When the Land Meets the Sea

Brad Duncan
Martin Gibbs

Please God Send Me a Wreck

Responses to Shipwreck in a 19th Century Australian Community

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This book is dedicated to: Christer Westerdahl for showing us a different way to look at maritime communities.

The people/community of Queenscliffe, who opened their doors and memories to us on many occasions to recount their stories and knowledge of their region. We could not have done it without you. Queenscliffe is a wonderful place!

Finally, to our families—Tracey, Emily and Liam, and Melissa, Eliza and William, who inspired us to get this work finished.

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Dr. Martin Gibbs is Professor of Australian Archaeology at the University of New England, Armidale, Australia. His maritime interests include the archaeology of maritime industries, cultural aspects of shipwreck site formation, shipwreck survivors and the processes of maritime colonisation. Current research projects include the archaeology of the sixteenth-century Spanish explorations and failed colonies of the Solomon Islands and studies of the convict system in Australia. He is also the author of 'The Shore Whalers of Western Australia: Historical Archaeology of a Maritime Frontier' (University of Sydney Press, 2010).

Chapter 1
Introduction

> *Some fishermen used to say: please God, send me a wreck… Shipwrecks were a blessing and a curse. Fishermen were the bottom of the food line. They had to build boats in winter to survive. Fishermen had other part time jobs to survive.*
> (Ferrier P. 2001–2004)

In the corner of a beachside park in the seaside town of Queenscliff on the south coast of Victoria, Australia, is a sturdy 12-ft upright wooden post, painted white, with a ladder bolted against it and leading up to a large iron bell. Fixed on the post is a slightly faded but still forbidding sign which warns that "Any person found ringing the bell except in the case of shipwreck or marine disaster will be prosecuted—by order Port Office". To the casual visitor, the bell is just another part of the heritage furniture of the town. However, to the older Queenscliff community, the Wreck Bell symbolizes an age when shipping mishaps were a pivotal component of their social, economic and symbolic lives.

Although shipping mishaps such as wrecking and strandings are generally viewed as being marine events, many occurred close to shore and often within reach of coastal groups who were repeatedly called upon to rescue those in peril, salvage the material remains of vessels and cargoes, care for survivors and mourn the dead. Such incidents, of greater and lesser catastrophe and consequence, crafted the social and physical nature of coastal communities. Historians and folklorists have long recognized maritime disaster as a powerful theme in exploring the relationship between ship and shore. Works such as Bathurst's *The Wreckers* (2005) and Seal's *The Wreck at Sharpnose Point* (2003) provide insights into communities of the English coast who participated in the rescue and salvage of ships. Wells (2011) has examined how the spectacle of watching a shipwreck fed into nineteenth-century American concepts of "authenticity" of experience, as well as hopes and fears surrounding maritime technologies. Anthropologists and geographers such as Stilgoe (1994) and Martindale (2012) have also studied coastal communities' connections to landscape (and seascape) stretching over several centuries or more, including tradition and practice relating to shipwreck. Each shipping crisis offered contrasts of loss and gain and in some instances left the community torn between

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the dualities of its potential roles as saviours or salvors. This apparent contradiction also forms a central theme in this current volume.

Maritime archaeology has mostly viewed the links between shipping mishaps and coastal communities through the lens of site formation studies. The focus has therefore been on the potential physical alterations to shipwreck sites caused through human agency, rather than the social factors surrounding these interactions. There has also been a tendency to view wrecks in isolation, often emphasizing the unique or dramatic qualities to their operational, wrecking or salvage circumstances, rather than as part of a wider pattern of behaviours. Rarely has there been a coherent exploration of the wider landscapes of sites, places and relationships which were a consequence of people preventing, mitigating, benefiting from or commemorating shipping mishaps, sometimes repeatedly and over extended periods of time. We will argue that by recognizing this continuum of cultural activity extending beyond individual incidents, as well as the archaeological evidence of such past and present activities, maritime archaeology has the potential to redefine itself as a more anthropologically oriented endeavour and bring a new vigour to its approaches.

In this study, we explore the relationships between the Queenscliffe community and the shipping mishaps that occurred on the adjacent coastal and inland waters over the last 160 years. We draw on extensive documentary research, oral histories and archaeological investigations to examine some of their short- and long-term social, economic, technological and symbolic responses to shipping disasters. In particular, we demonstrate how these actions and understandings created a cultural landscape extending far beyond the individual wreck sites. This landscape evolved over time and across generations, even as each vessel transformed physically from ship, to derelict, to archaeological site and eventually to place.

The research on which this discussion is based is primarily drawn from Duncan's (2006) PhD dissertation, which examined the maritime cultural landscapes of Queenscliffe and Port Phillip Bay. This study explored the nature of the cultural landscapes emerging from different maritime themes, such as fishing, defence, recreation and tourism, investigating how these interwoven landscapes manifested socially and physically. The nature of the community's responses to shipping mishaps and their intergenerational relationships to the resulting sites formed one of these strands, and we are aware that in focusing our attentions to just this one area, we have been forced to exclude many critical linkages. We refer the reader back to the original study to examine how these connections were formed, as well as for detail on the various data sets used (Duncan 2006).

We have drawn on Duncan's data and undertaken additional research to explore several trajectories in our continuing researches on the anthropological aspects of maritime archaeology. The conceptual and methodological basis of this work is explained in Chap. 2, but can broadly be conceived of as following two main threads. The first is the use of a maritime cultural landscape framework for unifying a variety of theoretical and methodological concepts and approaches. Sidestepping the lengthy debates about the nuances defining and separating the approaches of

"maritime", "nautical" or "marine" archaeologies, most practitioners accept the current inclusive definition of maritime archaeology as the study of "…human interaction with the sea, lakes, and rivers through the archaeological study of manifestations of maritime culture, including vessels, shore-side facilities, cargoes, and even human remains" (Delgado 1997: 259). However, it has only been in the last decade or so that there has been an appreciable shift towards this wider conception, primarily through the rise of the cultural landscape approach. In particular, the propagation of the notion that there can be *maritime* cultural landscapes which bridge the divide between water and land and provide a linking mechanism between social and physical landscapes across time has become an attractive and powerful tool for creating a new direction for maritime archaeological studies.

The writings of Westerdahl (1992, 2011), Jasinsky (1994) and Parker (1995) on European maritime systems have provided the basis for many of the current archaeological studies of maritime cultural landscapes. Their works have introduced a range of concepts not usually employed in maritime archaeology such as cognition, cultural traditions, and symbolism. However, as we will discuss further in Chap. 2, there are also important insights to be had from concepts and methods taken from studies of Indigenous maritime systems and landscapes, especially in Australia and the Pacific (Duncan 2006, 2011). While there has been great enthusiasm for the idea of maritime cultural landscapes, in some instances this has seen a simplistic re-branding of what are still primarily descriptive archaeological site surveys of wrecks and infrastructure without any genuine attempt to understand the nature of the cultural systems which created, used and perceived these sites and places. We therefore also offer this study as a means of influencing the direction of cultural landscape studies within maritime archaeology, especially for colonial contexts.

While we embrace Gosden and Head's (1994: 113) consideration of landscape as a "usefully ambiguous concept" which might embrace multiple potential methodological and interpretive approaches, our second thread is to offer an explicit framework for how we have structured and interpreted the maritime cultural landscape of Queenscliffe as it applies to shipping mishaps. We argue that shipping mishaps exhibit recognizable stages in their progress, with each stage being subject to an underlying set of social, economic and symbolic motivations and understandings. Previously, we have considered how the incidence and the nature of shipwreck have been influenced by how people perceive risk and their strategies surrounding risk avoidance, management and mitigation (Duncan 2004). We have also investigated the psychology of how people perceive and respond to shipping crises, and how this manifests in various material ways (Gibbs 2003, 2006). In this volume, we shift our gaze to consider how the coastal communities who witnessed and responded to shipping mishaps may have been subject to the same structures. As an archaeological essay and with an eye towards comparative studies, we have retained an explicitly process-oriented approach with a concern for possible archaeological correlates and signatures.

We advocate that when investigating the potential effects of "shipwrecks" on the community, all types of vessel incidents should be considered, including actual or constructive total losses (shipwrecks), collisions and groundings, strandings, and

associated materials in flotsam and jetsam traps (further defined in Chap. 2). *Shipping mishaps* is therefore used to collectively refer to these incidents (Duncan 2000: 102). It will be shown that in general, the Queenscliffe community made little distinction between different event and site types, focusing instead on the nature and quantities of materials they presented. However, the question addressed here is not necessarily what types of resources characterized these sites, but what these sites meant and continue to mean for the community.

We make no claim that Queenscliffe is either an exemplar, a unique circumstance, or even embodies all of the potential processes of community response to shipping mishaps, but simply offer it as a case study of a possible approach for maritime archaeological investigation. A full consideration of possible responses to shipwreck in other historical or modern circumstances is not possible, although international and comparative historical and archaeological examples, primarily from the nineteenth century onwards, are also presented in the discussion. While the Queenscliffe case study is clearly Australian and grounded in the nineteenth–twentieth centuries as are many of the comparative examples, the framework described here should offer possibilities for wider international application and comparative studies.

Chapters 3–5 follow the main sequence and structures behind the Queenscliffe community's responses to shipping mishaps. A cultural landscape framework would normally provide an integrated approach to the documentary, oral and archaeological data sets. In this instance, however, we have chosen to emphasize the nature of the behaviours and relationships which evolved from shipping mishaps, leaving a discussion of the physical or archaeological components of the resulting landscapes until a later section (Chap. 6).

Chapter 3 provides the historical and environmental background to the establishment of Queenscliffe and summarizes the pattern and nature of the shipping mishaps which occurred in the region. It then examines the long-term mechanisms established to prevent shipping crises or mitigate impact, focusing on the many formal government services which operated out of the township. These align with the *pre-impact threat* aspect of disaster response (see Chap. 2), anticipating the possibility of such events and setting appropriate mechanisms in place.

Chapter 4 explores responses during the *pre-impact warning* phase when a disaster seems imminent, as well as the *impact* phase when the wreck or stranding is happening and immediately afterwards. This is a critical period where those aboard and ashore had to make decisions and undertake actions which could significantly influence the course of events and their consequences. Following this is an examination of the *recoil* and *rescue* phases where the immediate threat to life had receded and the community and survivors dealt with the aftermath of the disaster. One of the critical elements within this chapter is the balance between formal (government) and informal roles and responses from those based on land, as well as tensions between their possible altruistic versus opportunistic motivations.

Chapter 5 describes the medium- and long-term responses to shipwrecks, recognized as the *post-trauma* phase of disaster. We trace the ways in which the economic, social and symbolic roles of shipping mishap sites within the Queenscliffe landscape changed over time. In particular, it examines the formal and

informal processes of recovering or salvaging vessels and their cargoes, including long-term and cross-generational activities. It also traces how shipping mishap sites became places within the landscape and how these and associated prevention and mitigation structures were incorporated into local tourism ventures.

Chapters 6 and 7 explore the landscape features associated with shipping mishaps. Special attention is given to the physical manifestations and archaeological signatures of activities relevant to the different stages of pre-disaster preparedness (Chap. 6) and response (Chap. 7), as a way of alerting archaeologists to how these diverse sites can be identified and considered as part of a system. Non-physical elements of place and toponymy are also discussed, as is the methodology of data collection and the interplay between oral, historical and archaeological data sets.

Chapter 8 returns to the notion of the Queenscliffe community's relationships and reactions to shipping mishaps as being, at least in part, a function of their perception of, and adaptation to, risk and crisis. It also considers the diversity of responses by different groups in their saviour and salvor roles and changes over time as expressed in the physical and social landscape. This includes a discussion of the creation of tradition and identity within Queenscliffe, as well as how this influences present-day community understandings and interactions with the physical and symbolic aspects of their shipwreck heritage.

The final Chap. 9 revisits the concept of a maritime cultural landscape associated with shipping mishaps. It examines how the Queenscliffe case study aligns with international examples and considers the potential for comparative studies. This includes closing reflections on the shifting trajectories of maritime archaeology and heritage management in the face of a re-alignment of the discipline.

To save confusion later in the work, it should be noted that "Queenscliffe" refers to the Borough of Queenscliffe in the state of Victoria, Australia, that covers an area of only 11 km^2 (4.2 square miles) including the towns of Queenscliff and Point Lonsdale, as well as Swan Bay. "Queenscliff" (without the final e) refers specifically to the township and its peoples.

Chapter 2
Shipping Mishaps and the Maritime Cultural Landscape

> *Above all, it should be noted that the primary object of study is man [sic] ... and not the ships, cargoes, fittings or instruments with which the researcher is immediately confronted. Archaeology is not the study of objects simply for themselves, but rather for the insight they give into people who made or used them ... maritime archaeology is concerned with all aspects of maritime culture; not just technical matters, but also social, economic, political, religious and a host of other aspects.*
>
> Muckelroy (1978: 4)

Since the 1980s, there has been an ongoing dialogue within maritime archaeology encouraging a shift away from its vessel-focused concerns towards an anthropological interest in the wider maritime world (Gould 1983). Despite this, there has until recently been a dogged persistence of the traditional culture-historical approach towards vessels and their contents (or their archaeological remnants), and the narrow technological, economic and social contexts of their operation and use. In this older conception, behaviours surrounding the shipping mishap event (mostly wrecking) are usually viewed in isolation and for their historical value, or as indicators of the transformation of the vessel from systemic to archaeological context. Subsequent cultural interactions with the remains of vessels or surrounding environments are primarily considered as site formation processes altering the integrity of the site, or as subjects of concern for cultural resource managers, rather than as part of a continuum of cultural activities and connections (Gibbs and Duncan 2015). Non-wreck components of the maritime world have suffered similar treatment, often being recorded without strong connection or contextualization within the wider cultural system or landscape past or present.

In part, the shape of maritime archaeology has been a function of the constraints of practitioners working within particular legislative or corporate structures (i.e. the role of the heritage agency or museum-based archaeologists is to record and protect shipwrecks rather than do wider research), or simply that shipwrecks have been prioritized as the most threatened form of maritime site. The greater set of maritime sites, especially those on land or in intertidal zones, also often fall into a grey area of responsibility with other heritage agencies, groups or academic subdisciplines with their own priorities. The consequence is that for many areas, there are now rich

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data sets on shipwrecks, with countless non-wreck, terrestrial and intertidal maritime sites still waiting to be identified, recorded and incorporated into the maritime archaeological narrative.

The challenge we face is how to re-conceive the aims of maritime archaeology and create new approaches that allow us to achieve multiple goals: a refocusing of priorities towards a more inclusive form of maritime archaeology which acknowledges the need to record and protect an extended range of sites and places; the recording, interpretation and synthesis of this material within a coherent framework that also facilitates comparative analysis; and the greater incorporation of anthropological concerns into our studies of the maritime world. This includes making best use of the methods and extensive data sets which are already available to us from nearly 50 years of professional maritime archaeology. The emergence of academic maritime archaeology over the last two decades, usually nested within broader archaeology and anthropology programs, has seen an appreciable shift in direction. This has especially been bolstered by the completion of higher degree theses, many exploring new theoretical and analytical structures which incorporate and synthesize existing and new data while embracing links between land and water. Published versions of these studies are also becoming available and fuel the possibilities for comparative research (e.g. Dellino-Musgrave 2006; Richards 2008; Stewart 2011).

The following section sets out the framework for how we have approached the investigation of the Queenscliffe community's responses to shipwreck past and present. In many respects, it represents an experiment in unifying the several theoretical and methodological avenues which we have followed separately and as collaborators in our explorations of how maritime archaeology might advance. In particular, we examine how these different approaches might be incorporated within a cultural landscape framework, although here we use the term *maritime* cultural landscape to emphasize the connections between land and sea. For the sake of brevity, we have summarized parts of our argument and refer the readers to our own and others' published and more detailed works elsewhere.

Maritime Cultural Landscapes and the Archaeology of Maritime Communities

The origins of the notion of a cultural landscape are reviewed extensively elsewhere and need not be repeated here (e.g. Hoskins 1955; Sauer 1925; Meinig 1979a, b; Ingold 1993; Tilley 1993; Bender 1992; Anschuetz et al. 2001; Westerdahl 1991, 2003a, b; Duncan 2006: 7–37). Consideration of maritime cultural landscapes simply extends this concept to include the non-terrestrial world, although in truth, the distinction may not be necessary. The works of Westerdahl, Jasinsky and Parker on European maritime systems have provided the basis for many of the current studies of maritime cultural landscapes by introducing a range of concepts not

usually employed in maritime archaeology, such as cognition, cultural traditions or symbolism.

Inspiration and direction on how to view how maritime cultures might construct their land–sea relationships can also be drawn from beyond the European world (e.g. Hunter 1994; Westerdahl 1994). A particularly important source for the authors has been the work of anthropologists Hviding (1996), McNiven (2003), and others (Lewis 1980, 1994; Johannes 1992; Roe et al. 1994; Roe and Taki 1999), including the authors' own research with Indigenous groups in Australia and the Pacific. One of the important understandings is how many of these maritime groups simply see continuity regardless of the different physical environments, with seascapes being perceived, understood, owned and used in the same way as landscapes. Reflecting back on many Western maritime practices sometimes reveals very similar mind-sets and a strong interplay between the resources, activities, signs and symbols between land and sea. Significantly, these non-Western studies explore as a matter of course the non-physical components of cultural landscapes, such as myths, folklore, toponymy and associated stories, and other specialized local knowledge (all of which were often used to validate territorial ownership, community identity and belonging to place). These cognitive aspects have often been divorced from Western cultural landscape studies until recent years.

Without engaging in the ongoing discussion of what constitutes a maritime culture (see Hunter 1994; Westerdahl 1994; Parker 1995), this volume uses the expression *maritime communities*. Westerdahl (2011: 337) has recognized this as a more apt term as it stresses the social aspects and societal connections of those whose life is based in, on or around the sea or waterways.

Cultural landscapes are also heavily influenced by the perspective of those who inhabit a region and of the researchers who investigate them. Westerdahl (2002a: 169) proposed that there were many types of cultural landscape including *economic, transport, power, ritual and resources landscapes* and that these landscapes transcended the land/sea divide and overlapped each other. This notion of alternative perspectives was also recognized by Crumlin-Pederesen (1996 as cited in Parker 2001: 23) who expounded that the main objective of maritime archaeology should be "to learn to perceive the landscape and settlements as they were seen with the eyes of the sailor or fisherman in the past, approaching land from the sea or from navigable rivers". Indeed, Goldsmith Carter (1945: 22) demonstrated that different perspectives of the same place by the same person may be held dependent on whether the view from is from the land or sea. These different viewpoints have also been recognized as influencing the researchers' approach to cultural landscapes investigations. Jasinsky (1999: 13) has shown that the differences between maritime and terrestrial archaeology lie in the perspectives of the sea, suggesting that "terrestrial archaeologists…stand on the shore with their backs to the sea, using the inland as the background for their documentation. Maritime archaeologists generally do the opposite".

Despite various studies explaining the patterning behind the distribution or nature of shipwrecks and maritime facilities, the maritime landscape approach is still in its early stages. Many recent studies have been oriented around particular

industrial operations and workforces, or synthesis and explanation of the distribution and nature of shipwreck or maritime infrastructure within an area or region (Ford 2011).

Key Components of Cultural Landscapes

In order to progress this argument, it is necessary to understand what does and does not constitute a maritime cultural landscape. Duncan (2006: 13–34) has compiled an outline of key aspects of maritime cultural landscapes, which are summarized below.

Landscapes Are Physical and Cognitive

Many archaeologists who investigated landscapes have predominantly focused on physical archaeological remains and other structural aspects, rather than social and metaphysical dimensions. Cultural landscapes include a whole suite of cognitive perceptions intrinsically tied to landscape construction and expression and are based on the relationships between individuals and communities, belief system and values, and how these translate into the cultural and environmental world which they occupy (Darvill 1999: 104). This concept of *cultural landscape* embraces themes that are experienced *both* physically and cognitively by those who use maritime or coastal areas. This is the crux of the concept that distinguishes true maritime cultural landscape studies from those that essentially embody either regional inventories of submerged cultural resources and archaeological sites (and often individual sites) or heritage management studies of maritime sites and/or areas. True maritime cultural landscape studies are therefore not only descriptive of maritime sites and community actions, but should also delve into the sphere of values and belief systems to explore the cognitive aspects of maritime communities.

What Cultural Landscape Is Not

It is useful at this stage to define what a cultural landscape is not. In particular, cultural landscape is not synonymous with land. Ingold (1993: 153) has demonstrated there is a difference between the actual physical landscape (land) and the physical use and intangible perceptions of it (cultural landscape). Even though many physically different regions form the totality of individuals' or groups' worlds, these environmental/perceptual settings are usually divided according to how people use/perceive them, with each used in different ways. What this means is that we need to question any academically imposed or simplistic notions of

landscape which are based on binary oppositions (e.g. land/sea, natural/cultural, static/dynamic) which differentiate between sources of data based on physical location and/or historical analytical research notions/directions. At the same time, we need to recognize the perceptive differences between landscape components as comprehended by the actual landscape participants themselves. Landscape cannot therefore be divided, as cultural landscapes are seamless and filled with meaning. Further discussion of these points is available elsewhere (Duncan 2006: 13–17).

Land Versus Sea Divide

The differentiation between land and sea is largely irrelevant in a cultural landscapes approach, as all areas regardless of their geographic locality (i.e. underwater, above water or land based) are considered essential components of the totality of the landscape. For example, at Marovo Lagoon, Pacific islanders do not differentiate between land and sea areas. So-called "terrestrial" Indigenous landscapes did not stop at the tidal interface, but extend out over the water to include territorial areas of traditional "sea land" (e.g. Hviding 1996: 1, 233–238). Cultural practices and beliefs were equally deeply embedded in the land and sea. This notion also has utility to western maritime landscapes where, although the physical boundary of one environment delimited the beginning of the next, neither could be understood without reference to the other (Westerdahl 2000: 3). The fact that the data sets were derived from either terrestrial or maritime environments is irrelevant, because as perceived by their users, they were collectively components of the same landscape.

Landscapes Are Continuous, Dynamic and Evolve Over Time and Space

Cultural landscapes are not static phenomena (as proposed by Hoskins 1955), as existing physical structures and the social practices and beliefs of ancestral or former communities are constantly incorporated into modern cultural landscapes (Jackson 1951). This continual re-appropriation and evolution generates dynamic landscapes as people adopt and adapt to ongoing change (Meinig 1979a; Darvill 1999: 107). Modern and archaic landscape features are therefore complementary parts of a continuing landscape, and analysis of the type and location of change in a landscape may further inform of the cause of those transformations. Cultural landscapes therefore do not always have a terminal point, but represent continuous trajectories from the past into the present and beyond to the future. Similarly, they are not spatially constrained. These approaches also have great utility for maritime studies, particularly in regard to the spatial migration of maritime activity within the physical landscape (Westerdahl 1998: 9; Parker 1999).

Landscapes Are Multivalent and Overlapping

The notion of cultural landscapes has evolved to recognize the role of perception (Meinig 1979b) and phenomenology (Ingold 1993, 2000; Tilley 1994; Westerdahl 1994) in landscape construction. People will experience any region differentially dependent on their individual or shared communal experience. Accordingly, there will be multiple (and often overlapping) cultural landscapes. These "multivocal" landscapes may not be bounded by the same geographic regions or time periods. They might coexist independent and/or interdependent of other cultural landscapes (users), and failure to recognize this is an inherent weakness in some archaeological studies (Bender 1992: 1, 9). The crux of this observation is the notion that it is people who create cultural landscapes, both physically and cognitively, and that all landscapes are the result of personal perception. These notions of multiple overlapping and often conflicting cultural landscapes have great utility for exploring the possible changing multiple perspectives of shipwreck sites (Gibbs 2005).

History Is Tied to Cultural Landscapes

The notion of cultural landscapes acknowledges that people tie life, events and continuity to place and that this is evident in narratives that have connections to the environment (Ingold 1993: 153–155). Several Melanesian studies have observed the importance of anchoring and indexing of history through the association of narratives with named places in the landscape (e.g. Roe and Taki 1994: 413; Hviding 1996). By travelling through the landscape, mariners reinforce their attachment to it, by recalling their own ancestral cultural history which is encoded in their knowledge of oral histories, folklore and toponymy (Mead 1973; Harwood 1976).

Other Landscape Components

Although the points outlined above are widely accepted as key aspects of cultural landscapes studies, we also advocate that other notions previously used in terrestrial studies should also be included in any maritime cultural landscape research.

Landscapes of Movement (Sailing Routes)

Routes are important landscape components as they not only provide connections through the landscape (sometimes guided by stories or song lines linking places and events), but are in themselves centres of activity that are imbued with meaning and

tangible/intangible substance (Ingold 2000: 237). By developing a serial mental map that recalled the progression of these "natural"/artificial features and their associated stories and meanings (especially for submerged or offshore features), mariners reinforced and reinvented their cultural landscapes while travelling along their own personal sailing routes (Roe 2002; Westerdahl 1991; Parker 2001: 33).

Empty Space Is a Significant Landscape Feature

Empty space is a key component of landscape construction. It can be used to draw attention to other landscape features (e.g. without the void surrounding it, the aesthetic power of Stonehenge would have been lost behind a forest of trees (Bender 1992: 5, 8). Alternatively, it can exclude access to others (thus reinforcing social boundaries and hierarchies of power), an authoritative power notion that has been observed in relation to "tapu" (or sacred) areas and other territorial restrictions (see Hviding 1996: 250–258; Meyers et al. 1996: 7; Dale et al. 1999). The "construction" of empty space (whether on land or at sea) therefore constitutes a socially significant landscape feature (Duncan 2006: 21).

Authoritarian Structures Create Landscapes of Power and Resistance

Control of populations is a key component of organization within many societies (McGuire 1991), and thus, authoritarian structures represent key mechanisms for landscape development. In a maritime setting, official control mechanisms may be exercised in many forms such as defence, policing, Customs, quarantine, pilotage, immigration or even religion (Westerdahl 2002a: 169–177; 2003a: 482). Power landscapes by their very existence in some instances also produce "landscapes of resistance", where inhabitants within or adjacent to those regions resisted that authority (Westerdahl 2002a: 169). The landscapes of power and resistance present interesting possibilities for investigation of social interaction between thematic maritime groups.

Technological Change Is a Dynamic Factor in Landscape Evolution and Change

Technological advancement is an important factor on landscape evolution and practice (e.g. Clark 1987). Developments in vessel designs and associated technology often markedly altered traditional maritime practices (e.g. the change from

steam to sail, as well as increasing vessel size) and hence landscape boundaries and perceptions (Parker 2001; Irwin 1992; Lewis 1994). This notion has particular resonance when examining the effects of technological change on the incidence of shipping mishaps, both from a risk management and vessel design perspective.

Actions and Events Are as Important as the Archaeological Signatures They Generate

Bender (1992: 8) has demonstrated that an act or event that created a landscape feature was often as (or more) important than the subsequent material remains (e.g. the digging and infilling of trenches for votive offerings). In other words, an act or event may be the primary focus of the landscape participant(s), and the resulting archaeological signature may only be an inconsequential and unvalued by-product. Often these aspects are only accessible through folklore, oral histories and toponymy. However, this situation may also work in reverse, where the event has been the main focus of research, but that to the landscape user, the site that is produced is of prime significance. This is particularly significant for this volume in regard to the effects of events (in this case shipping mishaps) on local communities.

Alternative Sensory Perceptions and Ancestral Knowledge Are Key Indicators of Landscapes

Landscape perceptions are not limited to visual stimuli and should include the other senses, such as smell, touch, sound and taste (Ingold 1993: 170; Darvill 1999: 107). Many studies have documented the importance of these senses by territorial mariners (when used in combination with ancestral knowledge) as essential memory cues for landscape navigation and recognition, spatial orientation and weather recognition (Gladwin 1970: 171–172; Johannes 1992; Hunter 1994: 262; Lewis 1994; Parker 2001: 32–36). Reflected sounds and smells have all been used as portents of the approach to land (Parker 2001: 36; Kerr n.d.) and are key elements of landscape research.

Environmental Change Shapes and Is Shaped by Cultural Landscapes

Landscapes are subject to both ecological/biological and physical environmental change as a result of cultural, climatic and geological influences and disturbances. Although many "landscape" studies are actually investigations of geographic change and coastal geomorphology, these aspects in themselves are key components of

landscape determination and transformation. In other words, although physical landscape may influence human action, human action also affects physical landscape, in an ongoing and often repetitious cycle.

Social Hierarchy Plays a Key Role in Landscape Formation and Change

The role and complexity of social relations have pronounced effects on landscape construction, particularly where differences in geographical location and elevation were used to reinforce class hierarchy ideologies (Gibbs 1997; Mrozowski et al. 1996). Landscapes also epitomize and reflect the changing societal structure and status present in various scales of community (Aston 1985; Bender 1992: 3; Perry 1999). This aspect is particularly relevant for maritime communities, where access to ancestral nautical knowledge was often used to distinguish between social classes (Irwin 1992: 220; Lewis 1994: 32–34, 244–245) or where social hierarchy was based on maritime profession (Westerdahl 1998: 9, 2003b: 18).

Alternative Landscapes Can Be Accessed Through Gender Studies

Gendered studies of Western historic maritime communities have only recently begun to emerge (Lydon 1993; Adams 2001: 304–305; Flatman 2003), but have long been common in Indigenous studies (e.g. Bowdler 1976). Even though women did not traditionally go to sea on vessels to work (Westerdahl 2002b: 54, 2003a: 475), they still played an active part in the fishing industry (e.g. O'Sullivan 2001: 261) and often became the *de facto* heads of households while men were away at sea (Flatman 2003: 3; Duncan 2006: 206). Given that almost every maritime community worldwide included women who were related to seamen and fishers or actively involved in the industry, gender studies clearly present another opportunity to further investigate different perspectives of maritime cultural landscapes.

Cultural Practices, Ideologies and Beliefs Are Transported Along with People

Whenever people immigrate to new lands, they take their cultural baggage with them. Researchers in the Pacific (Gladwin 1970; Lewis 1980, 1994; Irwin 1992;

Gosden and Head 1994: 114) and Northern Europe (Westerdahl 2003a: 481) have shown that the establishment of new maritime settlements often led to expanded networks of communities which shared similar (ancestral) practices and beliefs. These transported landscapes included not only physical manifestations (e.g. economic food sources and material culture), but also cultural practices, beliefs and ideologies, an observation also made of modern Western immigrants moving to new lands (e.g. Thoreau 1865; Gibbs 1995: 23; 1997). Maritime communities were particularly inclined to relocate their shore-based activities in response to the movement of seasonal resources (see Duncan 2006), and therefore, the study of transported landscapes offers the potential to examine cultures that stretch over vast distances and time. The processes of continuing (adapting), creating or rejecting existing beliefs and practices deserve consideration, as do instances where newly formed communities where diverse members bring different cultural traditions with them engage in processes of accommodation and synthesis. This is particularly relevant when investigating colonizing and diaspora communities of the New World and Australia, including their relationships with Indigenous communities and their bodies of knowledge.

Ritual, Superstition and Symbolism Play a Vital Role in the Determination of Landscapes

Religion, superstition, spirituality, and their roles in shaping cognitive landscapes either through associated ritual practices and observances, or through restricting or requiring access to particular areas, has been a common theme in landscape studies (e.g. Hunter 1994; Parker 1999, 2001; Westerdahl 2003a). Although the substance varies, these phenomena form components of powerful belief systems that are present in every culture on earth and are particularly prevalent in maritime communities which are noted for the entrenchment of superstition and mythology (Jasinski 1999: 14; Jeans 2004: 304). Many belief systems were grounded in superstitious practices, which in some cases have left tangible archaeological remains (e.g. Evans 1966; Dean 1997; Anonymous 2000; Eastop 2001; Hoggard n.d., 2004), making superstition an essential landscape component for investigation.

Maritime Cultural Landscapes and Shipwrecks

A cultural landscape approach enables shipping mishaps to be viewed from multiple perspectives, both as an event and as a place. For instance, a shipwreck may initially be perceived as a catastrophe and as such is the cause for frantic activity to

save life and cargo. Simultaneously, the incidence of wreck might also represent the creation of a new place in the landscape, which fills or reconstitutes the space/place that preceded it. The wreck may embody multiple meanings to different people, as economic or social resources, through their tangible and symbolic representations of historical events, as memorials of significant incidents, or as contested space through conflicting uses. Use and significance might also transform over time (Gibbs 2005). Other sites may in turn be generated as material is removed, reused or discarded elsewhere, or are created in response to the occurrence of the event, such as mechanisms to prevent, mitigate or benefit from future shipping mishaps. As an archaeological essay, a large part of this research has been to consider not just the behaviours of the Queenscliffe community in response to shipping mishaps, but to understand some of the physical manifestations of those responses and their associated archaeological signatures.

Another theme in this work has been to understand how shipping mishap-related activities and relationships, including connections to sites and places, became structured into the community as "traditional" practices grounded in shared understandings and informal codes of conduct. In this respect, our definition of tradition and traditional practice follows Knowles (1997). Based on the work of Cohen (1985: 99) and others, she suggests that "traditions are the ways in which communities define themselves through a symbolic past in the present" (Knowles 1997: 14). However, traditions are not necessarily defined by temporal depth, duration or an unchanging nature. Although there may be a sense of continuity, grounded within the mythological character of the tradition or its origins, there are often social mechanisms which also allow for change, re-creation or reproduction while allowing the community to retain it as a defining element of the group (Knowles 1997: 15). Most relevant to our work is Knowles' suggestion that tradition is often based upon shared practices and experiences, some of which are spatially specific and create strong attachments to particular places and (by extension) landscapes as well. The practices that occur at those places may be a symbolic expression of community.

Behaviour in Response to Shipping Crises: A Model

One of our concerns has been to construct an anthropological approach to shipping mishaps that considers not only the original operational elements of a vessel, but also the nature of the crisis event, its aftermath and the archaeological consequences of these. Previously, we have set out a sequence of stages associated with the progression of shipping mishaps, primarily catastrophic shipwreck, drawn from the models used in disaster studies (Gibbs 2002, 2006—Fig. 2.1). Following the work of Leach (1994), the main stages include the following:

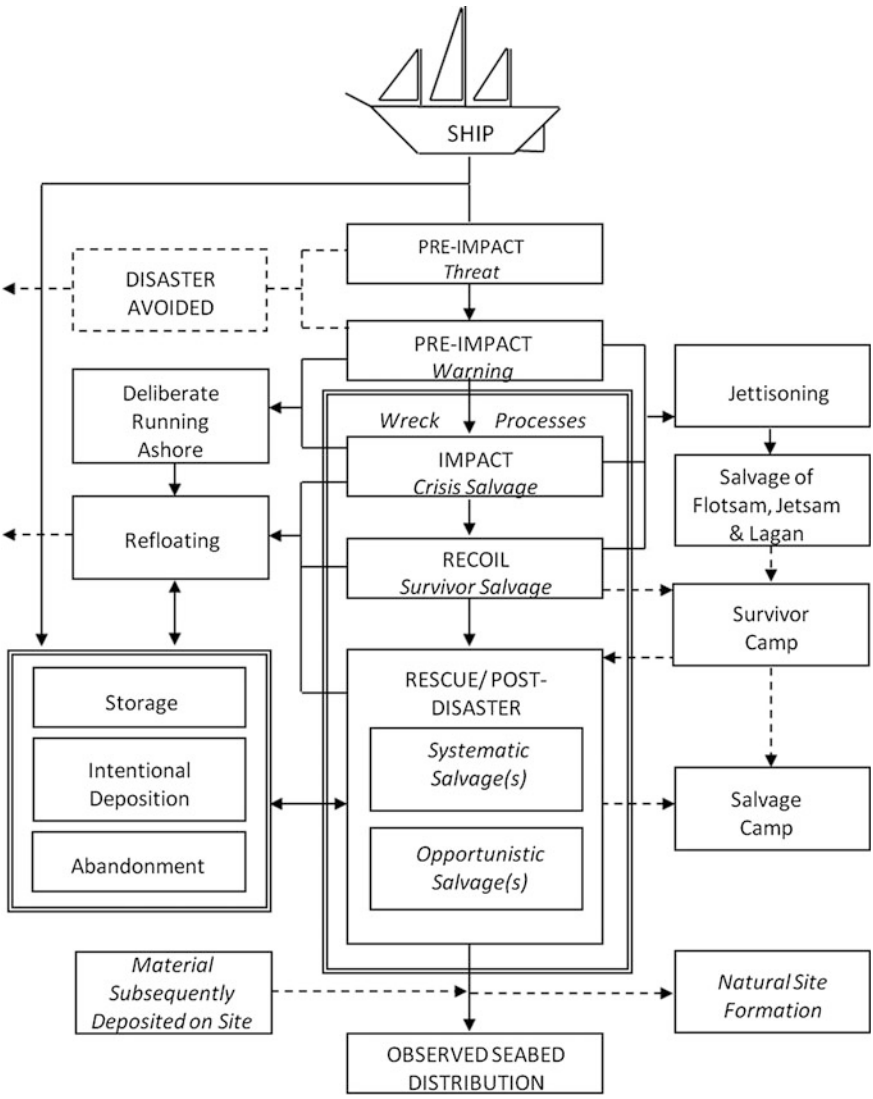

Fig. 2.1 Stages of response to shipping mishaps (Gibbs 2006)

- **Pre-impact**: the period before the disaster event. This can be divided into two phases:
  - **Threat**: when the possibility of disaster is identified (long term).
  - **Warning**: when the disaster is imminent.
- **Impact**: during the disaster "event" and immediately afterwards.
- **Recoil**: when the immediate threat to life has receded.
- **Rescue**: when the person or group is removed from danger.
- **Post-trauma**: medium- to long-term responses to the disaster.

The Pre-impact stage could have a very long-term Threat aspect, involving recognition of risk and corresponding pre-trip preparedness such as through selection or technological development of appropriate vessels, choice of route, training of crew, stowage of materials and maintaining lookouts. The Warning phase was when some of this preparedness (or lack thereof) would come into play through reaction to imminent disaster, including efforts to avert or mitigate impact. It was also the first point where there might be an interface with a coastal community trying to assist in various ways.

The sequence continues through the point of impact and the critical decisions and responses which might save or lose the vessel, its cargo or the people aboard. Even after the conclusion of the actual crisis, there are potential medium- and long-term actions after the main crisis event.

The role of subsequent rescue attempts and possible official salvage claims to the wreck can also considered, followed by stages of physical salvage at both official (systematic) and illegal (opportunistic) levels, and distinct behavioural practices associated with medium- to long-term exploitation of the wreck (Fig. 2.1). There are archaeological correlates from cultural modification or dispersal of the ship structure or contents during the different stages. An extension to the original model was an analysis of the responses and material strategies of shipwreck survivors which also paralleled and meshed with these stages (Gibbs 2003).

An important factor in the model, given its roots in disaster studies, is the recognition of cultural, social and psychological factors in responses during each phase. These varied between individuals and groups depending on the nature of the event and their perspective(s). It is also important to recognize that the time frame or duration for each stage is not equal. Pre-impact and Post-impact (recovery and post-trauma) stages may continue over many years and, in the context of how coastal unities respond, may even extend over centuries. The latter is particularly true for aspects of salvage and reuse of the different physical components of the vessel's structure and contents. However, the middle part of the sequence (Warning, Impact and Recoil) may be extremely rapid, potentially lasting only hours or even minutes. It is conceivable that some stages (especially pre-impact Warning) may be missed altogether, while others are dependent on a range of factors including the intensity and circumstances of the event, prevailing environmental circumstances, proximity to settlements, etc.

The behavioural stages and the archaeological correlates proposed in the shipping crisis model are not meant to be absolute or proscriptive, but simply provide a way of introducing a structure which might encourage a comparative (and more culturally oriented) approach to the archaeological analysis of shipping mishaps. The intention is also to move the analysis of shipping mishaps from the traditional view of a singular and unique "event" to a series of ongoing behaviours and cultural processes analogous to the natural processes which have been the focus of most site formation studies in maritime archaeology (Murphy 1997; Stewart 1999; Wheeler 2002; Martin 2011). Both the original wreck model and the survivor camp model have been tested by other researchers with reference to their own sites (Stanbury 2003; Nash 2004; Wilde-Ramsing 2009).

Whereas the original shipwreck disaster response model was from the perspective of those within the event (i.e. on the vessel), in this volume we explore the complementary responses from those external (at least initially) to the core disaster event, primarily those ashore. We argue that coastal communities shared, or at least experienced, parallel stages in relation to disaster preparedness, short-term response and long-term impact. We also introduce here the distinction between what might be considered altruistic actions (i.e. those concerned with the welfare of others) versus exploitative responses (i.e. primarily intended for economic or social gain). We do, however, recognize that there were instances where the boundary was blurred, or transformed from one to another, or encompassed elements of both. As for the original model, we are also concerned with how these behaviours might manifest within the cultural landscape and especially as sites and places.

Role of Risk in Maritime Cultural Landscapes

Duncan (2000, 2004) has previously explored the role of risk perception, risk taking, avoidance and mitigation in mariners' and coastal communities' behaviours as a factor in their responses to shipping mishaps. Risk is defined as "a negative or undesirable outcome… synonymous with the term danger or hazard" (Fox 1999: 12). Following Crook (1999), it can be proposed that there are two basic risk management strategies:

- **Neo-Liberal risk management**: Provides community members with an adequate level of information about the inherent risk levels, but leaves the individual to judge the acceptable level of risk taking. A modern parallel might be surf life-saving flags on a beach which indicate the dangerous areas, but leave choice of risk exposure up to the individual. This contrasts to the following;
- **Ordered risk management**: Occurs when a society chooses to control or limit exposure to risk, such as through total prevention of access to perceived dangerous areas. A modern equivalent might be to exclude access to and around a nuclear bomb site.

Mariners' recognition of risk and potential hazards and their consequent reactions to these (i.e. risk mitigation) were significant factors influencing the specific locations and overall distribution of shipwrecks and their subsequent cultural landscapes. Awareness of risk and hazard is a function of perception and knowledge of the natural and cultural environments, conceivable as falling into one of three types (Duncan 2004: 14–15):

- **Actual Risk**: the real, tangible risk presented by actual hazards is based on past cultural knowledge, experience or exposure to danger (e.g. environmental risks that contributed to shipwrecks).
- **Perceived Risk** (or associated risk): where perceptions of the level of danger influenced how an area was perceived, and hence whether it is used (or not).

Perceived risk does not necessarily reflect actual risk levels, but may be prejudiced by singular isolated catastrophic events or superstition; and

- **Manufactured Risk**: situations where actual risk factors or danger levels were exaggerated or fabricated in order to influence perceptions of that risk, and hence the subsequent use of an area.

Risk mitigation is therefore behaviour based around the avoidance of exposure to hazards, dictated by a society's (or individuals' and groups') conscious or unconscious decisions to follow ordered versus neo-liberal risk management strategies. The types of risk presented and potential risk management or mitigation do not rest purely with the ship's master and his or her decisions on vessel, route or actions, but also in the preparedness and responses of coastal communities. This might include formal and informal mechanisms such as bathymetric surveys and charts, sailing directions or the provision of local knowledge, navigational facilities (Lighthouses, channel markers, tidal and communication facilities and Pilot Services), the installation of rescue and safety equipment (e.g. rescue rockets, lifeboats, tugboats) and other processes should a disaster be imminent or in progress.

For mariners and coastal communities major influences in considerations of risk were the social and economic costs versus benefits behind decisions to take (or allow, or not manage) risks, against investing in their avoidance, prevention or mitigation. For ships' masters, taking on an increased risk (such as ignoring certain sailing directions) might mean for instance a faster passage and greater profit. For a coastal community, there might be a desire to ensure their harbour was safe or at least not perceived as too hazardous, which might reduce traffic, against a potential desire (by some) to make gain from ship repair or salvage (Duncan 2004). Risk might also have a seasonal aspect depending upon the changing weather and environment, meaning different responses and mechanisms were necessary at different times. All of these factors had the potential to influence the development of physical and cognitive cultural landscape(s) on land and sea. Figure 2.2 demonstrates the potential cyclic nature of risk management caused by shipping mishaps in a region.

When considering the circumstances of shipping mishaps, we would also suggest that it is necessary to contemplate the degree to which perceptions and evaluations of risk, as well as decisions and actions in response to impending or realized incidents, were in response to legalities and other factors such as insurance. Most mariners were well aware of the long-term implications for financial loss, legal culpability and penalty should they be found at fault in their decisions and conduct relative to a shipping mishap. The delineation of risk and liability, the responsibilities of a ship's master and crew, and the appropriate priorities, actions and expectations with regard to dealing with structure and cargo given particular circumstances were usually well documented (e.g. Hopkins 1867; Gow 1917; Hardy Ivamy 1974; Gibbs and Duncan 2015). So too were the circumstances and conditions for the sale or disposal of salvaged structure and goods, and the disbursement of profits.

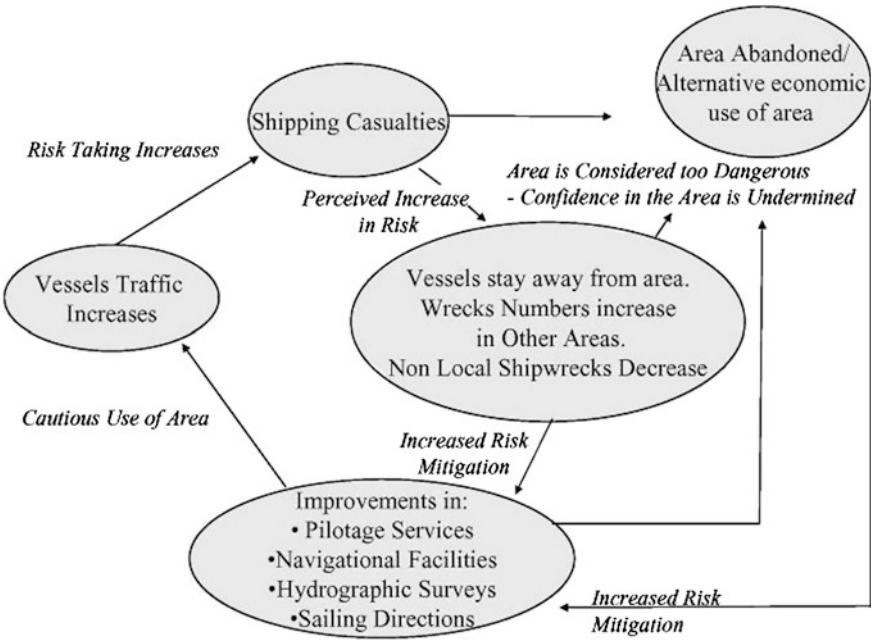

Fig. 2.2 Risk mitigation processes (Duncan 2000)

The various international and local codes regarding salvage rights usually balanced ownership of the vessel and cargo against the risk and real danger experienced by the salvors (due to environment, weather or circumstances) and the services they provided in the recovery of property (e.g. technologies and labour used, efficiency of recovery) (Brice 2003; Mandaraka-Sheppard 2007). Consequently, it might be argued that some (or many) of the behaviours exhibited during and after shipping mishaps were not simply to secure the safety of vessel, cargo and people, but attempts to work within or around various laws or insurance codes. This could extend to deliberate attempts to exploit situations such as insurance fraud through deliberate use of worn or unseaworthy vessels (c.f. Murphy 1983: 75), or balancing the expense of the loss of vessel and cargo against possible benefits from insurance claims (c.f. Souza 1988).

Defining Shipping Mishaps

A further contribution from marine insurance and broader maritime literature is how we might define shipping-related processes in ways that were consistent with historical understanding and usage. For instance, unlike the modern usage of the generalized phrase “shipwreck”, Marine Underwriters tended to categorize marine

Table 2.1 Vessel incidents and losses (after De Kerchove 1961)

Category	Definition
Collisions	The vessel collides with another vessel or structure
Groundings	The vessel collides with the seabed causing damage to structure
Stranding	The vessel runs aground but remains partly or wholly above water. There are two types of strandings
Accidental stranding	The vessel collides with the seabed
Deliberate stranding	The vessel is deliberately steered ashore into shallow water to avoid becoming an Actual or Total Constructive Loss
Abandonment	Only takes place under stipulated conditions where it is recognized that the ship, cargo and lives of those onboard were under imminent threat
Total Constructive Loss	The vessel is in imminent danger of becoming an Actual Loss and is abandoned accordingly
Actual Total Loss	The vessel is destroyed and ceases to be recognizable as its original function as a ship or boat

incidents in terms of degrees of economic loss from loss or damage to structure or cargo (Table 2.1). Similarly, materials resulting from a shipping incident are well defined (Table 2.2). In instances where deaths occurred, there were additional social implications and definitions which will be dealt with elsewhere in this volume.

Financial losses and deaths were not just confined to Actual Total/General Average or Total constructive losses (i.e. shipwrecks), but also occurred during strandings, groundings or collisions. Many contemporary accounts have revealed that vessels which were grounded or stranded were subsequently refloated, often after large quantities of their cargo was thrown overboard. This raises the question as to whether this loss of cargo is also a shipping casualty. In terms of marine

Table 2.2 Shipwreck materials (after De Kerchove 1961)

Category	Definition
Wreck	Anything without an apparent owner, afloat upon, sunk in or cast ashore by the sea… includes jetsam, flotsam, lagan and derelict
Jettison	The act of throwing goods overboard to lighten a ship or improve stability in stress of weather or in any other cases of necessity or emergency
Wreckage	Goods cast ashore after a wreck. Four basic types
Jetsam	Goods jettisoned for the preservation of the ship and cargo
Flotsam	Goods that float when cast overboard for the safety of the ship or after the vessel has foundered
Lagan	Goods cast overboard from a sinking vessel and buoyed as to be subsequently recovered
Derelict	Goods (including personal property) abandoned or relinquished by its owner, specifically a vessel abandoned at sea. A ship is derelict either by consent, compulsion or stress of weather
Salvage	Property that has been recovered from a wrecked vessel, or the recovery of the vessel herself

underwriter insurance, the answer would most definitely be "yes", as any loss of property associated with the incapacitation of a vessel has significant economic implications to the owner, crew and passengers and any other interested parties within the community. Previously, we have suggested that stranding sites should receive greater attention from maritime archaeologists (Duncan 2000, 2006), being in effect "phantom shipwrecks…the ones that got away" (Gibbs 2006: 10) and that jetsam and flotsam from these sites were likely to leave large archaeological signatures. Unfortunately, as strandings by their very nature are defined by ships sailing away or otherwise removed from the site of impact, these locations are often not as well documented as shipwreck sites, and until recently there has been the perception that stranding sites do not have archaeological signatures. This assertion will be further challenged in this volume.

In terms of risk mitigation, the loss of a vessel (structure), its cargo and/or lives aboard all represented the same type of scenario, the only difference being the nature and degree of severity of the loss. Therefore, in terms of shipwrecks versus strandings, the risk presented by the incident was in many respects the same. The objective of any risk mitigation strategy on the parts of mariners and coastal communities was to optimize the final result by minimizing the potential for the worst outcome (i.e. actual total loss). These types of vessel incidents also had tangible physical influences on the ways that mariners used the sea and ports (Duncan 2000). Consequently, any study of the effects of shipwrecks on a community should also consider all types of shipping incident that occur in that region.

Salvage

One of the major cultural processes in response to shipping mishaps is of course salvage. Maritime archaeology is still lacking in general studies of either the physical or social processes behind these activities, although Richards' (2008) "*Ships' Graveyards*" and Stammers' (2004) "*The End of Voyages*" are both important investigations which trace the trajectories of vessels beyond their wreck or decommissioning, into reuse, placement or destruction. There is also interest in the biography of objects salvaged from shipping mishap sites, including their symbolic significance and how these items move through communities (e.g. Steinberg 2008; Hosty 2010; Cook and Tolia-Kelly 2010; Gregson et al. 2011). However, there has been very limited consideration of the social processes involved in the transformation of ships into "places" (Simpson 1999; Gibbs 2005). Elsewhere, we have provided a detailed overview of some of the main definitions and process considerations behind the salvage of vessels (Gibbs and Duncan 2015), some of which will be discussed in more detail within this volume.

To simplify discussion of cultural processes including salvage which extract, scramble or add material associated with a shipping mishap site, we have previously used a simple hierarchy of a ship's structure and contents (see Table 2.3). This is based in broad terms on the relative difficulty of removing materials and how they

Table 2.3 Categories of material comprising a ship (Gibbs 2006: 3)

Category	Materials
Cargo and contents	Non-fixed items not associated with the mechanical operation of the ship and which were meant to be removable, including the ship's boats and life rafts
Fixtures and fittings	Minor fixed items, fittings, yards, chains, ropes, anchors and cannon, minor mechanical items and equipment
Minor structural	Items not normally removed, but whose removal would not compromise the integrity of the hull, such as bulkheads, decks, masts, superstructure, major mechanical items and equipment
Major structural	Elements of the ship whose removal would affect the integrity of the vessel, including hull planking, ribs and other structural items

relate to the structural integrity of the vessel (Table 2.3). These categories are flexible and not strictly hierarchical, as a large or heavy cargo item, or one situated in the lower hold of the ship, might be substantially more difficult to access and remove than lighter fittings or structural elements situated elsewhere (Gibbs 2006: 4). These distinctions are also useful for tracing the movement of materials within and beyond the community.

We suggest that most of the processes of salvage can also be aligned with the general model of the progression of a shipping mishap discussed above and broadly divided into a series of categories (Table 2.4) (Gibbs 2006). *Systematic salvage* might occur in one or several phases over time, depending on changing perceptions of value, or access to new or improved technologies. *Opportunistic salvage* could also occur sporadically and repeatedly over a longer period, presumably after the more formal systematic salvage processes were completed, although either one might precede the other or the two forms of salvage could even occur successively

Table 2.4 Stages of shipping mishap

Stage	Examples of actions
Pre-impact (threat)	Selection or technological development of appropriate vessels, selection of route, training of crew, stowage of materials, lookouts
Pre-impact (warning)	Jettison or removal of materials to attempt to avert disaster (i.e. prior to impact)
Crisis salvage	Removal of materials to attempt to save the vessel or to facilitate immediate survival
Survivor salvage	Removal of materials to assist survival away from the wreck if no rescue or assistance is immediately available. Often of a limited nature due to restricted resources
Systematic salvage	Usually, professional salvors with time, workforce and technology to undertake an intensive and sustained effort to remove all or some of the cargo, fittings, minor and major structural elements, including potentially refloating and removal of the vessel
Opportunistic salvage	Non-systematic removal of structure and contents, possibly illegal. Focus on accessible cargo, contents, fixtures, fittings, and minor structural elements. In some circumstances could extensively strip a derelict and contents

in a cyclic manner. These distinctions are explained further below and can also be applied to off-site materials (flotsam, jetsam and lagan, see Table 2.2), as considerable quantities of material could float away from a wreck (including as a result of the associated salvage operation).

As will be described below, wreck materials washing ashore near coastal communities, some with their own formal and informal (i.e. traditional) codes and practices for accessing this sort of material, could mean that protection was required until the legal owners or agents could organize (systematic) salvage. Both systematic and opportunistic salvage of shipwrecks and materials from shipping mishaps are evident throughout the history of the Queenscliffe community, and the interplay between these practices is a significant element in the following chapters.

Beyond the need to rescue human life, the effort expended in saving a vessel from impending catastrophe and the extent of post-mishap salvage was determined by many interrelated factors. Salvage priorities, processes and techniques were balanced against considerations of hazards, risk mitigation and the expense of the recovery operation against the potential economic profits (including practical reuse), social rewards, strategic requirements or symbolic benefits in recovering material (Gibbs 2006: 14). Some of the factors influencing decisions on whether and how to salvage, especially for systematic salvage, are included in Table 2.5.

Table 2.5 Factors influencing type and intensity of salvage

Size, type, construction and purpose of the vessel
Type (size, composition) of cargo being carried
Perceived values of different components, which also prioritized the order and intensity of removal (e.g. salving the vessel's structure in whole or part versus cargo and contents)
Setting, environmental circumstances (weather, currents) and accessibility (grounded or submerged)
Current structural integrity of the vessel and potential speed of or nature of changes
Logistical constraints (e.g. proximity to shore, distance from settlements and/or transport networks and suitable places for salvage camps/storage)
Technologies and labour force(s) available locally and regionally, including specialist knowledge and experience
Cultural dangers (e.g. war, Indigenous attack, contested ownership)
Legal or traditional ownership
Processes and procedures stipulated by legal, insurance, corporate, institutional or other policies, codes and guidelines
Other cultural factors (e.g. the circumstances of the wrecking event, or social or symbolic significance encouraging or discouraging removal of material). These might include the inhibitions or superstitions related to salving from a wreck where deaths have occurred
Time since the original wreck event and the progress of these various factors, including changing environmental, structural, access or cultural conditions

These and other considerations dictated priorities in what to take, the order in which it was taken (and to what extent), and conversely what to leave behind. Decisions not to salvage, perform only limited salvage, or abandon a wreck site temporarily or permanently presumably came when the structural remains or the materials within and around fell below a predetermined threshold of value. A vessel or site might, however, be subjected to successive periods of salvage depending on whether for instance the economic, social or symbolic values of the wreck shifted, salvage technologies or labour force improved, or if environmental circumstances and conditions increased or decreased access, hazard or effort. Different groups would perceive different values and potentials over time, both towards the core mishap site(s), but also towards flotsam, jetsam or even previously removed items. Cycles of systematic salvage might be interspersed with numerous episodes from opportunistic salvors, potentially operating with very different intentions and perception of the resources which shipping mishap sites offered. These cycles could extend over generations and take on aspects of traditional attachment and practice within a greater cultural landscape(s). Discussion of many of these factors and associated concepts relevant to the nature of shipping mishaps and the formation and continuity of maritime cultural landscapes are woven into the fabric of the following chapters.

Methodological Approaches to Maritime Cultural Landscape Studies

Duncan (2006, 2011) has previously outlined the scope of traditional data sources which might be utilized to explore and analyse maritime cultural landscapes, some of which are already well understood. These include the following: archaeological sites, documentary (historical and cartographic) records and anthropological (ethnography, folklore, oral historical) observations. Although the remains of archaeological sites give physical clues about practical aspects of societies, they do not necessarily inform of the ideologies that created them, and preservation factors may present a distorted view of past lifeways. This discussion also recognizes the heavy reliance on historic documentary and anthropological records in historical and maritime archaeological investigations and the necessity of further critical review of their veracity and validity, especially when using documentary sources that present selective observer interpretations which may not reflect reality (e.g. South 1977; Deagan 1988; Seashole 1988: 92–93; Wood 1990; Dark 1995: 42–47; Orser and Fagan 1995; Keates 1996; Whiteley 2002: 408; Pipkin 2003).

Indigenous Australian and Pacific island communities encode and contain their ancestral cultural identity within their cultural landscape(s) and associated features, especially through the identification and naming of places and the retelling of tales associated with them. The history and beliefs of each culture were *read* by the physical act of moving through the landscape and by constantly recounting folklore

stories (through oral history) of past ancestors and events, whose memory is triggered by named places (toponymy). The physical act of moving through the landscape while recounting community/familial history therefore reinforces one's own ties to it. Community members demonstrate this sense of belonging (to their given culture) by their ability to narrate this restricted knowledge. Thus, local toponymy, oral histories and folklore are inextricably linked to understanding and reinforcing cultural landscapes, acting as mechanisms to explain and understand both physical and intangible sites (Hviding 1996; Roe 2000, 2002).

Although these data sets are essential components in most studies of maritime Indigenous cultures worldwide, at the time the research this book is based on was undertaken, they had not been widely explored in the maritime context. These sources offer glimpses of more personal perspectives and often previously undocumented aspects of daily life and community values. As key drivers in cultural landscape formation, each will be briefly addressed to examine their potential to further elucidate landscape aspects from a cognitive perspective.

Several researchers have succinctly demonstrated the utility of ethnographic and anthropological studies of analogous cultures for understanding how cultural practices are archaeologically expressed (e.g. Gould 1980; Gould and Yellen 1987; Binford 1988). Although archaeological, documentary and anthropological records are parallel data sets, they also act as independent sources and thus corroborate or challenge each other to provide a holistic and diversified notion of past cultural traits. This study adopted an ethno-archaeological approach, whereby the practical and cognitive nature of activities associated with individual cultural practices were explored (using the above data sets) and then compared against their subsequent archaeological signatures using overlaid layers in a GIS. This approach linked observed behaviour to archaeological sites, thereby enabling new understandings of the site formation processes and behavioural practices that have produced archaeological places (and vice versa).

This GIS-based methodological approach facilitated the superimposition of observations of different thematic types of practices with associated material culture and perceptive values, and contrasted these with the archaeological record in those areas. Ethno-archaeological observations often provided significant insights into previously unrecognized cultural practices and their corresponding archaeological signatures, a process which also worked in reverse where the nature of archaeological sites hinted at undocumented cultural practices. The mapping of cognitive perceptions associated with identified significant sites was utilized to assign social meaning to relict landscapes, places and features.

Documentary and Ethno-Historical Analysis

Ethno-historical accounts of culture and material culture also represented another source of oral history and folklore, especially through contributions to local Queenscliffe newspapers. While the objectivity of local newspapers was often

questionable, the spirited and often highly opinionated rhetoric provides valuable insights into the psyche and rationale of many community members that is not available in official historical records. These views were contained in the local editorials and personal community contributions, which proved valuable for later analysis of local community structures and hierarchy.

Aside from explicit details of various activities (including accounts of social events, tourist attractions and infrastructure construction) undertaken in the area, the Queenscliffe newspapers often include explicit accounts of important local issues, folklore and scandals, sometimes presenting a startling contrast to mainstream documentary accounts. Of note is a series of individual memoirs and reminiscences of several maritime services and industries written by local identities, many of whom were residents in the 1850s. In addition to providing personal minutiae not evident elsewhere, these anecdotal accounts represent the first recorded oral histories and/or ethno-historical accounts of the township and extend the range of the subsequent oral history interview records (undertaken by Duncan and the Queenscliffe Historical Museum) for the area backwards by some 150 years.

Oral Histories and Folklore

Oral histories are used by different social groups both to inform and reinforce their own cultural identity (Young 2002: 13–14). A number of researchers have recognized the inherent value of utilizing oral histories to elucidate the cultural/social aspects of community life (that are evident in folklore) and which might not otherwise be apparent in the historical or archaeological records (e.g. Yentsch 1988; Paynter 2002; Young 2002). Paynter (2002: S92–S93) has stressed the importance of narrative for investigating alternative histories that are normally overridden by the predominant and often dominant social systems that influence written historical texts.

Folklore represents an informal framework for communicating culturally significant information outside official societal structures, which is incorporated into group customary thought and practice and transmitted through oral and documentary local histories (Seal 1989: 7). It has played a substantial role in the shaping of the landscape in many maritime cultures (see Westerdahl 1980; Johannes 1992; Lewis 1994; Hviding 1996) where it directed usage of areas based on spiritual beliefs, superstition, tradition or caution associated with past cultural events, and often revealed underlying cultural realities that elucidated further aspects of (often) relict cultural landscapes. Many studies have demonstrated the validity of the integrated use of oral histories and folklore in archaeological and historical research (e.g. Gazin-Schwartz and Holtorf 1999: 11), and that each discipline's source could

not be adequately understood without reference to the other. It has also been argued that the shallow time depth of nineteenth-century narratives means that oral traditions are of sufficient accuracy to be accepted by archaeologists as historical documents (Symonds 1999).

Although many researchers have advised caution (e.g. Coll 1977: 17 as cited in Young 2002: 13; Souter 2003), oral histories provide an opportunity to access traditional folklore and practices that, when subjected to analysis and interpretation, can be seen as a valid data source for landscape studies (Gazin-Schwartz and Holtorf 1999: 17–19). Taken further, it could be said that when examining oral histories for cultural landscape studies, the accuracy of the account is irrelevant, as the substance of the narrative is of more importance as an indicator of personal landscape perspectives and ideologies. Therefore, it is recognized that multiple pasts will exist in regional oral histories, each with its own distinct qualities based on personal experience, a situation analogous with the underlying principles of cultural landscapes studies.

Finally, the concept of the maritime cultural landscape recognizes that the local knowledge held by community members can be the product of many generations of collective knowledge. In effect, the recollections of these people embody a palimpsest of cognitive cultural perceptions and traditions that form part of their own current personal landscapes. Parallels exist with Pacific and other Indigenous maritime societies where folklore and cultural traditions are used to reinforce the social identity and history within a community. Several studies of Indigenous maritime societies provided indications for the analogous types of specialist practical and nautical knowledge that might be found for maritime communities in the study area. These Indigenous studies included documentation of Pacific Island fishing communities (Iversen et al. 1990; Johannes 1992; Hviding 1996) and long distance voyaging (Gladwin 1970; Finney 1976; Turnbull 1991; Irwin 1992; Lewis 1994; Thomas 1997), all of which indicated that maritime communities would possess various levels of specialist knowledge regarding environmental and climatic conditions; resource availability, location and procurement methods; navigation; and ancestral history, which in some cases would only be evident via oral history traditions (see Duncan 2000, 2004).

Queenscliff and surrounding areas proved a fertile ground for oral histories and folklore, as many residents could trace their familial origins back to five generations, and in some cases in the same industry. Numerous long-term residents were interviewed who demonstrated affiliations (either direct or familial) with local maritime industries, services or other coastal activities. Most of the participants interviewed were between the ages of 70 and 90, which meant they often had first-hand memories of many of the events, themes and sites being investigated. Younger participants also included those who demonstrated a strong familial knowledge or direct ties to maritime industries that exposed them to the cognitive landscapes and collective knowledge of mariners in those services. Oral histories were also available through taped interviews held by local historical museums.

Many informants offered perspectives into multiple industries, which provided useful overlaps for comparing and contrasting data derived from other sources and interviews and for attaining different perspectives of individual places or features. Oral histories therefore were clearly an important method of transmission of local histories within the township and often evidenced information that was not available through other sources of historical documentation (Duncan 2011).

Each informant was initially interviewed with a set of standard predetermined questions, which were designed to identify places associated with various cultural practices, along with the specific nature and diversity of the activities undertaken there which would later aid in the identification of their possible archaeological signatures. Informants were also questioned regarding social relations in the township, their belief systems and superstitions, and intangible knowledge of the maritime environment and economic resources.

Toponymy

Toponymy is a significant component of maritime cultural landscape studies (Holmberg 1991; Westerdahl 1980, 2002a, b, 2003a; Whiteley 2002: 411). People name places in ways that are significant to them, and the investigation of toponyms may provide insights into past cultural uses of an area (Barber 1994: 17). Events outlined in oral histories were often identified and encoded in place names that "materially objectify oral history in the tangible inspectable landscape" (Whiteley 2002: 410). Place names serve multiple purposes within a landscape. They may act as a reminder of cultural identity through the cognitive preservation of famous persons, events and history; operate as descriptive navigational signs; detail historical events; associate cultural activities to geographical features; or endeavour to promote the virtues of an area to potential users; and are at once both a perceptive and tangible reminder of the community's past (Barber 1994: 18). Toponymy cross-cuts other data sources, as it draws from a wide range of fields, and therefore has the ability to extract past cultural regional usages, and as such represents another source of data that may assist in defining a landscape.

Special attention was given to the maritime toponymy of Queenscliffe, with an intensive analysis of historical and modern maps. Local historical memoirs often revealed the only evidence of the meaning of these place names through the recording or use of unofficial toponymy. The oral interview process similarly captured a range of informal place names (and their meanings) and also revealed that knowledge of many place names was often restricted to particular groups within the maritime community.

Archaeological Data

Divers, fishermen and other mariners play an important role in the discovery of underwater archaeological sites, due to their knowledge of the submerged landscape through direct engagement or finds in nets (Maarleveld 1997: 5; Westerdahl 1999: 100). Massagrande (1995) has shown that even randomly collected survey data (by non-professionals) can be utilized to examine regional patterning of sites, if the nature of the bias and selective acquisition of the collectors is recognized. These sources therefore offer potential independent archaeological data sets that may represent vast periods of personal experience, which far exceed the capacity of individual researchers to record alone, and may be derived from remote areas or regions never previously unexplored by archaeologists. They therefore represent significant alternative resources of archaeological data.

Archaeological data relevant to the maritime cultural landscape of the Queenscliffe area were garnered through systematic field surveys undertaken over along approximately 80 km of coastline and offshore islands, with a particular focus on the littoral zone and nearby underwater sites. Due to the enormous size of the study area, these surveys were supplemented with existing local knowledge of archaeological sites derived from interviews with local divers and other community members. The data proved to be predominantly accurate and reliable for most informants, as sites were almost always relocated during targeted surveys.

Thematic Approaches and GIS Data Manipulation

After reviewing examples of analogous international maritime communities, this study recognized that different groups will use the maritime environment in disparate ways, and accordingly, multiple maritime cultural landscapes will exist in any one area. A variety of maritime industries and services existed in the Queenscliffe area. Therefore, a thematic approach was adopted that examined multiple cultural landscapes and associated landscape features relevant to individual(s) and collective maritime groups within the community.

Previous traditional thematic archaeological studies have encountered problems where sites which are used by multiple users and groups have commonly been allocated relevance to one theme *only* because of practical structural limitations within the recording system. The range of potential landscape features and inter-linked landscapes in the study area proved to be immense and intricately interrelated. The use of themes became a key element for the examination of different landscapes in this study, as the thematic fields could be used within a GIS database to indicate an individual's association(s) with a specific group(s) and/or particular landscapes. A greater appreciation of GIS and the use of thematic landscapes are presented in Duncan (2006: 69).

GIS database coverages were created to map, manage and analyse landscape features and site localities within Queenscliffe produced from the various data sets. This enabled multiple layers of disparate data to be analysed concurrently. Individual landscapes features (both tangible and intangible) were encoded with more than one associated thematic value (through the assignment of separate fields for individual maritime groups, informants or other data sources). This not only enabled easier analysis of site patterning and landscape features using different combinations of themes or data source sets, but also elucidated the multiplicity of values that might be attached to them by different maritime groups, thus providing significant insights into landscape practices and perceptions. This aspect also applied to individual landscape participants, who might have cross-cutting ties with multiple thematic groups. These facets highlighted and facilitated investigative access to the multivalent considerations of landscape(s) at and across various levels. This was of critical importance to this study, as many maritime landscape themes and sites overlapped, were interlinked, and were often valued by different maritime groups for highly diverse reasons. GIS was also used to geo-reference cartographic and bathymetric sources to plot the location of historical landscape features and toponymic places, and these sites were then ground-truthed to investigate whether potential archaeological remains were present (Duncan 2006: 69–72).

Conclusion

The theoretical structures and methodological approaches described above are woven into our narrative of Queenscliffe's responses to wrecks provided in the following chapters. The following chapter introduces the study area of Queenscliffe and the emergence of maritime community in the region. In particular, the role of shipping mishaps in generating risk mitigation industries and how these strategies influenced the development and perceptions of maritime use of the region is explored in detail.

Chapter 3
Preparing for Shipping Mishaps

> *...being so close to The Bay, and so close to Points Lonsdale and Nepean with their fangs ready to tear to pieces any unfortunate vessel that came within their reach, it was only natural that the most exciting incidents in Queenscliff life have always been connected with the sea.*
>
> Dod (1931: 66)

Emergence of a Maritime Community

The origins and development of the Queenscliff community and the nature of its relationships and responses to maritime disasters are embedded in both the natural and historical circumstances of the area. As early as 1802, explorers from the British colony at Sydney had noted the existence of a large bay on the south coast, but it was another year before a second party entered and recognized its potential as a harbour, naming it Port Phillip (locally referred to as The Bay) in honour of the first Governor of New South Wales (Scurfield and Scurfield 1993: 14). While there had been no immediate intention to establish a settlement in the area, fears of a possible French colonization on the south coast encouraged further government explorations, while private groups also began investigations of the potential of the region for grazing (Scurfield and Scurfield 1993). By the mid-1830s, several illegal private pastoral settlements had been established around and near to Port Phillip, forcing the government to establish the official settlement of Melbourne at the north end of The Bay in 1836 (Sutherland 1888a). In the absence of land routes, passage through the Port Phillip Heads and northwards through The Bay became essential to the survival of the new settlement.

From the earliest years of European exploration, the unpredictable and dangerous conditions at the entrance to Port Phillip (The Heads) ensured that the passage had a fearsome reputation for mariners. Outside The Heads is the wild Southern Ocean, susceptible to deep swells, freezing winds and unpredictable rough seas sweeping up from Antarctica, as well as occasional thick fogs and terrifying

B. Duncan and M. Gibbs, *Please God Send Me a Wreck*,
When the Land Meets the Sea 3, DOI 10.1007/978-1-4939-2642-8_3

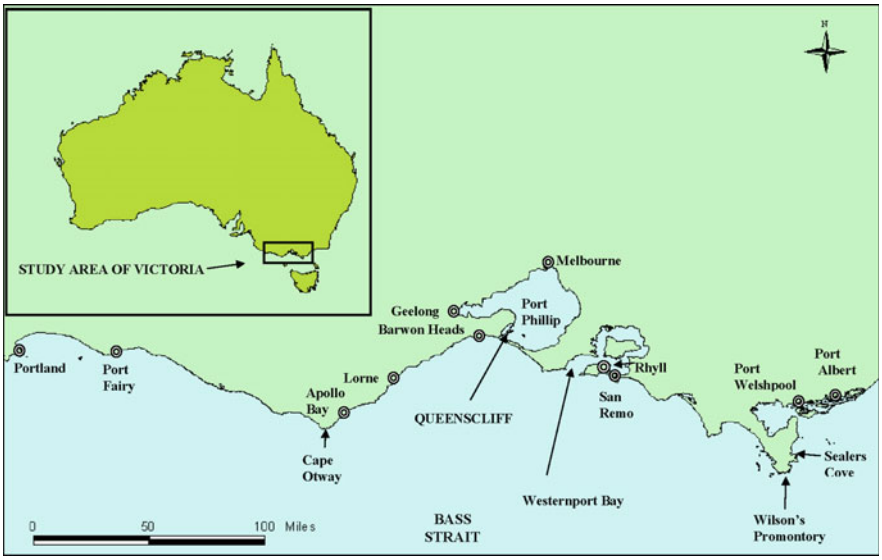

Fig. 3.1 Location of the study region

storms. The ocean shorelines between Pt Lonsdale and Queenscliff consist of broad rock platforms cut into Pleistocene dunes faced by steep rugged cliffs. The foreshore on the opposite side of The Heads between Pt Nepean and Observatory Point (Portsea) is similar, but also with parallel dune ridges on the inside of The Bay (Fig. 3.1).

To enter Port Phillip Bay meant a new series of dangers. The Bay is a flooded tectonic depression, over 57 km wide at its extremity but with a navigable width of only about 1.5 km wide at its entrance (Bird 1964: 35). The result is that with every tidal change there is a massive disparity of water levels between The Bay and the Southern Ocean, not unlike bath water being restricted at the plug hole. This funnel of water between The Heads, locally known as *The Rip*, can race at a speed of 6–9 knots (11–17 km/h). The danger is compounded by the tidal water hitting a horseshoe-shaped underwater chasm locally known as *The Wall*, which straddles the entrance to The Bay and plunges down to 95 m depth. Incoming water is redirected upwards towards the surface with great force, resulting in unpredictable eddies and whirlpools, and currents directed towards the shore (Yule 1876: 271; Loney 1989a: 1).

To make things worse, the area was also originally strewn with isolated uncharted pinnacles which often rose to within a few metres of the surface (Yule 1876: 305). In the early days, these pinnacles were usually discovered by vessels striking them (Anderson 1997: 7, 8). If mariners attempted to navigate The Rip against a strong ebb tide they could be swept against the eastern peninsula, especially if the oceanic wind eased off, leaving the vessels unmanageable. For sailing ships, the ideal time to enter or exit The Bay was the short period between

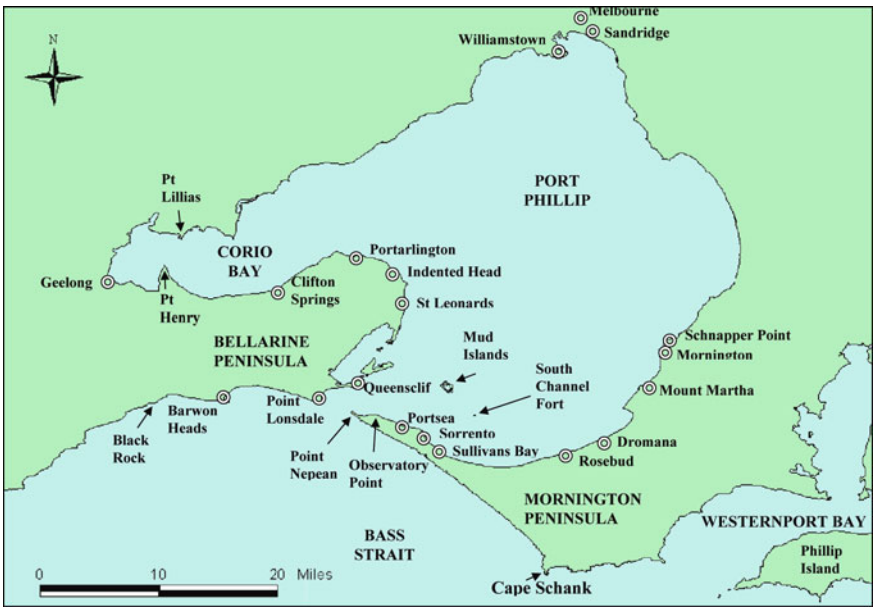

Fig. 3.2 Port Phillip and surrounding areas

high and low tides when the water levels reached equilibrium, known as "slack water" (Fig. 3.2).

Once through The Rip, Port Phillip offers comparatively calm waters but also a different set of hazards for mariners. The Bay is dissected by sand and mud banks created by sediments constantly being deposited and removed by the water flushing into and out of it. These banks are interspersed with up to six naturally occurring channels created by former river courses and tidal influences. However, the dynamic movement of sediments meant that originally only West and South Channels were sufficiently wide and reliable for safe navigation, with Coles Channel (to the west of West Channel) navigable only through regular dredging and chart updates (Bird 1964: 138). There are also several low-lying sandy and swampy barrier islands such as the Mud Islands (Bird 1977: 56). The shores surrounding The Bay include sandy beaches backed by dunes, shallow lagoons and salt marshes.

The unpredictable tidal surges and other hazards of The Rip claimed their first shipping victims as early as 1838, with several wrecks and strandings from damaged vessels soon after (PHO 1853). Shorthands Bluff, which offered a semi-sheltered anchorage on the western peninsula inside The Heads, had been recognized from the time of the first European explorations as having both strategic importance and potential as a base for maritime services. A Pilot Station was established there in 1839 when local ship master George Tobin was granted a license which allowed him to run a private Pilot operation. More licenses were granted over the next two years

and by 1841 four Pilots and five boatmen occupied tents on the beach in the lee of Shortlands Bluff (Noble 1979). Initially, the Pilots embarked onto vessels once they were inside The Rip, but later shifted to boarding outside after wrecks started occurring at or near The Heads.

The increase in shipping and wrecks at The Heads also highlighted the necessity for reliable charts and a system of navigation aids. In 1841, the Pilots requested that a disused Melbourne flagstaff be installed at Shortlands Bluff to act as a signal staff for broadcasting tidal movements and communicating with incoming vessels (LTGL 41/667). That same year lighthouses were proposed for Shortlands Bluff and Cape Schank, with lead lights proposed for the South and West Channels (GA 24/4/1841: 2; LTGL 41/908; 40/319; 41/532). Construction of the first lighthouse began in 1842, with sandstone quarried from the base of Shortlands Bluff used to build a tower with an attached storeroom and accommodation (Boys 1841; Raison 1997: 2). Although the light was operational by March 1843, several ships wrecked soon after, forcing the construction of an additional lighthouse on the southern side of the bluff as a complementary leading mark through The Rip (PPG 29/3/1843: 2; Burdwood 1855: 121; Raison 1997: 5) (Fig. 3.3).

With the 1851 discovery of gold in what was now the Colony of Victoria, shipping volume to the newly appointed capital of Melbourne at the north end of Port Phillip increased dramatically. In consequence, the incidence of shipwreck around The Heads also rose and it became clear that the new government needed to improve its maritime services to reassure travellers and traders of the safety of the

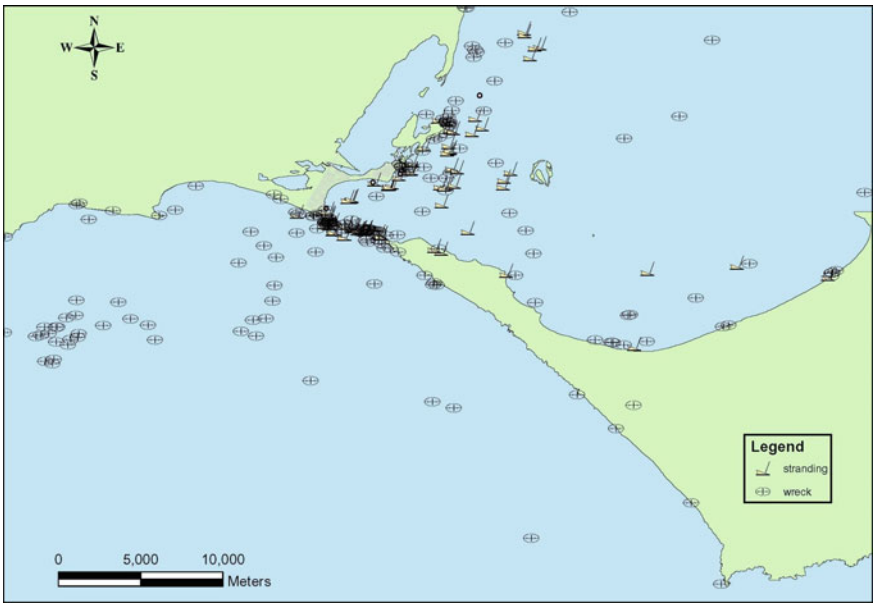

Fig. 3.3 Distribution of archaeologically known shipwrecks around Port Phillip Heads

port. The combination of rising population, a flourishing economy and the emergence of a wealthy leisured class, saw eyes turn towards the seaside landscape at The Heads.

The Foundation of Queenscliff

Shortlands Bluff, the easternmost tip of the Bellarine Peninsula on which the town of Queenscliff was established, can only be reached by land across a narrow isthmus and is otherwise surrounded by water. For much of the nineteenth century, Queenscliffe was therefore island-like in its nature. Constrained by a land area only 2.5-km-long by 1 km at its widest point, by the late nineteenth century the town was a relatively high-density settlement, with a socio-economically diverse population forced into close proximity. The first land sale in 1853 was predominantly to the Pilots and lighthouse men who were already there, and by 1854 a row of houses for the Pilots Service (Pilots Row) had been built by the government. With the gold rush creating a class of wealthy business men and successful miners, most of the rest of the land sold in the newly named town site of Queenscliff was for holiday homes or to speculators anticipating the development of the area as a seaside resort (Dod 1931: 8). Located only 40 km south of Melbourne and readily accessible via The Bay, the new town attracted judges, senior clergy, wealthy pastoralists and businessmen, and even the Governor.

As Queenscliff became established, its situation at the head of Port Phillip meant that it was an ideal base for a range of maritime services. The surge in shipping during the 1850s saw several serious epidemics arrive with immigrant ships, leading to Immigration and Health Officers being appointed to inspect arriving vessels and process incoming immigrants (Draper 1900: 9; GA 30/10/1854; Kruithof 2002: 103–105). Both officers used whaleboats that were launched off the beach to board vessels inside The Heads (Dod 1931: 9; Noble 1979: 43). Smuggling activity also increased in the Queenscliffe area along with blatant looting of shipwrecks (both of which will be discussed later). A token force of a junior Customs Officer and boat crew had been stationed at Shortlands Bluff in 1853, although the large expanse of coastline and hundreds of vessels entering The Heads annually rendered them almost completely ineffectual. An experienced Customs Officer and two policemen were stationed at Shortlands Bluff several years later (Day 1992: 292). By 1862, the Customs boat stationed at Queenscliff was making raids in search of smuggled spirits as far north as Portarlington, but raised the ire of the local population when a raid was carried out on the Sabbath (GA 8/1/1863: 2, 9/3/1863: 3), resulting in the boat being removed that same year (Loney 1989a: 5). By 1867, the Queenscliff Customs Station had been closed, despite concern that the former smuggling trade would be renewed (GA 18/4/1867: 3). After this time, Customs Officers based in Geelong, in the north-west part of Port Phillip, patrolled the area as necessary (Day 1992).

The increase in shipping traffic through The Heads also inevitably led to a rise in shipping mishaps and the need for rescue services. The Pilots stationed at Shortlands Bluff had initially assisted distressed vessels, with a former ships lifeboat provided for them in 1856 (QS 10/12/1892; McGrath n.d.: 1). The rising incidence of wrecks and strandings led to the provision of purpose-built lifeboats to rescue people from distressed vessels. These lifeboats were originally worked by the Pilots and the Health Officer and Customs crews, but in later years local fishermen who were often far more experienced with the diverse waters of the area took up the role. Subsequently, these boats and specialized launch and storage facilities were placed at various piers at Queenscliff and the nearby settlement at Pt Lonsdale. The Lifeboat Service remained an integral part of the Queenscliff landscape until it was disbanded in 1979 (Noble 1979: 49; Boyd and Roddick 1996: 3). Further, hydrographic surveys began in 1851 and required revision every decade to document the numerous marine hazards and shifting channels of Port Phillip (Scurfield and Scurfield 1993: 17). Over time a network of lights and beacons was built in and around The Bay to guide vessels through Port Phillip.

The strategic value of The Heads had been recognized early, but with the discovery of gold in Victoria in the 1850s, there were increasing concerns surrounding foreign attack from the sea (O'Neill 1988: 39). Over the years, up to seven fortresses and innumerable associated military emplacements were established around The Heads to combat the threat of potential invasion, including Fort Queenscliff based on the higher ground at Shortlands Bluff. Furthermore, several defence vessels were stationed at The Heads (particularly at Swan Island) to complement this network of coastal fortresses.

Queenscliff's geographical position at the entrance to Port Phillip and its use as a base for maritime services meant it was the first port of call for international shipping which had to stop for various government inspections and Mail Services before passing onwards to Melbourne and Geelong. Initially, a post office was established at Queenscliff that could receive mail from incoming vessels and take it overland by fast horse to the Western Districts and Geelong. A telegraph service from Queenscliff to Geelong and Melbourne was also established in 1854, ensuring that important news and Customs information could be transmitted from incoming ships to the capital within the hour (Day 1992: 290; Brownhill 1990: 583). Smaller inter-colony traders and passenger ferries also occasionally delivered mail and supplies on their inwards journeys, and later the township was a regular destination for tourist excursion vessels.

By the 1860s, a fishing industry had also developed at Queenscliffe, when Chinese and then European fishers arrived in the area (Kerr 1985: 69; QS 25/3/1893). Dried and later fresh fish were an essential food source for the early colony, especially with the increased demand from the goldfields (Wynd 1988: 115). Within a few years, a large permanent fishing community had been established in the township (Dod 1931: 80). From about 1867, the fishermen occupied the lower areas of Queenscliff and Swan Island, developing major infrastructure for boat maintenance and shelter in this area (Dod 1931: 26, 27). Fishermen harvested the areas both within and outside The Bay, developing a complex knowledge of and

relationship with the marine and adjacent terrestrial environments which also made them masters of those waters (Duncan 2006: 148–186).

Various other extractive industries also operated in and around the Queenscliffe hinterland. From the early 1850s until the 1920s, guano mines operated at both the Mud Islands and Duck Island (Prescott 1970; Yukovic 1998: 20). Lime burning, brickworks, wattle bark collecting (used for tanning) and firewood cutting all took advantage of the resources of the area (Harrington 1997; Dod 1931). There was also collection of seaweed and salt, and quarrying of sand and shell grit. These industries were serviced by a flotilla of small boats known as the Mosquito Fleet which transported these materials down to Melbourne and would bring supplies back to The Bay communities. As the hinterland was cleared, pastoralism also gave way to agriculture.

Tourism played a major role in the development of Queenscliff from the time of its foundation, with the new town becoming the first holiday resort in the colony. In addition to the wealthy who could buy their own holiday homes, the area was close enough to Melbourne to attract day or short-term visitors, serviced predominantly by seaborne transport in the form of bay steamers and specialized ferry transport (Day 1992: 286). The emergent Victorian era enthusiasm for sea bathing and sea air for health purposes quickly led to the establishment of tourist facilities which shaped the town's foreshore aesthetics and use for many years (Inglis 1999: 23). In addition to enclosed bathing areas, other tourist amenities were developed for both the day trippers and longer term visitors, including accommodation ranging from guesthouses to grand hotels, public houses, tea houses and restaurants, as well as promenades and other entertainments and services (Dod 1931; Beavis and Raison 1984: 30, 35). The town also hosted a number of other health-related facilities, including convalescent homes for sick children and a retreat for clergy. Seasonal surges in population as the result of tourism were to become an integral part of the survival of the town and, as for so many tourist destinations, both a blessing and a curse. As will be described in later chapters, not only did the derelict remains of wrecked vessels become tourist attractions for the Queenscliff area, but the spectacle of a wrecking under way also offered a more gruesome enticement for visitors.

By the second half of the nineteenth century, Queenscliff found itself simultaneously remote from the urban centre of Melbourne but also a hub of maritime activity in its own right. The diverse array of maritime industries and services, often with their own specialized vessels and relationships with different parts of the terrestrial and marine landscapes, led to the development of a maritime identity and society that pervaded the very character of the Queenscliff town.

Despite any commonalities forged through isolation and connections to the sea, Queenscliff as a colonial community was made up of individuals from many different geographic, ethnic and cultural backgrounds. Some had maritime links from their homelands and quite probably brought with them maritime knowledge, traditions and folklore. Others were new to the sea. This is significant as it is unlikely there was one dominant maritime tradition in the early years of the Queenscliffe community. As in many colonial situations, it is quite probable that a synthetic set of traditions and practices emerged at Queenscliffe, negotiated and adapted from old

knowledge and experiences from many places. The shared experience of a new and unfamiliar environment would have helped meld these together into new forms and applications. This synthesis of cultures and understandings is particularly important when considering the community's reactions and responses to shipwrecks.

Shipping Mishaps Around Port Phillip Heads

The Port Phillip Heads and The Rip are known as one of the most dangerous stretches of water in the world, accounting for many lives (and near mishaps) among the Queenscliffe maritime community and transient seamen alike.

> …Before long The Rip is at hand, the dreaded Rip, before which even the hardiest Pilots will sometimes quail, and small wonder at it… There she goes, right through the wrathful Rip, which hisses its mad defiance of the intruder upon its gambols. 'By heavens' exclaims the captain who had never visited the port before, 'I had heard The Rip was bad, Pilot, but had no idea it was anything like this'. ("The Mark Three" 1884b)

Navigation through the area required specialist knowledge of its intricacies and irregularities. In historical accounts, The Rip is often spoken of in terms which are somewhere between reverence and dread, such as the epigram opening this chapter or Dod's testimony that "many mariners venturing through The Rip breathe a long sigh of relief when they are safely through its terrors" (Dod 1931: 39): Even though they feared the crossing, they were forced to accept it as an occupational hazard (Mather 2001).

> Was The Rip dangerous? Christ yeah! Especially in a south west wind and a big break, with the tide and a break coming behind you. A few boats got sunk there. I wasn't too happy sometimes coming through I tell you! (Shapter 2001)

Shipwrecks and shipping incidents were common occurrences along the Victorian coastline and well over 800 wrecks are recorded in the historical record (Heritage Victoria Shipwreck Database), although this figure does not include the hundreds more strandings and re-floatings. Due to its nodal convergence for shipping into the ports of Melbourne and Geelong, The Rip was also well known as a focus for shipping mishaps. The combination of environmental and human factors led to a significant clustering of shipping mishaps within 10 km of The Heads. Vessels that could not be removed became shipwrecks (i.e. *average* or *total constructive losses*), while vessels that were successfully removed were known as strandings or groundings (Duncan 2006: 215). The first documented shipwreck at The Heads occurred in 1840, when the cutter *Prince Albert* went ashore (Bateson 1972: 149). Since then, scores of shipwrecks and innumerable strandings and groundings occurred in the area, with over 95 wrecks identified within 10 km of The Rip, both inside and outside The Bay (Arnott n.d.; Anderson 1997; Anderson and Cahir 2003; Love 2006, 2012). The close proximity of these mishaps to the coastline, popular resorts and other essential services led to a rich historical

documentation of these events, along with an extensive collection of images of vessels ashore on the shallow reefs on both sides of The Heads (e.g. Williams and Searle 1963, 1964; Loney n.d. a, b; 1971, 1981, 1989; Naylor n.d.; Foster 1987–1990).

The causes of shipping mishaps around The Heads are too numerous to document in this volume, although several factors affected the incidence of wreck, stranding or near misses in the area. Submerged rocks and pinnacles were major shipping hazards, with many ships tearing open their hulls around Points Nepean and Lonsdale. Damaged vessels were either wrecked at those locations or foundered inside The Bay as water filled their hulls while they attempted to reach a safe haven. Even the relatively shallow waters inside The Bay were hazardous, particularly when combined with regular gale force winds, which often led to dangerous sea conditions where vessels foundered or were driven ashore, only to be pounded to pieces by storms.

Poor navigational services in the early days of the Colony of Victoria further contributed to numerous strandings, particularly inside Port Phillip, where vessels often grounded on the constantly changing sandbanks and the (then) uncharted rocks and reefs. An initial paucity of reliable bathymetric data for The Rip and sandbanks (particularly around the southern end of The Bay), outdated charts, inadequate navigational infrastructure and unexpected tidal conditions at The Heads led to numerous shipping mishaps. However, human error and adverse behaviour by individual mariners and/or maritime companies and services also played a significant role in the loss of many vessels. Numerous masters and their crews were reprimanded in this early period for laziness, drunkenness or incompetent seamanship (often resulting in collisions or wrecks). High pilotage and towage fees also led some vessels to attempt passage through The Rip under their own navigation (e.g. GA 8/9/1855: 2). Disputes over potential salvage rights of stranded or distressed vessels also often led to disaster in the interim.

The Victorian gold rush of the 1850s played a major role in the wrecking of several ships, with vessels deserted, sabotaged or set ablaze by their crews attempting to get free of their articles in order to be able to head to the goldfields. In one particularly spectacular event, it was alleged that the crew of *Empress of the Sea* set the vessel afire and then threw the water pump handles overboard (Simkin n.d.). Similarly, some vessels were so desperately short of crews that they waited for months for skilled mariners or went ashore for lack of sufficient crew to sail them. There were insufficient suitable vessels available to meet the overwhelming demand for transportation to the Victorian goldfields. Consequently, many of the ships that arrived at Port Phillip were at their end of their working life and hardly seaworthy, making them susceptible to wreck, a phenomenon also observed by Delgado (2009) for the San Francisco Gold Rush. Some ships which were purchased at bargain prices overseas were simply abandoned upon arrival, while others may have been deliberately wrecked or stranded in order to claim insurance payments for vessels that were quite literately falling apart by the time they reached Australia (Grant 2001–2012).

Another possible human influence in shipping mishaps around Port Phillip was end of voyage weariness, where crew who had been at sea for a lengthy period were fatigued and made mistakes when entering the dangerous waters at The Heads. Although this aspect is not usually identified in official witness accounts (as admission to such would imply guilt and hence responsibility for the incident), modern studies of seafarer fatigue have demonstrated that exhaustion reduces cognitive function and comprehension (c.f. Smith et al. 2006; Wadsworth et al. 2008).

Despite almost exhaustive historical research for shipwrecks in the Port Phillip and Heads area, no previous attempts had been made to comprehensively document grounding or stranding sites, although several notable instances had been recorded by local researchers (Love n.d.; Williams and Searle 1963, 1964). Initial investigations of primary and secondary resources identified well over 100 strandings or collisions in the immediate area (Duncan 2006: 218). Based on these results, it is likely that several hundreds more occurred in the region. The first-recorded strandings in Port Phillip occurred in 1803 before the establishment of any permanent European settlement, when two vessels associated with the (later) abandoned Collins settlement at Sorrento stranded in The Bay (Sydney Monitor 29/6/1836: 3).

Although stranding sites are often overlooked by archaeologists and historians as the ship involved in the incident is no longer present at that location, historical accounts from the study area document numerous instances of large quantities of cargo and ballast jettisoned in attempts to lighten and re-float vessels (Williams and Searle 1963, 1964; Loney 1971). During one incident, over 50 tons of general cargo was thrown overboard when *Victory* stranded in Lonsdale Bight (MMH 19/8/1850: 2). Discard of coal is a recurrent theme in accounts of stranding, with many stranded (or wrecked) vessels dumping their cargoes overboard around the vicinity of Shortlands Bluff or Lonsdale Bight (GA 20/4/1862: 2; 7/6/1852: 2; 28/6/1866: 2). In one dramatic event, in 1934, *Milora* discharged 1500 tons of coal into the sea (Williams and Searle 1963: 54) (Figs. 3.4 and 3.5).

These strandings had obvious visual impacts on the community, particularly when they occurred close to shore. One informant recalled witnessing the stranding of *Milora*:

> I remember that I was 4 years old [in 1934] when that happened. My parents had taken us over to the beach with my brother to look at this ship. It was close to the Clark Beacon and closer to Pt Lonsdale. There was this enormous ship, right up on the beach. (Patrick 2004–2012)

Similarly, when the 39,000 ton tanker *Golden Gate Sun* ran ashore off the Queenscliff Back Beach in 1984, it presented an imposing sight as it towered above the lighthouse and other beacons in the area (Wane 2003: 51).

Of the 100 identified strandings in Port Phillip, in 15 % of the cases the historical records specifically indicated that ballast, coal (i.e. fuel), cargo or even structure had been jettisoned overboard to lighten the vessel. It can be seen from the examples

Fig. 3.4 *S.S. Milora* stranded on Victory Shoal (*Photograph* QHM collection)

Fig. 3.5 *Golden Gate Sun* ashore at Shortlands Bluff in 1984 (*Photograph* © Rodney Nicholson, sea Gems Gallery, Queenscliff)

above that as vessels involved in strandings have by definition been removed, stranding sites potentially present an opportunity to study shipping mishaps that may only be evident from cargo or discarded structural remains.

Unofficial Risk Mitigation Strategies—Deliberate Stranding

Mitigation measures are usually introduced wherever shipping mishaps occur, particularly if the area is economically or militarily significant and further shipping movements are anticipated. If the area is not deemed valuable enough to invest resources in mitigating risk, then it will usually fall into disuse or other strategies will be developed (e.g. Duncan 2000, 2004). Port Phillip was of key economic and strategic importance, and although the risk to shipping presented by the elements could not be completely eliminated or avoided, to some extent it could be mitigated. Several strategies were used to reduce the risk of shipping mishaps in the Port Phillip Heads region; many of which had a direct impact upon the creation or nature of the Queenscliffe community and the archaeological resource related to shipping mishaps.

A different aspect to stranding sites is their role as a mitigation response after a shipping mishap. Despite the presence of a complex network of navigational beacons, many vessels struck uncharted rocks at Pt Nepean and Pt Lonsdale (e.g. *William Salthouse*, *St George*), causing serious damage to their hulls. Many of the historical accounts of strandings around Port Phillip indicate that damaged vessels were being deliberately run aground on to shallow shelving beaches or sand banks to prevent their total loss through sinking in deep water. This practice enabled the vessel to be repaired or sufficiently lightened to continue its journey, by throwing ballast, fuel, structure or cargo overboard, or through their transferral to lighters.

The first historical evidence of a deliberate stranding was when the barque *William Salthouse* was run ashore in Nepean Bay in 1841 (Williams and Searle 1963: 1). Several similar instances were reported between 1852 and 1855, when a number of vessels (*St George*, *Ontario*, *Marie*, *Marchioness*, *Antoinette Cezard*) were intentionally grounded in Swan Bay after they had torn their hulls open on Corsair Rock at Pt Nepean (MMH 31/12/1852; Argus 16/11/1853 and 17/11/1853; Williams and Searle 1963: 13, 17). Although many of these ships were carrying luxury goods destined for Melbourne and the goldfields, large quantities were thrown overboard to lighten the vessels.

Beaching an endangered or damaged vessel became an unofficial but recognized practice of the Queenscliffe Pilots from at least 1855. Swan Bay (north of the Swan Spit Buoy, where the lighthouse stood afterwards) presented the most favourable conditions, as it was sheltered from most of the prevailing winds and was close to a settlement (Draper 1900: 8–9).

> The Ship St George…arrived at The Heads on Tuesday…she got on some rocks off Pt Nepean, and struck heavily for a few minutes. The force of the current carried her clear of the rocks, but so leaky that the pump could not keep the water under. The Captain then… got inside of Pt Lonsdale, where a Pilot was got on board – there was now seven feet of water in the hold in spite of an incessant pumping. He decided to take her into Swan Bay, and beach her, which manoeuvre was safely effected…The ship is described to be in a perfectly safe position, beached in Swan Bay, and the Captain is confident that he can get her into harbour after discharging a portion of the cargo. (MMH 31/12/1852)

Documentary accounts and local researchers (Love 2006: 35; Ferrier 2001–2004) identified other favoured areas for strandings, including the shallow and gradually sloping waters off Swan Island Spit, Popes Eye shoal, Pt Nepean Beach and the Mud Islands (Great Sands Bank), the latter being more sheltered from sudden gales than Lonsdale Bight. Deliberate beaching was also used in cases where vessels were ablaze, as was the case with *Empress of the Sea* where "the cables had been slipped and the vessel ran on shore as far as she would go" (Simpkin n.d.: 9).

Similar use of deliberate stranding as a hazard prevention practice was also identified by Duncan (2000: 127; 2004a) among coal carrying vessels in the Gippsland region of Victoria, to the east of The Heads. Duncan hypothesized that these often older and dilapidated ships vessels were purposely sailed closer to the coast than officially advised, so that if they got into difficulty in huge seas they could deliberately strand on the beach rather than risk foundering at sea. Figure 3.6 shows the distribution of deliberate stranding sites in the study area.

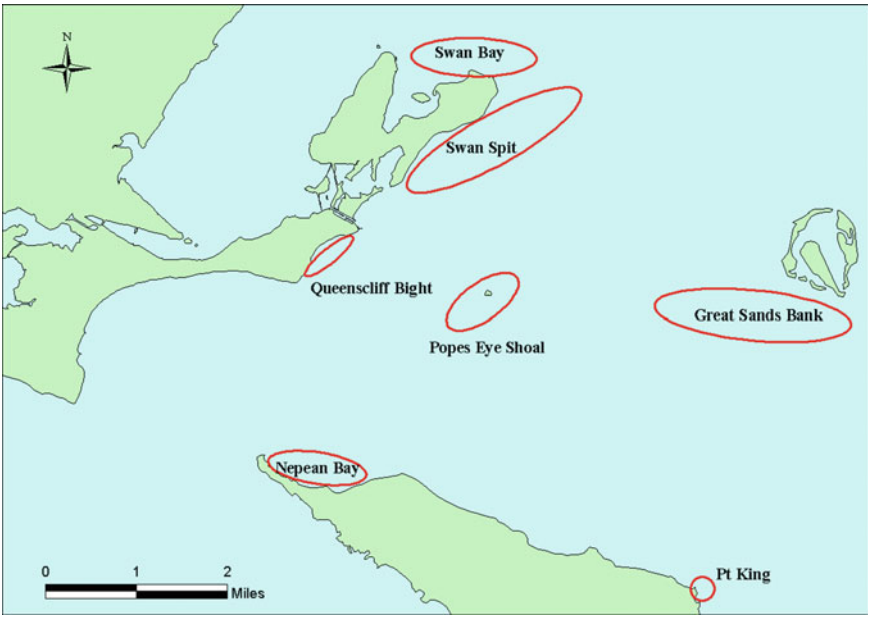

Fig. 3.6 General locations of known deliberate stranding sites in the study area (Duncan 2006)

Despite the prevalence of shipping mishaps around The Heads and Port Phillip, there is no evidence that the area saw the emergence of private "wreckers", as seen in Florida and the Bahamas. In that sense, this term refers to professional salvors who cruised shipping mishap prone areas, looking for strandings and wrecks, or offering assistance to ships in distress (Viele 2001). This should not be confused with the British historical usage of the term "wrecker" which refers to those who encouraged the wrecking of ships to allow for illegal looting (Bathurst 2005).

Official Mitigation Measures

Shipwrecks and strandings were not only human catastrophes (and in some instances tragedies) for the colony, but also a financial loss that discouraged shipping trade. Official correspondence from 1852 regarding the need for Pilots argued that: "every shipwreck was dangerous to the character of the port" (Noble 1979: 21). The incidence of shipwrecks and strandings in and around Port Phillip led to a proliferation of mitigation strategies designed to prevent incidents, or if these strategies failed, to moderate their consequences. These strategies worked on the principles of prevention (risk elimination) and rescue (risk remediation).

As described earlier, five major maritime service industries in Queenscliff were established as a direct consequence of the proliferation of shipwrecks in the region: Pilots, Lighthouse, Lifeboat and Customs and Hydrographic Services. The Pilots, Lighthouse and Hydrographic Services were instituted to prevent or reduce the incidence of shipwrecks in the area, whereas the lifeboat was established to protect human life and property after shipping mishaps had occurred (Duncan 2006; Day 1992; Raison 1997; Noble 1979). Although most people recognize why these services existed, it is also important to also understand how they functioned, the effects of this on the Queenscliff community, and how these processes are visible within the archaeological record of the area.

Port Phillip Pilots Service

The Pilots' Service represents perhaps the most important example of primary risk mitigation and as the first established in Queenscliffe shaped how the community responded to shipwrecks. For this reason, this industry will be examined in more detail than the other services.

As noted previously, a private Pilot station began operation at Shortlands Bluff in 1839, using local knowledge of the hazards and conditions to guide incoming vessels through Port Phillip Heads. A Pilots Board was established in 1840, introducing government regulation of the industry. The Pilots then operated two double-ended 9-m-long whaleboats, but these craft were considered inadequate for conditions at The Heads. By 1841, the Government cutter *Ranger* had been

temporarily provided to act as a cruising station outside The Heads and also to assist with bathymetric surveys of marine hazards. This led to a dramatic increase in the fortunes of local Pilots, who relied on user-pay pilotage fees as income, a portion of which was contributed to a channel maintenance fund. As their wealth increased, some Pilots developed drinking problems or arrogant demeanours, often refusing to obey instructions from the Harbour Master to undertake official duties unless they could profit commercially (Noble 1979: 15–18). In the early 1840s, the four Pilots and their nine boatmen occupied tents on the beach in the lee of Shortlands Bluff, a situation that was encouraged by the Board to prevent them becoming too complacent and "unwilling to put to sea in bad weather". When *Ranger* was withdrawn in 1843, Pilots resumed using whaleboats for transferrals to incoming vessels (Noble 1979: 11–15).

By 1849, Pilots were no longer required to board incoming vessels outside The Heads (Intelligencer 31/8/1850: 902, GA 31/12/1852: 4). To further complicate matters, two forms of specialized pilotage services emerged, whereby *Outside Pilots* guided vessels in through The Heads, while *Inside* (or *River*) *Pilots* took the vessels up the channels to Melbourne (Springall 2001). Incoming vessels were required to stop at Shortlands Bluff to change Pilots and to anchor if no Inside Pilot was available (Noble 1979: 23).

From 1851 to 1853, the Queenscliff Pilots were officially engaged as civil servants (Cuzens 1912: 2). However, given the lure of the goldfields, experienced and competent Pilots were difficult to come by, which may have meant inexperienced and sometimes inept mariners were being appointed to the role. Despite seven new appointments in 1852, there was still a shortage of Pilots relative to the immense volume of immigrant ships (MMH 8/3/1852: 3; Noble 1979: 18, 21). This resulted in vessels queuing for Pilots inside and outside The Heads (Argus 23/9/1853: 4). Several vessels were grounded in that year while under charge of Pilots (MMH 13/8/1852: 2; and 9/12/1852: 4), leading to the dismissal of at least one Pilot for negligence. Furthermore, as a large number of Pilots resided in Melbourne, they preferred vessels bound to that port as opposed to Geelong, prompting calls for the Pilots to be permanently at Queenscliff with a Pilot patrol vessel stationed outside The Heads (GA 24/6/1853: 3). Two square-rigged vessels were initially introduced for use as outside patrolling stations in 1852–1853, but were found to be unsuitable as they lacked manoeuverability. They were later replaced by three fore-and-aft-rigged vessels (MMH 4/2/1853: 4; GA 24/6/1853; Cuzens 1912: 2).

The need for improved standards and for Pilots to be more financially responsible for their services led to the introduction of the Pilots' Board of Port Phillip in 1854. This organization had widespread regulatory and dismissal powers and made sweeping changes in the industry ("The Mark Three" 1884a, b; Cuzens 1912: 2; Noble 1979: 24, 25). A new business model was adopted whereby the Pilots were divided into competitive companies, each of which was responsible for its running costs, to be funded by user-pay pilotage fees. Each company was allocated a vessel and assigned a weekly patrol area (either outside or inside The Heads) on a rotational basis to ensure that incoming vessels were always met prior to entering the

port. In an attempt to further stimulate efficiency, each company was paid dependent on the tonnage of traffic that it serviced, although this often led to incoming vessels finding The Heads unattended as Pilots chased larger incoming vessels further afield (Cuzens 1912: 2).

Although vessels seeking to avoid pilotage fees and a continued lack of available Pilots led to many vessels going ashore in 1855, further changes were implemented to the Service's structure which increased Pilot availability. Most significantly, Pilots were no longer changed at Shortlands Bluff, but steered the vessels all the way through the channels to and from the Ports (GA 8/9/1855: 2; Noble 1979: 22–25). This change in procedure appears to have eventually reduced shipping mishaps around The Heads.

By 1861, shipping volume had decreased and the Pilots' Service was reduced to two companies of eleven Pilots each. While one vessel patrolled outside The Heads, another was moored inside (at an area known as the Pilots anchorage) near Shortlands Bluff on standby for when the outer vessel had discharged all her Pilots (Ferguson 1861: 7; Noble 1979: 28). Vessels requiring pilotage services either displayed a Union Jack at the fore topgallant masthead during the day, or burned a blue flare at night (IAN 10/6/1885; Yule 1868: 257). Vessels were initially spotted with the aid of a large telescope mounted at Shortlands Bluff (Ferguson 1861: 7), which was later complemented by the use of electric telegraph from regional lighthouses who advised of approaching vessel (Noble 1979: 29, 30). The Pilot vessel would then sail into the lee behind the customer's stern to transfer the Pilot via a small lighter.

The risk of providing offshore pilotage services was succinctly demonstrated by two shipping mishaps associated with Pilot vessel. Four men were lost in 1873 when the schooner *Rip* attempted to get to the sea in a South West gale (see Fig. 3.7), while the cutter yacht *Corsair* was wrecked on Corsair Rock in 1874 (IAN 12/8/1873: 137; Illustrated Sydney News 29/8/1873: 13; Cuzens 1912: 2; Noble 1979: 33–34). Despite these setbacks, by 1879 confidence in the Pilots had increased, with an enquiry into pilotage concluding it was an effective service as,

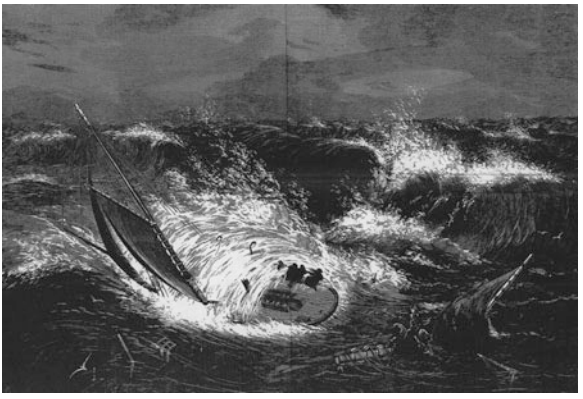

Fig. 3.7 The disaster to the Pilots boat *Rip* at Port Phillip Heads (George 1873, State Library of Victoria, SLV)

Fig. 3.8 Mail steamer taking the Pilot, (Sleap 1884a, SLV)

out of 26,000 vessels that had passed through at The Heads in the last five years, only 35 casualties had occurred (Noble 1979: 35). Despite this finding, Pilots faced public disdain whenever a shipwreck occurred. This led in turn to a spirited defence by the Queenscliffe community, who extolled the dangers faced by Pilots outside The Heads in a small boat in a heavy gale (QS 10/5/1884; also see Fig. 3.8).

> To criticise before a good coal fire, and in a well carpeted room on a winter's night is one thing, but to be lowered down in a small boat in a gale of wind amid the howling and seething sea momentarily expecting to be slashed to pieces is quite another aspect of affairs. I have had experience of this both inside and outside The Heads, and have often felt I would give the world to be on terra firma, especially when clinging to the boats keel. In the early days it was a common thing for the boats to go miles to see and board ships and get back the best way you could, as to tow was impossible through The Rip. (Fanning 1892a; QS 26/11/1892)

Even with reduced incidence of wreck, there continued to be official enquiries into Pilot work practices when mishaps occurred (QS 13/8/1887). This close scrutiny encouraged the Pilots to improve their operations and also their bathymetric knowledge of The Heads and Bay through their own sounding surveys (GA 12/11/1855: 2). However, for transient mariners, the appearance of the Pilot Boat alongside symbolized the impending arrival at their destination, with one traveller recording: "After a long voyage at Sea, all hailed the sight of the Pilot with joy" (QS 13/8/1887).

The cruising cutters were eventually replaced in the early 1900s by larger steam vessels where Pilots were accommodated aboard, and in 1941 these were superseded by motor-driven vessels. The offshore station model was retained until the final cruising station ship (*Wyuna*) was decommissioned in 1975 in favour of faster launches and helicopters (Noble 1979: 68–70).

Fig. 3.9 Pilots Reserve buildings and Pier c.1882 (*Photograph* PH24 Queenscliff Historical Society)

The Pilots Service brought many economic benefits to the town, as early Pilots resided locally and so contributed to its wealth and social hierarchy. Many generations of merchant seamen were engaged by the Pilots' Service to run their cruising patrol vessels (Noble 1979: 73–4). By 1884, a local carpenter was constantly employed in working on the two vessels at Shortlands Bluff, which were regularly subject to damage at sea during Pilot transferrals. He would also repair the small clinker built craft used for Pilot transfers, which were regularly damaged at sea (Springall 2001; Beazley 2001–2004; Patrick 2004–2012). The victualling of the Pilots' boats also provided a steady income for local businesses, especially for fresh produce, with the local baker and milkman making daily deliveries (Patrick 2004–2012).

The growth of the Pilots' Service saw the reservation of the area in Queenscliff Bight directly below Shortlands Bluff, eventually known as the Pilots Reserve. This area was used extensively for vessel maintenance, with both boatbuilding and repair sheds, as well as storage and victualling facilities (see Fig. 3.9). A pier was built prior to 1882 to allow Pilot vessels to come alongside the facilities ashore for re-victualling and maintenance (Noble 1979: 30–31).

Lighthouse Service: Navigational Beacons and Lighthouses

Despite initial calls for the construction of lighthouse facilities at Pt Nepean in 1836, it was not until 1841 that the new Governor (La Trobe) recommended lighthouses be built at Shortlands Bluff and Cape Schank, with lead lights proposed for the South and West Channels (Noble 1979: 42; Raison 1997: 1–2). Due to the complexity of mounting lit structures in areas where little support infrastructure existed, the first navigational structures were predominantly unlit beacons (Duncan 2004b: 264). Increases in the shipping incidents at The Heads underscored the necessity of a reliable system of navigation aids and charts. In an effort to ensure the

success of the new Port of Melbourne, a system of buoys marking the West Channel was established as early as 1841, laid by the Customs revenue cutter and then the Pilots' vessel *Ranger* (GA 21/7/1841). Maintenance of these channel markers was guaranteed by the Governor (Boys 1841). A Government survey vessel (*Loelia)* was stationed at The Heads to continue laying buoys and to take soundings of the constantly changing sand channels (Cuzens 1912: 1). The first major navigational structures established (in 1843) were the Swan Island beacon and the Pt Lonsdale signal staff, the latter being used to communicate with incoming vessels (Stokes 1843; LTGL 41/667).

Construction of the first Heads lighthouse at Shortlands Bluff began in 1842, along with a signal station to record shipping movements (Cuzens 1912: 1; Jarrat 1865: 48). Although operational by March 1843, continuing shipwrecks in the locality (e.g. *Thetis* and *Princess Royal*) demonstrated that an adequate system of leading lighthouses was required to safely direct shipping past the submerged rocks and reefs in The Rip (PPG 29/3/1843: 2; MMH 6/3/1844: 4; GA10/6/1848: 2). The Shortlands Bluff Lighthouse lacked sufficient power and elevation to be adequately seen by shipping in critical approaches to The Rip and despite further modifications it was blamed for the wreck of *Princess Royal* at Pt Lonsdale in 1849 (LTGL 43/2027; PWONTM 20/2/1844).

To improve safety for incoming vessels, a tidal station which broadcast slack water notifications to incoming vessels began operating at Point Lonsdale in 1852 in daylight hours (Ferguson 1852: 2). Colour-coded pennants and Marryat's (flag) signals were used to communicate with shipping (Ferguson 1854: 6). The operators were also instrumental in reporting wrecks (such as *Marmion*) to the Pilot and government vessels via the flagstaff (GA 30/5/1853: 2), as well as caring for shipwreck survivors (e.g. GA 2/5/1853: 2).

Over time, more lighthouses, lead marks and beacons were added as new hazards were identified, to guide vessels along the network of channels. These included a timber-framed lighthouse on the seaward side of Shortlands Bluff in 1854, used in conjunction with the Shortlands Bluff Lighthouse to form a complementary leading mark through The Rip, as well as a lightship in the West Channel by 1854 (Burdwood 1855: 121; Raison 1997: 4–5). These marked the beginnings of the development of a complex network of navigational structures used to guide shipping both into and through Port Phillip.

By 1856, the threat of shipwrecks in Bass Strait had become so acute that a Joint Commission of the Colonial Governments of Victoria, Tasmania, New South Wales (NSW) and South Australia was formed to deliberate on the adequacy of existing lights and the possible installation of further facilities. Despite recommendations for the construction of new lights along the Victorian coast, including at Cape Schank, Gellibrand Point (lightship) and leading lights for Shortlands Bluff, the Victoria Commissioner did not readily adopt the recommendations (Bach 1982: 131; Raison 1997: 5, 57). Instead, improvements to The Heads' navigational leads system were made as further marine hazards were identified, primarily through shipping mishaps. These measures included a 20-ft-high-unlit red pillar lead beacon to avoid Lonsdale Rock by 1856, a lookout station from 1858, the first rocket shed for use in

shipwreck rescues in 1860 and a telegraph station to Queenscliff in 1861 (Ross 1859; Yule 1868: 210; Syme 2001: 27; Dod 1931: 51).

Work was completed on two replacement lead lighthouses at Shortlands Bluff in 1863, along with new lead marking systems which included an obelisk and a new telegraph station. The former timber lighthouse tower was relocated to Pt Lonsdale to mark another submerged hazard identified after it was struck by the clipper ship *Lightning* (McWilliams 1865; Yule 1868: 211, 213; Dunn 1949: 39). Further improvements to the system included a series of lightships and pile lights along the West Channel and Swan Spit, and leading lights in the South Channel. A new concrete light erected in 1902 also incorporated a Port Traffic Control centre (Dunn 1949: 68, 69). In addition to lights and marks, a steam-powered fog horn was installed in 1886, in response to restricted visibility during the wreck of *George Roper* in 1882 (Dunn 1949: 56). Although now rarely used, residents complained that the horn emanated a distinctive sound like "a sick cow" that often woke them from their sleep (Irving-Dusting 2002–2006).

From 1903 onwards, the Ports and Harbours Department was also involved in the extensive modification and deepening of The Rip and various channels through dredging and blasting (Noble 1979: 49–50). These operations not only increased the size of vessels that could enter The Bay, but also led to dramatic changes in the local maritime environment. This led to a cycle of continual redefining of channels and consequently adjustment of the leading marks, beacons and lighthouses used to navigate them that continues until now (HOA 1907: 428, 1913: 31; Ports and Harbours Branch 1959: 188).

Hydrographic Surveying and Channel Deepening

Hydrographic surveyors continued to document submerged hazards in The Bay, with all noting the constantly shifting channel locations (Scurfield and Scurfield 1993: 17–20). Bathymetric charts and Admiralty sailing directions (e.g. Flinders 1801; Stokes 1846; Burdwood 1855; Yule 1868, 1876, 1884) provided official recommendations for approaches to The Bay, supplemented by more localized sailing directions for local mariners (Ferguson 1854, 1861; Ports and Harbours Branch 1959). A hydrographic office operated out of Queenscliff in the Pilots' Reserve until the end of the twentieth century.

Long-Term Mitigation Responses

Over time, long-term strategies were introduced in attempts to mitigate the anticipated occurrence of shipping mishaps. In Queenscliff, these took the form of a Lifeboat and Customs Service.

Lifeboat Rescues

The Lifeboat Service was a long-term response to incidences of shipwreck, and once established was at the forefront of any response to shipping mishaps in the Queenscliffe region. In the late eighteenth and early nineteenth centuries, almost a third of British seamen would die either from accidents on board or in shipwrecks (Bathurst 2000: 2). This massive loss of life led to the design of many innovative life saving devices from around 1808 onwards, including Manby's lifesaving mortar (that fired a shot weighted rope to wrecked vessels) and lifesaving vessels with watertight compartments which were the forerunners of modern lifeboats. By 1824, the Royal Society for the Preservation of Life from Shipwreck (England) was established to facilitate organized rescue of shipwreck survivors (Bathurst 2000: 2–3). These landscapes of shipwreck management (see Duncan 2000, 2004a) ordered and directed physical resources and people to not only coordinate the rescue of shipwrecks survivors, but also address their welfare after the event.

The initial agglomeration of shipwrecks around Port Phillip Heads highlighted the need to establish rescue services, with a Lifeboat Service which followed the UK model established at Queenscliff soon after European settlement. From the 1840s onwards, Pilots were expected to assist all distressed vessels, which became a formal requirement from 1852 to 1856. When *Sacramento* wrecked at Pt Lonsdale in 1853, both Pilot boats and the Health Officer's yawl were used to assist (Draper 1900: 10).

An ordinary ship's lifeboat within flotation tanks and emptying capacity was put into service at Shortlands Bluff in 1856 as the first dedicated lifeboat, crewed by members of the Customs, Health Officer's and Pilots boats (Fanning 1892b; McGrath n.d: 1; Noble 1979: 48; Boyd and Roddick 1996: 3). A series of purpose-built lifeboats was constructed from 1858, the first (*Queenscliff*) being mounted in a purpose-built shed constructed in 1860 on the northern arm of the Queenscliff Pier and from which she was manned for 30 years (Raison 2002: 26). As she was lowered from falls on the pier, a buoy was supplied offshore from which to haul her off in bad weather (Loney 1989a: 4). The vessel was rowed by 10 men and had a Coxswain, Bowman and Superintendent, being first used in 1861 in an unsuccessful rescue attempt of the barque *Asa Packer*. The boat was commissioned as the "Official Queenscliff Lifeboat" in 1865 (Noble 1979: 48). Further detail of the organization and make-up of the lifeboat crew is presented in Chap. 4.

The wreck of *Gange* in 1887 highlighted the necessity for a lifeboat to also be stationed at Pt Lonsdale, after time was lost rowing from Queenscliff (some 5 km away) to the wreck. A new and larger self-righting lifeboat was purpose built, along with a dedicated pier and lifeboat shed at Pt Lonsdale (Noble 1979: 48; Boyd and Roddick 1996: 3). However, when the Pt Lonsdale pier proved inadequate for the size of the new vessel, it was exchanged with the *Queenscliff* (lifeboat) and the new lifeboat was housed in the shed (built for the previous lifeboat in 1888–1889) on the new Queenscliff Steamer Pier. The presence of two lifeboats in the same area enabled their crews to practice their lifesaving and rocket skills with and between

boats, but *Queenscliff* was never involved in any rescue attempts during this time (Boyd and Roddick 1996: 3; Rasion 2002: 27, 37). A new motor-driven lifeboat, *Queenscliffe*, was purposely built in 1926 to RNLI specifications and mounted on a cradle slipway that allowed for rapid launches in all weather (QS 26/4/1919). It was shifted to the New Pier after a small boat channel across the Peninsula (The Cut) caused sand accretion around its launching ramp on the Fishermen's Pier and was again moved to deeper water in 1949 (Beazley 2001–2004; Raison 2002: 28).

The Lifeboat Service also offered opportunities for the lifeboat crew outside times of shipping mishaps. In order to maintain their lifesaving skills, the crew were involved in regular practice sessions with the rescue equipment. Lifeboat practice was usually undertaken on the first day of the month and consisted of either rocket or lifeboat drills that lasted half a day. In the early days, lifeboat practice took place outside The Heads, with later exercises held at St Leonards, Sorrento or outside The Rip, and rocket practice at Queenscliff or Pt Lonsdale (Kerr 1985: 73; Boyd and Roddick 1996: 3–4). During this time, the crews would inspect and maintain the contents of the lifeboats and the rocket sheds at Points Nepean and Lonsdale and conduct rocket firing practice (VPRS 2143).

A former member of the lifeboat crew described the rocket practice in the 1960s:

> During rocket practice we would set up the apparatus on a certain angle, and would make sure that all the equipment was tied together the right way, and then we connected a lighter rope to the heavier rope that would later be pulled across. We would aim ahead of the target, and you needed to make sure that the rope stayed dry, as a wet rope would limit the range for the rocket. The later modern ones didn't work over considerable distances. The wreck needed to be almost onshore, or otherwise you had trouble firing into the wind. Later on the cost factor meant that the men couldn't physically fire the rockets, so there was no real practice. We also used to practice using the lantern to signal with (Ferrier 2001–2004).

The practices were well attended by the local fishing community:

> They used to do the lifeboat practice here once a month and they would fire off the rocket for practice. The fishermen would always turn up for the practice as you got a pound for it and it was easy money. (Werry 2003–2004)

From the 1950s onwards, a search and rescue service was established to coordinate searches for smaller vessels such as pleasure craft. Depending on the weather, range of the search, emergency response time and the size of the crew required, either the lifeboat or other smaller launches would be used to search for distressed vessels. The lifeboat was used for large offshore search areas, at night or in very bad weather, whereas the launches were employed where speed was required and dependent on the search area range. All these vessels were moored in Queenscliff Creek. The Pilot vessel *Hawk* was also used on occasions (Boyd and Roddick 1996: 4). When the search and rescue service was disbanded in 1979, the lifeboat was also decommissioned (Noble 1979: 49).

The lifeboat was primarily intended to service the regions around The Heads at Queenscliff, Pt Lonsdale and Pt Nepean, occasionally up to 3 miles out to sea, and

as far as Barwon Heads or Cape Schank. The lifeboat also serviced inside The Bay, up the West and South Channels and around the Mud Islands (GA 18/4/1867: 3). However, in 1932, the lifeboat was called on to rescue crew from *Casino*, which had gone ashore at Apollo Bay, but they were recalled before they had gotten past Barwon Heads as the journey would have taken six hours (Boyd and Roddick 1996: 13–4). Further specific aspects of the lifeboat regime will be discussed in further detail in later chapters.

Customs Services

The British Colonial Government's enforcement of the *Navigation Act* from 1815 to 1849, which effectively placed a trade embargo on foreign non-British shipping visiting Australia (Bach 1982: 48, 55, 58), probably provided further impetus for the smuggling trade as it limited the importation of goods into the colony and led to exorbitant prices for luxury goods such as alcohol. Smuggling provided an alternative and/or supplementary income for some persons in the early days of the colony and was a constant problem for authorities.

The newly found wealth of the 1850s gold rush period attracted further smugglers to The Heads region and led to an increase in smuggled goods. With an increasingly wealthy population, this included more luxurious goods such as champagne, hams, perfumes and obscene literature, and a huge trade in illicit alcohol. Smugglers were commonly known to bury contraband goods within sand dunes (sometimes in barrels) to avoid detection and special Customs Officers were assigned to police these offences. The sly grog trade and smuggling was rife in the Mornington Peninsula, especially given the absence of an adequate police force in the area (NHS 1966; Day 1992: 284–285, 293).

In 1852, all Customs Duties, taxes and charges were abolished on imported goods except on spirits, wine, tea, coffee and tobacco. Wharfage fees were also abolished to encourage foreign (predominantly French) vessels to begin importation of luxury goods to meet the demand of the newly wealthy gold miners and pastoralists (Day 1992: 283). When these vessels wrecked or were stranded, they presented attractive targets for looting, particularly in frontier communities such as Queenscliff where even basic household goods were often scarce. The shores of Port Phillip Bay from Geelong to The Heads and along the eastern shores from Pt Nepean to Brighton were also notorious haunts of bushrangers (outlaws) and deserting seamen, who preyed upon shipwrecked vessels and were involved in smuggling and illicit sly grog distilling and distribution (Day 1992: 292).

The looting of vessels on the foreshore presented a twofold loss to the fledgling colony. Not only were owners deprived of their cargoes which were badly needed by the settlement, but the government was denied essential income generated through importation and Customs Duties on the international cargoes. As the cargo of these foreign shipwrecks had not cleared Customs, many of those involved in opportunistic plundering from shipwrecks were regarded in the strictest terms of the

law as smugglers. This pillaging led to the establishment of a Customs Service to not only try to control smuggling and illicit importation, but to also police Customs laws in regard to shipwrecks. As noted earlier, a Customs Officer and boat crew was stationed at Queenscliffe from 1853 although the large expanse of coastline and hundreds of vessels entering The Heads each year often rendered their presence ineffectual. By 1867, the Queenscliff Customs Station was removed, despite the continued activity of sly grog merchants (GA 24/6/1867), prompting concern that the former smuggling trade that existed there would be renewed. In past time, "uncustomed brandy and Geneva were regularly planted (buried) on the beach… and now that there is a fleet of fishing boats in this sub-port, …the prevention of smuggling will be almost…an impossibility" (GA 18/4/1867: 3).

In later periods, drug smuggling remained popular, and in the 1920s, a local fisherman discovered a potato sack full of tins of opium (Ferrier 1989: 20). Upon arrival at the pier, one of the tins was opened to reveal the contents, and many were souvenired by locals until police were contacted and called for their return. This trade has continued until comparatively recently when one former resident reported that he had been approached to smuggle ashore goods dumped outside The Heads (oral history interviewee—name withheld by request), and as late as 2004, drugs were dumped offshore for collection by smugglers (Howard 2003). Looting of wrecks is described further in the following chapters.

The Customs Service was also initially responsible for the enforcement of the quarantine and passenger regulations. In 1852, the service began an active campaign to ensure that overcrowded passenger vessel conditions did not threaten the health of initially those aboard, or eventually lead to epidemics that might be introduced into the colony (Day 1992: 285). Morgues were often located within Customs Department compounds (see Duncan 2003a: 229), a duty that was later relegated to the Water Police.

Conclusion

The establishment and development of official maritime services for the prevention, mitigation, rescue and salvage of shipping mishaps was an integral part of the creation and growth of the Queenscliff landscape and community. The nature of these formal services changed over time and was paralleled by the development of informal systems and practices within the community which offered not only altruistic assistance but also identified opportunities for economic and social gain. In the following chapters, the sequence of responses to shipping mishaps is explored in more detail.

Chapter 4
Crisis Phase Responses

> *Men were involved on both sides of the wreck. They would save people from the wreck and then be involved in the salvage and/or looting of the same wreck. This included lifeboat people, fishermen, and even Pilots. Once the crew and captain were off the wreck there were no witnesses when the looters returned to the wreck in the dark.*
>
> (Oral history informant—name withheld by request)

To understand how shipping mishaps affected the Queenscliff community, it is first necessary to examine how people organized themselves to respond to these events. Despite the various pre-emptive strategies implemented to minimize the risk of shipwrecks (as described in Chap. 3) with the increasing flow of foreign vessels bound for the Port of Melbourne during the gold rush years of the mid-nineteenth century, it was inevitable that shipwreck numbers would also rise. As shipping mishaps at The Heads were such regular occurrences in the nineteenth century, the Queenscliff community began to organize itself not only for its attempts to eliminate or mitigate risk, but also in anticipation of these events actually occurring.

There is no doubt that when shipwrecks occurred in the Queenscliff region, men regularly risked their lives to save others, while the community responded with great compassion and generosity towards survivors and victims. Documentary and oral accounts reveal a suite of behaviours in immediate reaction to shipping mishaps, ranging from spontaneous assistance to practiced and well-orchestrated procedures. However, this chapter challenges the notion that shipwrecks were perceived *only* as calamitous situations. The following sections examine the sequence of immediate responses to shipping mishaps and introduce the distinction between altruistic responses, where the primary objective was the rescue of human life or property without immediate reward, versus exploitative responses where the intention was to derive profit.

B. Duncan and M. Gibbs, *Please God Send Me a Wreck*,
When the Land Meets the Sea 3, DOI 10.1007/978-1-4939-2642-8_4

Altruistic Responses to Wrecks

With the incidence of a shipping incident, two broad types of responses were observed in the study area. The first of these was altruistic in nature, where people scrambled to assist at the site of the mishap. These responses are outlined in further detail below.

First Response to Crisis: The Wreck Bell and Lifeboat Launching Procedures

Most wrecks around The Heads occurred close to if not on the shore. International regulations in the mid- and late nineteenth centuries specified the use of flags, light rockets and blue flares as signals of distress (GA 1/2/1872: 2; Draper 1900: 9). From the 1870s, these calls for help were often first observed by the Signal Station established on Shortlands Bluff, as the Queenscliff Postmaster or the Signal Station staff were frequently the first to report shipping incidents (Dod 1931: 13, 21, 39; Boyd and Roddick 1996: 12). A wreck bell was then rung to alert the community, and more specifically the lifeboat crew. The original Queenscliff bell was mounted on a flagstaff at the Signal Station (Figs. 4.1 and 4.2) close to the black (High) Lighthouse by at least 1877 (Dod 1931: 13, 21, 39; Irving-Dusting 2002–2006). However, the bell

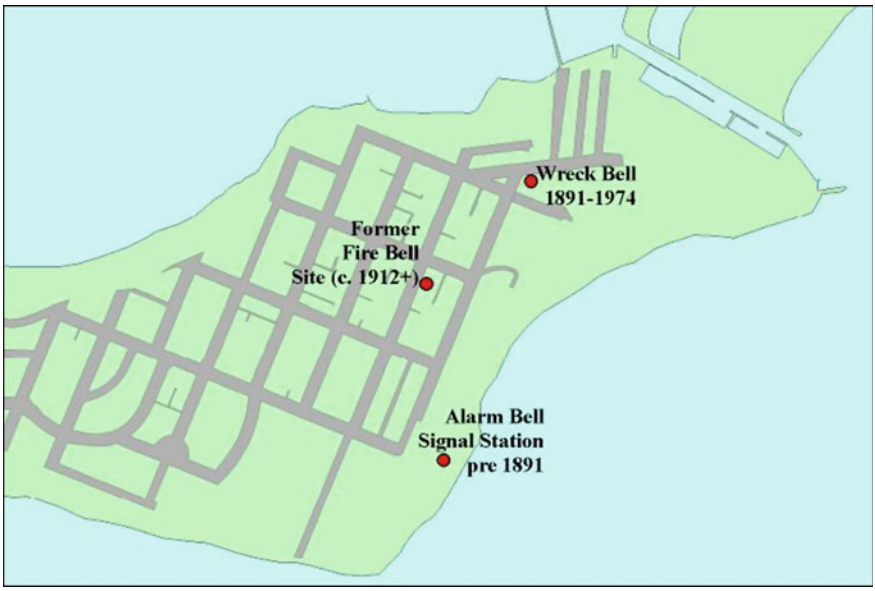

Fig. 4.1 Alarm bells in Queenscliff

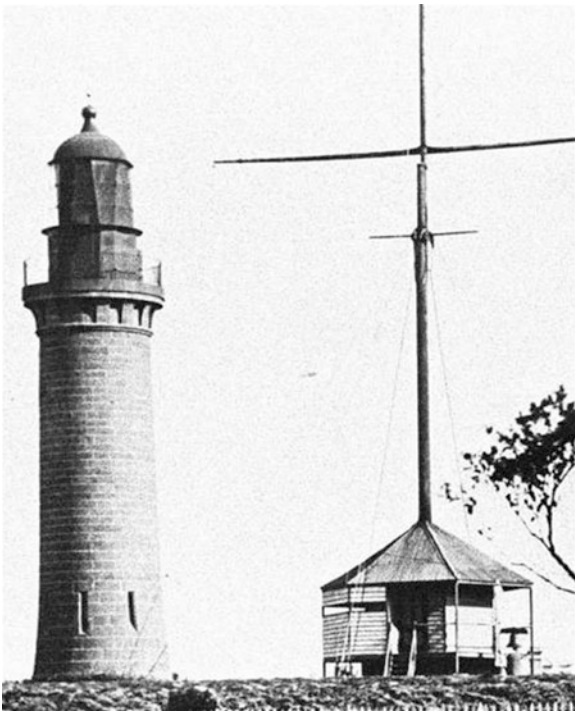

Fig. 4.2 Shortlands Bluff Signal Station Wreck Bell (located in *lower right hand corner*), c. 1878. High Lighthouse at *left* (*Photograph* PH23, QHM Collection)

could not be heard by the lifeboat crew at the bottom of the hill in a south easterly gale, which led to complaints that the location was unsatisfactory (GA 20/7/1871: 3). After numerous deaths during the sinking of *Gambier*, in 1891–1892, a new bell was erected by the Ports and Harbours Division on the corner of Gellibrand and Wharf St (Mercury 3/9/1891: 2; Boyd and Roddick 1996: 5). A wreck bell was also installed at Sorrento on the other side of The Heads (NHS 1966: 63).

The bell was only ever rung in the event of a maritime emergency where the lifeboat was required. It had a very unique tone that could be distinguished from the fire bell located in Hesse Street near the post office (Irving-Dusting 2002–2006; Ferrier 2001–2004; "Bluelight" 1912). In 1890, a reward was proposed for the first person who rang the bell to alert the town to a shipping mishap (QS 5/9/1891). During disasters, the bell was sounded continuously for 15 min (QS 10/3/1894). The quotation which opens this chapter, taken from a Queenscliff newspaper of 1892, captures the atmosphere when the bell rang. The lifeboat crew was always available for service and boasted that they could launch within 12 min of the bell tolling (Argus 28/5/1861; Ferrier 1991: 4). One notable and rare exception to the bell being rung without a wreck in progress was during a gale in 1933, when fishermen fearing for the safety of their moored boats summoned assistance from the lifeboat to save their vessels (Argus 21/1/1933: 23). Other mechanisms were sometimes used to alert the townsfolk in times of need, including the firing of

firearms or even the cannons at the fort, or ringing the local fire bell (West Australian 28/8/1924: 10). The Pt Lonsdale flagstaff was also used to convey messages of wrecks further to the west (QS 27/3/1886).

In most cases, the lifeboat rowing out to the vessel in distress was the first active physical engagement of the local community in any shipping mishap. As the Lifeboat Service was established only several years after the establishment of Queenscliff, it formed an integral component of the response to most shipping incidents. Lifeboat service was extremely dangerous work, and the crew were handpicked from experienced local seamen (QS 20/1/1894). The boat was originally crewed by members of the Customs, Health Officer's and Pilots boats, with fishermen joining the service by 1861 (Fanning 1892b; McGrath n.d.: 1; Boyd and Roddick 1996: 3). Fishermen then formed the entire crew after the Customs and Health Officer's boats crews were withdrawn from Queenscliff around 1867 (Fanning 1892b). The lighthouse keeper was officially appointed as the superintendent of the lifeboat and was responsible for the administration and safety of the vessel and crew, with the coxswain in charge when at sea (Boyd and Roddick 1996: 3; Raison 2002: 26). The number of crew ranged from eight to eighteen, dependent on who was available at the time. Permission to launch the lifeboat was required from the Harbour Master and required the lighthouse keeper and coxswain aboard. This often delayed the launch, sometimes by hours, during which lives were periodically lost. Emergency call-outs were later regularly transmitted from the Queenscliff post office to the lighthouse keeper via the telegraph (Boyd and Roddick 1996: 3, 6, 14).

Fishermen proved to be the natural choice for the lifeboat crew. Due to their specialized and intensive exploitation of the local environment and use of smaller vessels, fishers often used radically different routes to those utilized by the majority of mariners, including smaller channels both at The Heads and on the extensive sandbanks inside The Bay.

> fishermen had a better knowledge of The Rip than Pilots. The Pilots stuck to one entrance, the fishermen worked The Rip, knew the currents, swell, and seas. Fishermen knew The Rip, knew every swell that came in. Pilots knew The Rip to suit the job (Beazley 2001–2004).

This sentiment was reiterated by local newspapers, who stated that the boat was manned by "a crew of hardy and experienced fishermen who know the eddies, currents and dangers of The Rip as well as they know Hesse St" (QS 10/12/1892).

Competition for a position in the Queenscliff lifeboat appears to have been fierce in the early days. Tom Dickson, superintendent of the lifeboat crew, reported in 1887 that

> At the pier, I met my fellows running quickly to the spot, and in a few minutes we had at least double the crew we wanted to man the lifeboat. Our boat is manned in the same way as the Humane Society, that is…a superintendent, a coxswain, a boatman, and as many men as there is oars, in our case 10. We quickly lowered the boat, which always hangs fully equipped for active service at a moments notice…from davits at the pier. (Dickson 1887)

In 1919, it was reported that up to 30 people would show up for 12 places when the wreck bell was rung and that the trouble was not in getting volunteers, but

Fig. 4.3 Queenscliff lifeboat approaching a wreck at Pt Nepean (*Image* Sutherland 1888a: 443)

preventing them from getting into the boat (QS 26/4/1919). The problem became so acute that after the first 16 men from the No. 1 lifeboat had reported for duty, the lifeboat shed doors were locked to prevent others entering the shed (Kerr 1985: 73). In later years (1949), there was less haste when the bell was rung:

> …there was no rush or panic to get launched…my family stayed tucked up in bed, while my father wandered over to see what needed to be done (Irving-Dusting 2002–2006).

The lifeboat would then be rowed to the wreck, which was no mean feat in what were sometimes gale force conditions (Fig. 4.3; Fanning 1892b). Some rescues involved lengthy searches and attempted rescues, where the lifeboat crew could be at sea for nearly 24 h in gale force conditions (e.g.: Burnie Advocate 12/5/1931: 7).

Later launch procedures varied with the introduction of a motorized lifeboat mounted on an inclined slipway at the end of the Queenscliffe Pier (see Fig. 4.4).

> The wreck bell was rung [organized] from the lighthouse, who got in touch with the coxswain of the lifeboat who would ring the wreck bell. Then all the crew would come down and they would ring anyone who did not hear the bell. If the coxswain was away, then the acting coxswain took over. Everyone had their own duties and that might have been to put the bungs in, or make sure the cables were out of the way. When the order was given to, pairs of people would run forward to tip the boat over the cradle and into the water (Mouchmore 2001–2004).

On-Site Rescue Procedures and Facilities

Upon arrival at the scene of the imperilled vessel or wreck, the lifeboat would indicate with flares to the signal station. The procedure for approaching a vessel is recorded in various newspaper accounts:

Fig. 4.4 Queenscliffe lifeboat being launched c. 1930s–1950s (*Photograph* PH916 QHM Collection)

> First we let go an anchor, which kept the boat steadily to sea, then we paid out a rope attached to the anchor, as we slowly backed in towards the vessel…then two long lines were thrown to us…and made fast to the stem and stern, thus keeping us abreast of the barque.. After the rescue I gave the rescued party over to the *Albatross*, which took them across to the Quarantine station at Portsea to get a clean bill of health. (Dickson 1887)

> After all had been safely placed in the boat, then it was a case of hauling off on the kedge line, which had to be cut, and pulling out to sea to wait until daybreak to get back to the harbour. (Baillieu 1887)

This nature of this procedure also has implications for its visibility in the archaeological record (see Chap. 8).

The lifeboat crew sometimes used a rocket launching device which could be deployed either from the lifeboat or from the shore to pass an attached rope to the wreck (Fig. 4.5). This was then the means of passing across a thick secure line which, when tied to the vessel's mast, could be used to transfer survivors via a breaches buoy to shore (e.g. Argus 25 March 1887, p. 7). Different types of rockets were used over the years, including Manby's mortar (from 1858), Dennet's Rocket and Colonel Boxers Rocket (after 1871), the latter increasing the range from 500 to 1000 yards (c.900 metres) (Figs. 4.6 and 4.7: Mullett 1919: 13; Syme 2001: 27).

Before rocket facilities were stationed at Pt Nepean (1876), the lifeboat crew would row across The Rip inside The Bay when shipwrecks occurred at the front beaches at Sorrento or Portsea (particularly in bad weather when it was too dangerous to go to sea), and transfer the rocket launching gear overland to affect the rescue via the ocean beach (e.g. during the *Cheviot* and *Craigburn* shipwrecks—QS 20/1/1894; Welch 1969: 43). Later, a series of pathways was cut along the cliff faces of the Nepean

Fig. 4.5 Deploying a breaches buoy lifeline via a lifesaving rocket at Pt Nepean (*Image* Macfarlane 1892, SLV Collection)

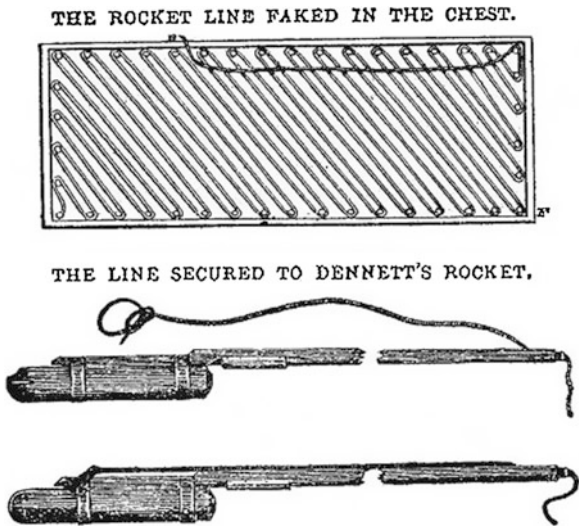

Fig. 4.6 Dennet's rocket apparatus (*Image* Mullett 1919: 13)

Peninsula, with tracks leading down to the beach through the scrub to facilitate easier access to any potential local wrecks (McMeekin and Braithwaite 2004). These paths are still evident today as the beach access routes along the foreshore.

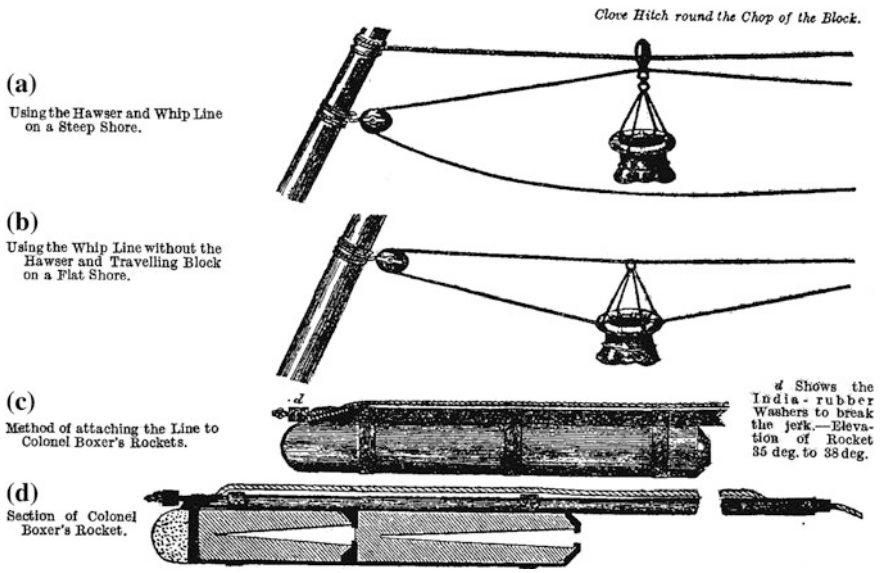

Fig. 4.7 Breaches bouy and Colonel Boxer's rocket set-up (*Image* Mullett 1919: 14)

By 1894, calls were made to implement communications via telegraph between the lighthouses at Cape Schank, Pt Lonsdale and Queenscliff. When wrecks occurred at Pt Nepean or Sorrento Back Beach, they had to be reported to Queenscliff via Melbourne, the folly of which was highlighted during the shipwreck of *Alert* in 1894. Often when wrecks occurred at Pt Nepean, the Lifesaving Corps stationed at Sorrento could not be alerted to shipping disasters, such as the *Petriana* and *Australia* shipwrecks (Argus 24/6/1904). Later efforts to improve the relaying of information about wrecked ships seen or heard from the Nepean Peninsula led to the installation of telecommunication cables between Pt Lonsdale, Portsea and Sorrento (Argus 13/3/1905: 9).

The transfer of passengers and crew from stricken vessels was often a hazardous operation as the lifeboat was thrown around in high seas. Aside from physical hazards, for the people aboard who were caught in the grip of what might be (or seem to be) a life-or-death crisis, there was a range of behavioural responses. These could range from those able to respond effectively, through to denial or inability to take action, or extremes of irrational behaviour which might even become a threat in their own right (Gibbs 2002). In some instances, the captain or crew might also be suffering similar psychological trauma and potentially be making poor decisions. The Pilots, lifeboat crew or other would-be rescuers reaching the vessel would be forced to deal with whatever situation they encountered. There are instances where reluctant, frightened or distraught passengers had to be moved to the lifeboat by coercion or force (Argus 26/1/1854: 11). By 1891, the Queenscliffe Lifeboat Service had rescued over 100 people using the lifeboat, and another 46 souls through use of the rocket appliances alone (Argus 8/6/1891: 7). There were hundreds more rescued

from circumstances which, while not necessarily as dramatic or catastrophic, might be equally traumatic for those who lived through them.

The Lifeboat Service pervaded many aspects of daily life within the community, while the undoubted heroism of the crews was recognized and rewarded nationally and even internationally. In some instances, the public made subscriptions as a reward to the lifeboat crews (e.g. Argus 28/5/1861). Conspicuous feats of individual heroism received special attention. Following their efforts in the rescue of human lives from the schooner *Anonyma* in April 1859, Queenscliff Customs boatmen, John and Francis McBear, were not only presented with an engraved silver cup by the grateful ship's captain, but also awarded medals from the British Shipwrecked Mariner's Society. An extensive report in national newspapers recounted the events of the rescue and also quoted in full of the speech by Sir Henry Barkly. The presentation was accompanied by a parade by the Queenscliff Volunteer Artillery in their honour (Sydney Morning Herald 4/1/1860: 5). The significance of how the lifeboat crews were perceived was an important element in the social structure of Queenscliff and will be discussed further in later chapters.

Other Community Assistance in Shipwreck Rescues

Shipping crises often forced cooperation between the different maritime services based near The Heads, including the military. Shipwrecks on the ocean beaches from Sorrento to Pt Nepean were often first accessed by military personnel from the fortresses in those locations (e.g. *Cheviot* 1887) (Welch 1969: 43). However, the soldiers were initially restricted in their ability to leave the base during disasters due to lack of orders from their senior officers and were sometimes accused of complacency when they did not turn out during times of wreck (e.g. QS 30/7/1887). Aware of this tarnish on their public image, by 1887 approval had been given to train the defence personnel at Pt Nepean in the use of the rocket gear to assist in shipping incidents (QS 13/8/1887). In later years, military installations also played key roles in searches for survivors, where the searchlights at Crows Nest, Pt Lonsdale, Queenscliff and Nepean Forts were used to aid in rescues and the search for the survivors, such as for *Paroo* (1902), *Edward* (1912), *Wyrallah* and *Dilkira* (1926) and *Goorangai* (1940) (QS 5/10/1912; Williams and Searle 1963: 47; Boyd and Roddick, 1996: 14; Barrier Miner 22/11/1940: 6). The military vessel *Mars* (Argus 28/8/1924: 11) and destroyer HMAS *Yarra* (Western Argus 8/2/1927: 5) also assisted in searches within Port Phillip at various times.

The Pilots' Service sometimes became involved in rescue operations for distressed vessels, such as using their cruising steamer to intercept a lifeboat from the whaler *Campbell* outside The Heads in 1914 (Western Argus 23/6/1914: 32), and helping out when *Ozone* was subject to gale force winds in 1925 (Argus 18/4/1925: 31). However, Pilots were also restricted from involvement in rescues as they were an essential service for incoming and outgoing shipping and hence could not normally be pulled off their station to assist. Fishermen were also known to take to

their own boats to assist in rescues, particularly where emergency signal rockets had been sighted (Argus 28/8/1924: 11; West Australian 28/8/1924: 10). Other parties such as the government survey steamer *Lady Loch*, and the local tourist and cargo steamer *Edina* were also involved in early wreck rescues (Kerang Times 21/10/1887: 3; Argus 21/12/1891: 6).

Philanthropic Responses

For those who survived the *impact* phase of a shipping mishap, their rescue and return to land signalled an end to the initial crisis but also the start of the *recoil* phase. It is important to remember the human element of shipping mishaps and that these were intensely traumatic events for those aboard the ships, and quite possibly for rescuers and observers as well. Once rescued and ashore, wreck survivors were forced to deal with the physical and psychological repercussions of their situation, exacerbated by the possible loss of family, friends and worldly possessions.

> Although no lives were lost at the wreck [*Sacramento*], the loss of the cargo and luggage must be felt by those to who it belonged. When the immigration agents arrived from Geelong, the scene was heart rendering: as many people as possible had been fed and sheltered by the Pilots, but there was neither food nor accommodation for 300 people. Many sufferers were scattered along the beach, wringing their hands in despair… and relatives had lost each other in the confusion. (GA 3/5/1853: 2)

Prior to the establishment of the town of Queenscliff, survivors were often initially attended to by the flagstaff and lighthouse attendants, before being cared for at the Government House (GA 2/5/1853: 2). The Pilots and settlers also often fed and provided accommodation for the survivors from their own personal possession (Cornwall Chronicle 4/5/1853: 2). Shipwreck survivors were then commonly transferred to the immigration depot at Geelong for processing, where they were offered food, board and access to employment until they found their own accommodation (Cuzens 1912: 1; Kruithof 2002: 89). These services were sorely needed as on many occasions the victims had lost everything in the wrecking event. In later years, rescued shipwreck victims were sometimes transferred to the Quarantine station at Portsea, as much for their accommodation as to be checked for any symptoms of infection (Dickson 1887). With their own roots as a maritime community, the peoples of Queenscliff were usually profoundly sympathetic of shipwreck survivors, springing into action on hearing of an incident in order to assist in any way possible. During the *Sussex* and *Victoria Tower* shipwrecks which both occurred in 1872, one resident loaded his buggy full of brandy, tobacco and other stimulants in case survivors had made it ashore (GA 1/2/1872).

State and national newspapers often recounted the bravery and generosity of the Queenscliffe community, in addition to other informal and formal accolades. An 1859 report noted that there had been several instances where the survivors of wrecks, rendered penniless from the loss of their belongings, had ended up surviving on the hospitality of the townsfolk (Argus 17/7/1858). Several charitable

trusts and benevolent funds were established for victims (e.g. Nepean Disaster Fund; *Alert* Distress Fund), with concerts held by the Victorian Engineers (military) to assist (QS 10/12/1892, 23/9/1893). The Queenscliff community also looked after their own people, and when local fishermen or other mariners were lost during wrecks they galvanized to raise funds to support the family and in some cases even bought the widow of the deceased mariner a house (Mather 2001). Assistance was often requested for widows either through subscription lists or "some practical manner", and the community sometimes replaced the boats of wrecked fishermen (QS 22/10/1892, 26/11/1892; Higginbotham 2004).

Death and Burial

Death as a result of shipping mishaps was a common and deeply lamented situation, and it was not unknown for remains to wash ashore after a wreck. For wrecks in close proximity to Queenscliff, some of which involved multiple fatalities, the corpses (or body parts) would be transported into the town for identification and preparation. A morgue formerly stood on the Fishermen's Pier (now located in the Queenscliffe Maritime Museum), while the rocket shed at Pt Lonsdale was occasionally used as a temporary morgue (Naylor 2004). As The Esplanade was the closest hotel to the entrance of The Heads and also to the New Pier, even in the 1960s it was required by law to maintain a coffin on its premises should a body be recovered in these areas (Adams 2006).

Although marine deaths were largely treated with great respect, they were nonetheless economic opportunities for Queenscliff builders and carpenters who also acted as undertakers. For instance, the Priddle Family, who were normally builders, also had a small morgue and coffin workshop on their property in Hesse Street.

> In the mid 1850s, my grandfather and great grandfather were undertakers in Queenscliff, and they were involved in just burying shipwreck victims. They made coffins, they were builders but they also made coffins. As a child I remember I sat in the coffins and one time used one as a boat. They were pretty good too, as they were sealed and floated well. They made the coffins in pre determined sizes, five foot six, and five foot nine, and one day I said to them "What about lending me a coffin to go fishing" and from then on they lent us his boat! (Springall 2001)

There were also ancillary workers such as hearse operators and gravediggers at the Pt Lonsdale Cemetery. In one instance, the coffins of two shipwreck victims were removed from a funeral until a disagreement over the burial arrangements was sorted (QS 5/9/1891).

Churches of several denominations were available in the town and services were held in these and at gravesides. In some instances the dead were transported back to their families, although often they were buried locally in individual and mass graves. In the earliest period, shipwreck victims and local dead were reportedly interred in the sand dunes below the Queenscliff Low Lighthouse and beneath the current Queenscliff football ground (GA 20/11/1866; 29/11/1866; McWilliams

1865 plan; Dunn 1949: 39). In 1854 at least four people drowned during the wreck of *Columbine* were buried in an informal cemetery on Shortlands Bluff (Argus 5/4/1854, VPRS 1189/110/3934). From at least 1864 onwards, shipwreck victims were buried at the new Pt Lonsdale graveyard (Dunn 1949: 39; Simpkin n.d.: 12).

The loss of victims at sea often presented an intolerable situation for grieving relatives who wished to bury their loved ones. Relatives of victims of shipping incidents would sometimes offer rewards for the recovery of their loved ones' bodies, as was the case with *Gambier*, where the family tendered a £10 reward for the corpse of Mrs. Trewenack (Argus 3/9/1891: 8; South Australian Register 3/9/1891: 5). When her body was discovered on Swan Island a few days later, the military transferred the corpse via the local police sergeant to The Esplanade hotel, where it was eventually identified by a handkerchief in her pocket. The body was then conveyed to Adelaide for burial alongside her deceased husband (South Australian Register 7/9/1891: 5). However, the identification proved to be wrong when it was realized by the deceased's daughters that the corpse had unfamiliar clothing and too many teeth (Argus 9/9/1891: 6; West Australian 9/9/1891: 4). Despite the mistake, the body was buried by Mrs. Trewenack's friends with suitable ceremony, with the true identity later established from its clothing (Adelaide Advertiser 9/9/1891: 4; 27/10/1891: 2). One can only imagine the angst of the relatives of both women.

This respectful handling of the dead contrasts starkly with the treatment given to the dead and dying at the wreck of *Fiji* at Moonlight Head in 1891, only 300 km west of Port Phillip. It was reported that the people stealing spirits from the wreck "crept up and down the narrow pathways like ants and preferred to drink to their full rather than assist the sufferers" (Barrier Miner 9/9/1891: 3). *Fiji* also provides an example of the commonplace practice of burial of wreck victims close to the wreck site. Although it had been intended to take the bodies to the consecrated Loch Ard cemetery nearby, they were already in an advanced state of decomposition (Argus 9/9/1891: 5; Capricornian 12/9/1891: 28). Consequently, makeshift coffins were made from timber from the wreck and the bodies were interred at the top of the cliff close to the site.

It is clear that the Queenscliff community held strong sympathetic views for shipping mishap victims and in many cases were active philanthropists. They were often represented as a heroic and noble populace, to whom shipwrecks were tragic events that befell the poor unfortunates who either owned the vessel or were aboard. However, as will be seen below, shipwrecks also offered an opportunity for income and resources that was a boon for the often impoverished members of the town.

Exploitation Responses to Shipping Crises

The second type of response by the Queenscliff community was much more insidious and economically motivated. As will be seen below the extent of this behaviour varied markedly, sometimes skating a thin line along the edge of legality, and in some instances passing well beyond.

Salvage Claims

Despite demonstrations of great bravery from the lifeboat and rocket crews, historical and oral history sources present another perspective to those involved in shipping rescues. There are many documented accounts which show that once the crew and passengers had been removed from the wreck or stranding, the very same rescuers became ruthless negotiators in trying to obtain salvage rights or other rewards. In the earliest days of Queenscliffe, it was often the government services who found opportunities for wealth as a result of shipping mishaps. Many government officials advocated salvage rights for services provided to stranded vessels, even though they were operating in their official governmental duties. In 1850, the Geelong Harbour Master (Capt. Bunbury) and crew of the Government schooner *Apollo*, the Geelong Customs Staff, and the master and crew of the steamer *Aphrasia*, all submitted salvage claims when they assisted in refloating the vessel *Victory* (MMH 16/9/1850: 2). These government personnel were often reported attending various strandings and wrecks (e.g. *William Hyde*, GA 24/7/1849: 2; *James T. Foord*, GA 3/5/1851: 2; DPH 1859). One newspaper went as far as to label Capt. Bunbury as a "wrecker" (GA 23/5/1851: 2), regardless of the fact that everyone except Customs personnel were legally entitled to salvage claims (MMH 16/9/1850: 2). Despite the negative outcome to the case, the Customs officials continued their interest in shipwreck salvage, as demonstrated in 1852 when they chartered *Aphrasia* to proceed to the *Isabella Watson* wreck, and the former Customs official, Mr. Friend (by then the Geelong Harbour Master), waited by the wreck "in order to save as much as possible" (GA 24/3/1852).

Pilots were also regularly involved in shipwreck rescues in the early days of the settlement and often risked their lives to save survivors. However, on many occasions after Pilots had rescued wreck victims, they claimed salvage rights on the vessel and/or their contents. In one case, a Pilot recovered enough specie from the *Sacramento* wreck to retire from piloting after only six weeks on the job, while his boatman invested his proceeds to establish the Melbourne Steamship Company (QS 30/7/1910; Draper 1900: 10; Noble 1979: 21). Similarly, when gold from *Empress of the Sea* was transferred to the Pilot boat after the ship had caught fire, the Pilots sailed directly to Williamstown where the gold was held in their office until salvage compensation was paid to them (Cuzens 1912: 7). Some historical sources even claimed that the Pilots had engineered the transferral of the gold from the ship's longboat by delaying taking the towline until the vessel was swept outside The Heads, which thus increased the validity of their salvage claim, while the fishermen transferred the passengers ashore (Simpkin n.d.: 10).

Furthermore, Pilots were often involved in rescuing or towing disabled vessels at sea and frequently claimed salvage rights against them (e.g. *Lillies*—Noble 1979: 55). When the towline accidentally parted to the barque *Craigburn* while being towed through The Rip by the tugboat *Rescue* (1891), the Pilot in command ordered the tug to return with the line after letting go the anchors. However, the tugboat's captain demanded that another £500 or that a salvage agreement be entered into, as

he claimed that the tow contract had expired when the rope was let go. *Craigburn*'s Captain resisted attempts to raise the anchors, which led to several unsuccessful attempts by a number of competing tugboats to secure a towline, but eventually resulted saw the vessel wreck and some of the crew drown (Noble 1979: 57).

The economic importance of salvage to the local community often resulted in cut-throat practices. Protracted negotiations by unscrupulous mariners attempting to claim salvage rights in return for rendering assistance to distressed vessels, sometimes led to the vessel foundering and wrecking in the interim. One of the earliest cases of salvage claims resulted from the stranding of the barque *Victory* (on Victory Shoal, Lonsdale Bight), after the steamers *Vesta* and *Aphrasia* aided in towing the vessel off the reef, and two lighters belonging to a local merchant (Capt. Cole) aided in transferring goods that would otherwise have been thrown overboard (MMH 19/8/1850: 2). Salvage was defined in the ensuing court case as "that compensation that is to be made to other persons by whose assistances a ship or its loading may be saved from impending peril, or recovered from actual loss" (MMH 16/9/1850: 2). Capt. Cole became involved in a number of salvage cases at The Heads, where he also raised vessels using divers (MMH 9/3/1852: 2, 14/2/1853: 4).

Salvage was also undertaken on smaller scales by Queenscliff community members, although this still often represented significant windfalls for the salvor, particularly if they were the poorer fishermen of the community. In 1861, a local fisherman (Mr. Smith) loaded his boat with chickens escaping the inferno of the wrecked *Empress of the Sea*, which he sold for a good price locally (Simpkin n.d.: 9). Fishermen also often assisted in trying to prevent distressed vessels from sinking by moving them to other areas so that they could be run aground on shallow sandbanks, which increased their potential success in later salvage rights claims (e.g. *Eliza Ramsden*—Maitland Mercury 31/7/1875: 4).

Legitimate salvage continued to offer profitable economic opportunities in this region well into the late twentieth century. This included salvage payments to the Queenscliff Lifeboat Crew and the Port Phillip Pilots for saving a tug that was assisting with the stranded *Walumba* at Pt Lonsdale in 1961 (Noble 1979: 76; Ferrier 2001–2004). After the stranded tanker *Golden Gate Sun* at Shortlands Bluff was pulled free in 1984, the owners of tugboats claimed salvage rights of $400 000 (Wane 2003: 51). Other forms of salvage operation are discussed in the following chapter.

Financial Benefits of Lifeboat Crew Membership

If we re-examine the role of the lifeboat crew in light of financial incentives and opportunities, an additional perspective to their situation arises. The lifeboat crew was recompensed with a generous stipend for each wreck attended or each time the lifeboat was launched (although the crew did not always consider this payment was adequate—see QS 4/7/1891). The crew were also paid about nine pence for attending the weekly 5 h lifeboat practice sessions in 1893 (Boyd and Roddick 1996: 11). The lifeboat remuneration was an important source of income for fishermen:

> They got about £3 when they attended a wreck, which was a lot of money back then (c. 1930s–50s). They used to look after the married men first, who would usually get first go at a place in the boat… They would get about a week's wage if they attended a wreck. My nephew attended a wreck in the 1970s and got $15 for it back then… it was easy money. You got a few pound for attending the lifeboat practice, and the fishermen always turned up, especially during winter when it was tight and the fishing wasn't so good… All the men would turn up at the practice for their money. (Werry 2003–2004)

Generous rewards were also offered for saving lives, and in some cases (e.g. *Gange* rescue) sums of between £5–8 were awarded to the lifeboat coxswain and crew based on seniority (Argus 29/7/1887: 7), which represented a substantial sum in those days. It is notable that this amount was awarded by the Dept of Trades and Customs, the very people who would later police pilfering from the wrecks.

Oral history within Queenscliff still captures this transition from heroism to opportunism:

> Men were involved on both sides of the wreck. They would save people from the wreck, and then be involved in the salvage and/or looting of the same wreck. This included lifeboat people, fishermen, and even Pilots. Once the crew and captain were off the wreck, there were no witnesses when the looters returned to the wreck in the dark… (oral history informant - name withheld by request).

For most of the nineteenth century, until salvage rights were abolished for lifeboat crew, a place in the lifeboat represented a valuable bonus income, particularly if official salvage by the lifeboat crew took place, whereupon substantial dividends were possible. Given that the fishermen were some of the poorest members of the Queenscliff community, there was heavy reliance on this extra income to support their often large families, hence the reported rushes to be among the lifeboat crew (QS 30/7/1887, 26/4/1919; Kerr 1985: 73).

Wreck Tourism

Beyond the possibilities of salvage, shipping mishaps also resulted in a flow of economic benefits into the wider community. Although the community was generous with feeding and housing survivors, there were still opportunities for providing transport for people and cargo onwards to Melbourne or Geelong. More importantly, Queenscliffe benefited by an inward flow of people attracted to the spectacle of a wreck in progress. Journalists were often the first, hiring boats and even trains to get there quickly to allow them to get sensationalist stories into the next day's newspapers. These reports were sometimes sensationalist, playing on the public's thirst for graphic details of injuries and death against a backdrop of mayhem and tragedy. Where possible these were combined with accusations of incompetence or tales of bravery in a bid to satiate readers' interests. Many were couched in terms of "witness accounts", suggesting that in an age where information was exchanged predominantly verbally and through the printed press, that there was social status to be gained by being present at a wreck.

Once word was out that a wreck was underway, overnight hundreds of people might arrive to watch the catastrophe unfold (e.g. GA 4/1/1872; 17/1/1872: 2; Dod 1931: 68). The fact that shipwrecks frequently happened in winter created a significant out-of-season financial opportunity for the Queenscliff tourism industry, providing transport, food and accommodation. Wreck events were sometimes treated with a carnival atmosphere which was a stark contrast to the solemnity of the initial emergency. When *Sussex* wrecked near Barwon Heads in 1872, many picnickers visited the scene, and a crayfisherman nearby was kept busy by ferrying visitors across the river (GA 4/1/1872). The road to The Heads was besieged with vehicles of every description, including many dignitaries such as Geelong councillors and politicians (BS 5/1/1872).

> Scores of people made use of the half holiday and went out to see how the wreck of the *Sussex* was getting on. Cries of "to the wreck, now for the wreck" were heard throughout Geelong, as the touts secured passengers for their vehicles. Visitors (men, women and children) were scattered in every direction looking for mementoes of the wreck, but finding few. Entrepreneurs also established tents for the accommodation and refreshment of visitors (GA 15/1/1872).

There was a degree of urgency in getting to a wreck or stranding, given the possibility of bearing witness to sights that might not be repeated. Contemporary accounts detail frantic efforts to see the spectacle before the ship potentially broke apart, sank or was removed, although being witness to a potentially spectacular dénouement was clearly a valued experience, giving the audience the opportunity to include themselves in history by their ability to say that they were present. It is notable that this behaviour was not present at later stages where the derelict vessels had been present for some time and become static tourist attractions (see Chap. 5). This suggests that it was not primarily the physical remains of the wreck that were the main attraction to the scene, but the unpredictable drama associated with the site that was the drawcard (Gibbs 2005).

This rush to witness wreck events continued in Queenscliffe through to the recent past. Naylor (2004) recalled an entry in her mother's 1941 diary: "Someone said there was a wreck [*SS Orungal*] and everyone piled into the car to have a look the next day". Even in the mid-1980s when *Golden Gate Sun* went ashore at Shortlands Bluff, framed pictures of the vessel were available in local shops same afternoon (Barnard 2004). The question of how these sorts of activities past and present fit with notions of "dark tourism" to sites of tragedy will be discussed in a later section.

Looting

The coastal environment of the Queenscliffe region played an important part in encouraging the removal of materials generated as a result of shipping mishaps. Wrecks and strandings along the exposed oceanic coast of Victoria often occurred

close to the shore on the fringing reefs and rock shelf. Within a short period of time, even vessels which might have been pulled off or re-floated were often smashed to pieces, were cast ashore on the beach, and/or sunk. Vessels which foundered inside The Rip and Port Phillip were stranded on the rocky shelves or sand banks and were often left exposed above the waterline. The proximity of these vessels and their cargoes to the coastal community of Queenscliffe presented a tempting and convenient source of income for local residents, with many succumbing to temptation. There are numerous early accounts of opportunistic salvage, or more accurately looting, by the local community and outsiders, commencing immediately after a vessel had stranded or wrecked.

> *Wrecking at The Heads*: We are assured that this offence has become quite habitual, and that Port Phillip Heads have become a den of wreckers, the impunity with which these depredations are committed adding daily to their audacity. A vessel is no sooner in a disabled state than she is surrounded by bands of men who can be no better described as so many pirates – plundering the vessel of all that is valuable and easily removed. Not long since the unfortunate purchasers of the *Sea*, and *Will o' the Wisp*, were robbed by these rascals of all that could easily be taken away; even anchors, chains, copper sheathing, from the bottom, and in these cases the loss will amount to many hundreds. It is stated that a vessel has been stopped by information, at Williamstown, with plunder from the wreck of the *Ontario*, to the amount of many hundreds of pounds; and report says a thousand pounds worth is now buried in the sand at The Heads, awaiting an opportunity of being brought secretly to market. It is unnecessary to say that this ought to be immediately seen after, and put a stop to. (Argus 29/11/1853)

This account was typical for the time and was repeated in content for many other shipping tragedies. When *Ant* wrecked at Breamlea in 1866, and it was reported that "The wreckers have made sad havoc with all available materials. It is known, and those who have done the despoiling will be called upon to render an account of their ill doing" (GA 28/6/1866: 2).

Reports of the loss of *George Roper* in 1883 commented that even while the wreck was in the process of being auctioned in Melbourne, "Wreckers have been busy, and a large amount of cargo has been stolen" (South Australian Register 9/7/1883). The same article noted that after the steamer *Blackboy* had gone up on the reef fully loaded with salvage from the wreck "some cruisers had gone on board, and most ruthlessly plundered and destroyed goods, evidently in search of valuable plunder, and being disappointed they threw the things about". Given its nature, the identity or origins of illegal salvors are almost impossible to determine. However, access to boats and sufficient proximity to the wrecks to determine when they were free from surveillance is suggestive of at least some level of local participation. There are certainly several newspaper reports of fishing vessels being seen near to wrecks.

Several informants recounted oral history that local people would visit the scene of a wreck with diverse intentions: "Some people wanted to help out, and some wanted to help themselves. It was almost an act of God in their favor" (Ferrier 2001–2004). This observation highlights the underlying mixture of altruism and opportunism. A wreck might offer locals and visitors alike a diversity of items, washing ashore as a result of jettison or floating off as the vessel broke up.

> The cargo was piled breast high on the shore for a mile and the wreckers of Queenscliff and all the district around had a great time. All the drays and spring carts were commandeered, and on Saturday afternoon there was a steady procession of vehicles rolling into the Cliff, loaded up with every variety of goods, crates of crockery, bales of drapery, bundles of brushware of every kind, in fact an innumerable list of articles. The Customs authorities had not taken any action, and the police seemed to think it was a case of flotsam and jetsam, where finders were keepers. (Dod 1931: 68)

Looted items might be used or sold locally (see Chap. 5), or be taken to the Geelong Market to generate extra income. Reports immediately following the wreck of *Joseph H. Scammel* (1891) detail that the looting was so bad that the road to Geelong had to be closed to keep the salvaged material from leaving the district, as carts were piled high with the proceeds (Loney 1989b: 42).

Plundering of vessels shortly after their stranding or wrecking continued well into the twentieth century. When *Time* grounded on Corsair Rock in 1949, it was alleged that droves of mariners descended on the abandoned vessel. Because of the recent nature of this event, specific details of the informant and other historic participants have been withheld, although the details have been corroborated by Jurgens (1974: 3):

> When the *Time* went ashore some people helped themselves to it. They were more or less pirates. Some fishermen went aboard and took timber, hides and bags of sugar, which was piled high on the pier until it was taken home… When the *Time* went ashore, [names people withheld] went aboard and pinched everything…doors, rope, paint, the lot. The police recovered [some of] the gear from the fishermen, and the police auctioned all the gear… (Shapter 2001)

Similar opportunistic salvage was also being undertaken across The Rip on the back beaches at Sorrento and Portsea, where a wreck bell also existed and men and women responded not only to save lives, but to gain liquor, china and household goods (NHS 1966: 63).

Despite formal salvage law, it appears that this behaviour reflected the common attitude of the time that shipwrecks and associated debris represented a godsend from the sea, which every citizen had the right to exploit. Shipwrecks were often a boon for struggling fishermen, as they occurred in the winter when the fishing was poor, and the weather was bad.

> Some fishermen used to say "Please God, send me a wreck"…Shipwrecks were a blessing and a curse. Fishermen were the bottom of the food line. They had to build boats in winter to survive. Fishermen had other part time jobs just to survive. The wrecks were a real economic resource, (as) there was extreme poverty in the fishing community from the 1850s-1900s. (Ferrier 2001–2004)

Looting was not restricted only to the poorer members of the town. Dod (1931: 97) recalled the events of when *George Roper* (1883) wrecked on Lonsdale Reef.

> When heavy gale set in, the holds broke open and many whisky barrels and other liquors floated around bay and channels. Soldiers even got in on the act when a barrel floated ashore at the bottom of the bluff, and formed a bucket line up to their barracks to empty its contents until a local pastor reported them to their officer.

Aboriginal people were also documented as having accessed spoil from wreck sites in the mid-1850s (Simpkin n.d.: 5).

The lawlessness associated with looting of wrecks quickly attracted the attention of the authorities. As described earlier, the new-found wealth associated with the Victorian Gold Rush led to a booming market in imported luxury items to meet the demands of the newly rich gold miners and pastoralists. When vessels carrying these goods wrecked, they presented attractive targets for looting, particularly in communities such as Queenscliffe where even basic household goods were often scarce.

The looting of vessels on the foreshore presented a twofold loss to the fledgling colony. Not only were owners deprived of their cargoes which were badly needed by the settlement, but the government was denied essential income generated through importation and Customs Duties on the international cargoes. As the cargo of these foreign shipwrecks had not cleared Customs, many of those involved in opportunistic plundering from shipwrecks were regarded in the strictest terms of the law as smugglers (Day 1992: 283, 292).

Customs officials and police were regularly stationed on and nearby to strandings and wrecks (to protect the vessels from the hordes of looters (e.g. see Figs. 4.8 and 4.9); *Light of the Age*—GA 18/1/1868: 3; *Sussex*—GA 4/1/1872):

> In all directions - under bushes and beneath some canvas tents that had been erected, suspicious looking prowlers may be seen evidently anxiously awaiting a squall to give them the opportunity of wrecking. Picnic parties mixed with those who were bent on more earnest work. (GA 4/1/1872)

Fig. 4.8 Customs camp at the wreck of *Joseph H. Scammel* in 1891 (*Photograph* Des Williams Collection)

Fig. 4.9 Wreck of *George Roper* (1883). Note the policeman beating a looter in the foreground (*Photograph* PH2801, QHM Collection)

The day after *Sussex* (1871) wreck occurred, 1500 people were encamped on the shore nearby (GA 6/1/1872). Many reports appeared of items not only being looted from the shoreline, but of visitors' property also being stolen (GA 17/1/1872: 2). The cliffs at the Barwon Heads were covered with the tents of Police and Customs Officers from both Geelong and Queenscliff, along with former crew from the wreck, who had been sent down to watch over the site: "There were a large number of carts in close proximity to the shore, and scores of land sharks waiting for something to turn up" (BS 5/1/1872).

Many looters showed scant regard for the authorities, and looters often pillaged material from wrecks despite the presence of police and Customs Officers. One account from the early 1850s detailed how the Customs tent at the site of *Sussex* wreck was burnt down when a fire swept through the scrub. The fire was deliberately lit by looters in an attempt to distract officers from their pillaging activities further down the beach (Loney 1989b: 18). Several local informants also suggested that unexplained fires had occurred during shipwreck looting on a number of occasions during the twentieth century, not only to conceal evidence of theft, but to also ensure that the wreck (which was a rich source of income) could not be removed:

> The *Orungal* and the *Time* were set fire to, and it was rumored that it was possibly by wreckers to stop the chance of them taking the wreck away from the looters, and disguised the evidence of the looting activities (oral history informant name witheld by request)

It therefore appears that fire was sometimes employed as a tool of concealment and procurement during looting activities. This observation has implications for the discovery of burnt material on or near shipwrecks that might normally have been attributed to an accident at the time of wrecking.

Overindulgence

Many documentary accounts detail scenes of drunkenness at wreck sites, especially where there was alcohol aboard. If looters could not bring the booty home, they attempted to consume as much of it as possible at the location:

> The cases of debauchery and wantonness which are going on there amongst the wreckers, who loiter about the place, are past belief and extent, and their bacchanalian orgies would be disgraceful to savages. Surely the government should do something, either by having police station at The Heads or otherwise, to protect property and suppress or prevent scenes like those we have referred to (Argus 10/12/1853)

These scenes were the common occurrences associated with many shipwreck incidents (see Loney 1989b; Anderson and Cahir 2003: 23, 154, 165). When *Sussex* went ashore with a cargo of liquor, extensive local looting was reported (GA 1/2/1872).

This intemperate behaviour also took place at flotsam traps (see discussion below), where the mariners would overindulge in liquor that had been washed ashore out of sight of the authorities:

> When the *Light of the Age* and the *Sierra Nevada* wrecked, many casks of wine and rum were washed ashore at Swan Island, Lonsdale Bight, Pt Lonsdale and Mud Islands and for the next fortnight barrels were floating all over the Bay. Men would disappear for weeks at a time, drinking until the barrels were finished, (Ferrier 2003)

Nor was this extreme behaviour limited to adults, as Dod (1931: 69) recalled the scenes of wanton destruction of property at wreck sites by children:

> Some of my mates, finding a crate of bedroom crockery some distance from the police, amused themselves by tying bedroom jugs and utensils together by the handles and playing horses with them. Galloping up and down the beach till they were broken to atoms.

The incidence of so many wrecks had obvious effects on an often impoverished fishing community, who were destitute especially in the winter months when poor seasonal fish stocks and adverse inclement weather severely limited their ability to derive an adequate income to feed their often large families. An editorial account (QS 24/9/1892) recalled "the early days" when a vessel had gone ashore near Queenscliff close to the old lighthouse quarters and a cargo of hams were piled on the shore with an armed guard to protect them. The locals were driven to despair by the sight of the hams, which were a luxury item, especially in a fishing community that was sustained predominantly on seafood. Locals gathered on the cliff top to feast their eyes alone on the pile of tempting food:

> I don't particularly want the blessed hams, only they do put me so much in mind of dear old Yorkshire. I have'na ben able to eat or sup a' the morn, my appetite's a clean awa, owing to the thinking o' the hams, and the morn's porridge has lost a' its flavour: do ye no ken, at a' what's to be done? (QS 24/9/1892)

A scheme was devised to steal the hams, whereby one perpetrator distracted the guard with conversation and then secured a hook attached to a string to the hams while stooping to pretend retie his shoelaces. His accomplices then carefully hauled the ham away with the string, with at least a dozen hams supposedly procured in this way (QS 24/9/1892). This account suggests the lure the wrecked cargoes presented to the local Queenscliff population, but also evokes the folkloric qualities in outwitting authority figures. It is likely that the wreck in question was the barque *Glaneuse* (1886) which carried a cargo of luxury imported items including sardines, hams and champagne.

Camouflaging or Caching

In attempts to circumvent discovery, several informants described how local residents collecting flotsam and jetsam would often hide contraband material close by the wreck by collapsing eroding sand dunes over the booty for recovery at a later time (Werry 2003–2004; Irving-Dusting 2002–2006; Ferrier 2001–2004):

> Yes, the people here used to pinch a bit of stuff off of shipwrecks. My old man told me about when the *Sierra Nevada* wrecked… there were dead pigs and bodies everywhere, and barrels of whisky washing ashore. Some soldiers found one of the barrels, and they collapsed sand over the top to hide it. (Shapter 2001)

Looters would then return to the scene days or months afterwards when activity associated with the wreck had died down. Many historical accounts were found to substantiate this practice:

> Sergeant Draper… has just returned from a trip to The Heads…to visit the scene of the wreck of the *Ontario*, in order to try to save some of the cargo. He has been …fortunate as to recover a considerable quantity of property [including casks of brandy, gin, wine, porter and oil]… All this he dug out of the beach sand, and it is supposed that property to an immense amount is similarly secreted in the same locality. The scenes witnessed there are of the most brutalizing description. There are a mob of wreckers skulking about the spot, and their wantonness and debauchery are…absolutely unparalleled…, a group of them were in a beastly state of intoxication and their *delirium tremens* orgies baffle all description. (Empire 15/12/1853: 4)

Another account reported that "Thousands of pounds worth [of plunder] is now buried in the sands at The Heads, awaiting an opportunity of being brought secretly to market" (Argus 29/11/1853). This practice was recorded many times in association with a number of wrecks, including *George Roper*, *Ontario*, *Light of the Age* and *Joseph H. Scammel* (Argus 29/11/1853, 10/12/1853; Dod 1931: 69, 97;

Dunn 1949: 40; Loney 1989b: 37, 40). However, it was not unknown for looters to take advantage of each others' efforts:

> I had a private tip that there was some good things planted in the ti-tree scrub above the sand dunes on the Saturday, by folk who were too heavily laden to carry away all they had gathered. Seeing the patrol on the beach, I restricted my searches to the scrub and was quickly rewarded with the discovery of an iron bath tub full of all sorts of brushes of every kind… (Dod 1931: 68)

There were many caching areas around the district where goods were either buried close to the wreck, or where debris was hidden where it washed ashore at flotsam traps. Local residents often towed barrels into the back of Swan Island (Stingaree Bight) which were rolled up into hills to "dry out", and "it was a poor house in Queenscliff in those days that could not show a few good bottles of whisky" (Dod 1931: 97). The local Customs Inspector reported finding many instances of goods hidden between various wreck sites and Geelong (Anderson and Cahir 2003: 30).

The looters were often quite organized. Customs Officers using probes in 1891 located under nine inches of earth 29 boxes of tobacco from *Joseph H. Scammel*, buried in a trench lined with corrugated iron (Brownhill 1990: 311). However, more often than not, copious amounts of alcohol from the wreck had first been consumed onsite, blurring the memory of the booty site location, which could not be subsequently relocated (Werry 2003–2004; Ferrier 2001–2004). In some cases, the proceeds were never found, raising the possibility that new types of secondary archaeological sites associated with shipwrecks still exist in the area. One of the informants who was aware of this practice also offered that in the recent past some local men had indeed found several small barrels of whisky in the sand hills at Point Nepean (Werry 2003–2004).

Contraband in Houses and Public Places

Scavenged or looted wreck materials were was also buried closer to home as the opportunity presented. The following instance was recalled by several sources (Loney 1989b: 43; Ferrier 2001–2004): "Once a fellow got some tobacco and buried it in his back yard in kerosene tins to hide it. When he dug it up he found it was unusable, as the kerosene vapors had permeated through it, so he used it to dip his sheep instead (i.e. treat for insects)". Loot was often buried in backyards or under beaches.

> One time the Customs guys came down to town and all the fishermen hid their stuff from the wreck by burying it. There was lots of cloth and silk, bolts of it, you know for making clothes, and they all took their bits they had down to the beach and buried it…that's right, they buried it just over there, in behind the Beach St houses in the dunes. But the only guy who got caught was a bloke who took the lining boards off his house and put it in behind there, and when the Customs came down they could see bits of the cloth sticking out from behind the boards. (Werry 2003–2004)

Several people recalled that there were some houses that were locally known for storing contraband salvaged shipwreck material (Jurgens 1974: 3), with goods often hidden in the ceiling rafters or cellar (e.g. *Mythian* house—an ex-Pilot's residence) (Irving-Dusting 2002–2006; Ferrier 2001–2004).

Public places were also allegedly used to conceal contraband, possibly because direct blame could not be apportioned to any one person, or possibly because local government officials were also involved. Kerr (1985: 73) reported that alcohol from *Sierra Nevada* was hidden at Pt Nepean and behind the Queenscliff Railway Station to avoid detection by Customs, and that many bottles had been rediscovered in these locations for many years afterwards. Rumours also abounded in the town of a relatively recent occurrence (in the 1970s/1980s) when timber from a stranding at Pt Lonsdale washed ashore at Queenscliff and was hidden under government buildings to conceal it from an aerial search by a helicopter (oral history informant —name withheld by request). It is also believed that this incident may have found its way into an episode of a popular Australian television series (*Seachange*) that was filmed in the area.

It is likely that the caching of contraband-looted shipwreck material led to a local black market based on knowing who held what items. Although Queenscliff and Pt Lonsdale residents demonstrated a great reliance on shipwrecks and strandings for opportunistic salvage, other communities close to the coast but located along Swan Bay and further from potential wreck sites did not, even though they did purchase shipwreck items from salvors (Beames D. 2003).

Deliberate Wrecking?

Given the significance of shipping mishaps to the local economy, the spectre is also raised of deliberate wrecking, where vessels were intentionally enticed into dangerous areas. Deliberate wrecking was a reportedly common practice around the world during the early nineteenth century, where ships were lured ashore by creating false beacon lights that were confused with expected navigational facilities, whereupon it would be stripped of all valuables and on occasions the crew and passengers were murdered to protect the wreckers' identities (Bathurst 2000, 2006). Given the demonstrated economic importance of shipwrecks to the local community, this study specifically searched for evidence of this practice in the greater Queenscliff region.

Although rigorously denied by the local community, a few examples were identified of possible deliberate attempts at wrecking of vessels by third parties onshore. In 1851, allegations of wrecking were levelled at the Harbour Master, Captain Bunbury, when it was noted that by giving the person who was responsible for maintaining the port's lights and buoys the right to salvage stricken vessels, it was likely that the frequency of stranding and wrecking of vessels would increase (Argus 29/9/1850: 2). In a different case, the Pilot Cutter *Corsair* had nearly gone ashore in 1854 when following a beam they took for a ship requesting Pilot's

services, which turned out to be from a fire onshore. The Pilot complained that the light might have led ships to wreck, which would have happened if not for his local knowledge. It was revealed that the fires had been lit by "fishermen from Queenscliff" who were camped in the foothills on Pt Nepean, but no explanation was offered as to why they were there in the first place.

It should also be noted that a trade in supplying sly grog into the Quarantine station was thriving at the time, and certain parties from Queenscliff often visited the area under the guise of collecting firewood or water from the station's well (Welch 1969: 47–48). Further circumstantial evidence of potential wrecking behaviour was when the clipper *Sussex* went ashore near Barwon Heads in 1872. The remains of two fires lit one above the other were located later in the foreshore dunes, which the vessel's master had confused for the lead lights at the entrance to The Bay. Although it was suggested that these fires had caused the wreck, no plausible explanation for the lighting of the fires in this location was given (GA 6/1/1872, 10/1/1872).

While these events demonstrate the potential for wrecking behaviour, they are in themselves not conclusive evidence of it (although see the discussion of the placement of lighthouse doorways, described in Chaps. 7 and 8). Even though the practice has been discounted by numerous Queenscliff historians (Grant 2001–2012), if wrecking did take place it was probably restricted to the period prior to the establishment of the town, when government services and navigational facilities were minimal. Most of the early opportunistic salvaging from shipwrecks near Queenscliffe took place predominantly from the 1850s to 1870s, and gradually decreased until the turn of the twentieth century as navigational and safety installations were improved. This situation was consistent with the last days of piracy that was still being experienced at frontier locations in the West Indies, UK, Canada and the USA.

There was a possibility that wrecking may have taken place during the lawless years of the Victorian Gold Rush. During this period, there was a multitude of incoming miners and former (or escaped) convicts from areas known for these purported practices (e.g. Cornwall, Scotland and Ireland—Sutherland 1888b; QS 22/10/1892). It is conceivable that when people failed at gold fossicking, they may have turned their hands to other economic endeavours including opportunistic salvage or possibly even wrecking. A spate of piracy against gold carrying vessels even in the relative metropolis of Melbourne's Port of Hobson's Bay (Sutherland 1888a: 136, 333; Draper 1900: 1–6, Bradlee 1923: 169–71, 174) prompted calls to increase defences at The Heads as early as 1852 to prevent privateers holding the colony to ransom (Raison 1997: 7). Clearly both the community and government were paranoid about the safety of the colony and threats to it from both external and internal threats. By the 1870s, permanent maritime services and military bases were housed in the Queenscliffe area, which would have probably prevented wrecking activity.

Conclusion

This chapter has demonstrated the extent to which local communities planned for and exploited local shipping mishaps wherever and whenever they occurred. The dichotomy between the radically different observed behaviours of the local townsfolk as both saviours and salvors demonstrates the degree to which shipping incidents both shaped local communities and were in turn shaped by the community's presence and activities. These short-term or *crisis* stage responses to shipwrecks not only led to anticipated formal responses aimed at mitigation and rescue, but also a range of informal, unexpected and sometimes illegal behaviours in what might otherwise be considered a law abiding community. In the following chapter, we contrast these types of reactions with those encountered in the medium to long-term periods after shipping mishaps.

Chapter 5
Mid- and Long-Term Responses

> *The kitchen of our house was lined with stuff and panels from the Time…We had to pay for it from salvagers…it may have been from black market sales.*
>
> (Beames D. 2003)

If the need to Pilot ships safely through the treacherous waters of The Rip saw the birth of the Queenscliff community, then the potential to salvage or otherwise profit from shipping mishaps was spawned at the same time. In Chap. 4 we explored the short-term *pre-impact* and *crisis* stage responses to shipwrecks, dealing with the immediacy of the wreck event as a physical and social phenomenon. However, this was only the start of a longer sequence of processes and responses that were embedded in the Queenscliffe community. In this chapter, we explore their medium- and long-term relationships with mishap sites, especially the various forms of salvage and reuse of materials, as well as the emergence of other forms of social and economic association and reliance.

Systematic (Official) Salvors

The first recorded systematic or formal shipwreck salvage in the Shortlands Bluff area was in 1844, several years before the Queenscliff township was established, when Mr. Raleigh purchased the wreck of *Thetis* which had come to grief near The Heads (MMH 6/3/1849:4). Presumably, the several wrecks in the area which predated this and encouraged the formation of the original Pilot camp were also been salvaged to a greater or lesser extent. No record remains of who undertook this or how it happened, which may suggest an element of opportunistic salvage. As described in Chap. 4, negotiating with captains over the formal rights to salvage an imperilled vessel and its cargo could start before its impact with the rocks or shore, with even the Pilot and lifeboat crews transforming from saviours to potential salvors. Over the following years, the steady flow of wrecks coming to grief attracted many others in the newly formed community to engage in legal systematic

B. Duncan and M. Gibbs, *Please God Send Me a Wreck*,
When the Land Meets the Sea 3, DOI 10.1007/978-1-4939-2642-8_5

salvage of vessels and cargoes, as well as in less formal or even illegal processes of collecting materials originating from shipping mishaps.

One of the earliest semi-professional salvors operating around Queenscliff was Scotsman William Bailey (nick-named Wandering Willy),who camped in various places along the coast during the 1850s, collecting debris from wrecks and fishing between salvage efforts.

> His raft was moored to the north of the old jetty with chains and anchors, and took two years to build. The raft was made from the mast and spars of the *Lady Harvey* shipwreck as superstructure, with planks and beams lashed and betted together. His cargo was laid on top of this makeshift platform, and consisted of anchors, chains, winches, assorted bolts, rigging, and cabin fittings. At this time, Barwon Heads to Queenscliff and from Cape Schank to Pt Nepean was strewn with wreckage, but people were too absorbed with the gold rush to salvage this material. The voyage to Williamstown took three weeks, and as the raft was thought to be a derelict, many seamen raced to claim the prize, only to be disappointed to discover Willey [sic] at the tiller. The raft was broken up and sold in lots at auction…. (Fanning 1892c)

Various people speculated on the salvage of vessels, with local merchants and entrepreneurs buying strandings, derelicts and cargo for bargain prices and in some instances making significant profits. For example, the wreck of *Joseph H. Scammel* was sold for £85, but the profits of the salvage realized over £1314 (*Traralgon Record,* 15/5/1891:4; 19/5/1891:2). Given the expense and risk of buying and salvaging a wreck, consortiums were often formed. In the case of *Sussex* which wrecked in 1872, many speculators from the Melbourne iron trade visited the derelict with valuators, trying to judge its worth. After sale, shares were offered to finance the salvage, which proved very successful and lucrative for investors (GA 1/2/1872). *George Roper*, lost in 1883, was sold at auction for £3000 to a large Melbourne Syndicate who then purchased a steamer to help the salvage operations (South Australian Register 9/7/1883). One of the consortium members, a Mr. Miller, was involved in the salvage of *Sussex*, *George Roper*, and at least two other shipwrecks (*Gange* and *Gambier*), and successfully worked at least one of these wrecks for many years (GA 20/1/1872; QS 13/8/1887, 26/11/1892).

Several other salvage companies and consortiums are named in historical documents, sometimes formed to recover structure or cargo from specific wrecks. In other instances there were prospectuses for recovery from a range of derelicts and sites, occasionally in conjunction with a specific patented recovery device or technique (e.g. Argus 9/7/1904:16). In one case of the latter sort, a critical newspaper report reviewed the prospectus of the "Australian Salvage Company" noting that many of the wrecks to be targeted had been destroyed years before, while their patented salvage devices were unlikely to work in the turbulent waters near the Port Phillip Heads (Argus 29/12/1869:4).

Even when a derelict lay close to Queenscliff, systematic salvage did not necessarily follow immediately. The timing and types of salvage processes were often dictated by decisions by insurance assessors and vessel owners, or were dependent upon other legal processes, sometimes resulting in substantial delays. *Empress of the Sea*, wrecked in Port Phillip in December 1861, was one such case. Arguments

regarding the rights to salvage and whether the captain had done the right thing by organizing its sale rather than attempting salvage himself continued for some time. It was nearly 18 months later that the ship and cargo were purchased for £3,760, allowing salvage to commence (Argus 11/6/1863).

Organized salving continued to be profitable well into the twentieth century and has a well-established place within the recent oral history of the Queenscliff community. There are strong recollections of the operations of one post-WWII syndicate which bought the rights to several wrecks in the area, including the steamship *Orungal*, *Australia* and *Time*.

> When the *Time* went ashore… a mob bought the salvage rights to the wreck… you would see them taking off walnut and silky oak timber, and there was a craft loading sugar from it. They even had a guard on board, to stop people pinching their stuff. The pier was loaded with timber and sugar. They used the crayfish boats to ferry all the gear ashore. They would hook up the [sugar] bags off the bottom of the hold using grapples. (Shapter 2001)

Fig. 5.1 Salving timber from the *Time* shipwreck (*Photograph* PH3442, QHM collection)

Fig. 5.2 Unloading sugar from the *Time* shipwreck (*Photograph* PH3440, QHM collection)

A different perspective on the salvage of *Time*, outlining the interplay between systematic and opportunistic salvage, comes from a parallel strand of oral history (see Figs. 5.1 and 5.2).

> [He] was a villain, but a likable rogue. He took the propeller off the *Time* with explosives. When the *Time* went ashore the fishermen unloaded it. They stacked the sugar out the back of the railway station, but they got caught with it, and the insurance company told them that they had to buy the boat, or go to court for theft. I used to go past [the shipwreck] all the time and see them unloading the sugar from it. It was loaded with plywood and sugar from Queensland, which people were trying to pinch. (Oral history informant name withheld by request).

Queenscliffe fishermen were often hired to assist with salvage operations (Simpkin n.d.: 9; Dod 1931: 97). However, there is little evidence that during the nineteenth or early twentieth century, Queenscliffe supported a company of dedicated professional wreck salvors.

Although the Queenscliff salvors utilized many of the physical processes known elsewhere (c.f. Gibbs and Duncan 2015), the historical and oral records also attest to a variety of ingenious and cost-effective local approaches to salvage. Contemporary newspaper reports often provide detailed descriptions of salvage operations, sometimes in the context of the legal disputes over ownership rights, or whether salvage had been carried out effectively (e.g. Argus 11/6/1863; 9/1/1872).

There are also many illustrations of salvage in progress which provide detail on some of the techniques employed. What salvage techniques were used depended upon various factors including environmental conditions, the integrity of the wrecked vessel (complete or broken up), whether stranded and refloatable, above water or submerged, needing to be righted, distance from shore, and the level of finance, technology, workforce, expertise and other resources available to the salvors. There might also need to be extra placement assurance devices or structures constructed to stabilize the position of a vessel during the various operations.

Elsewhere, we have documented the wider range of possible salvage processes, not all of which are visible historically or archaeologically within the Queenscliffe case study (Gibbs and Duncan 2015). Similarly, collection of flotsam and jetsam and recovery of lagan might be concurrent with salvage focused on the main wreck. Conditions could change rapidly and require a shift in approach, or even force the abandonment of salvage efforts. It is worth noting that in addition to extracting and scrambling materials from shipwrecks, the mechanisms of salvage sometimes contributed their own archaeological remains to the sites. The archaeological evidence of salvage will be discussed in Chap. 7.

In some instances, stranded vessels which had suffered limited structural damage could be refloated quite quickly after minor repairs (if necessary), through waiting for a higher tide to allow them to be floated off and/or hauled off with the assistance of winches or steam vessels. The refloating process could be assisted by lightening the vessel through offloading of ballast, fuel (e.g. coal and timber), cargo, anchors, cannon or even structural elements into vessels alongside, or by jettisoning overboard (e.g. Argus 30/6/1902:6). It might also be necessary to right a vessel which had heeled over, sometimes by adjusting ballast, but often through mechanical

means such as winches attached to another vessel, or to anchors on the sea floor, on land (sometimes buried), or by lines fixed to trees or structures. By the later part of the nineteenth century, water could be pumped out of a flooded vessel, or air pumped in (e.g. Argus 2/4/1906:6; 4/3/1890:6). The vessel could then continue its journey or be removed elsewhere to allow repair or salvage in safer or more effective surroundings.

Various equipment was employed to assist salvage, from simple tools such as grappling hooks through to more elaborate technologies such as the experimental Maquay flotation devices unsuccessfully used in an attempt to refloat *City of Launceston* (Strachan 2000: 24). A detailed account of the raising of the steamer *Black Swan* in 1867 describes chains being passed under its keel, with two old hulks used as floating docks then brought on to each side. Two huge bridges of timber were fastened between the hulks which were then filled with water to sink them lower and the chains from *Black Swan* fastened to the bridges. The water in the hulks was then pumped out to raise them and the sunken vessel with them, followed by several steam tugs towing the whole into shallower waters (Argus 13/9/1867:6).

Recovery of any jettisoned materials might take place, although potentially it could prove uneconomic or impractical, meaning that once the vessel had been removed a mass of debris remained on the sea floor. As suggested in Chap. 2, these stranding sites represent a "phantom" where only an echo of the shipping mishap remains. However, the structural and cargo resources at these sites in some instances provided notable contributions to the Queenscliff economy.

Vessels stranded or wrecked close to shore might be reached by small boats, or at low tide even by foot or wheeled vehicles. Figures 5.3, 5.4 and 5.5 depict these sorts of shore-based salvage activities. At the site of the *Bancoora* stranding (1891), a flying fox was made from a ship's mast embedded in the sandhills, with a ship's winch and donkey engine used to transport the cargo ashore (Brownhill 1990: 311; Loney 1989b: 45). A corrugated road of logs embedded in the beach was then constructed to carry the salvaged material from the shore and inland over the dunes. The salvors of *Glaneuse* (1886) initially used horses to haul cargo from the wreck along wire ropes, but later installed a donkey engine (Argus 7/10/1886:6). Similarly, the salvors of *Sussex* (1872) used an iron tank (possibly part of the cargo of the ship) as an airtight raft for bringing the cargo ashore, with an iron tramway constructed over the sand dunes. A wooden sled pulled by 12 bullocks was used to transport heavy objects (Sleap 1886—see Fig. 5.4).

These temporary "salvage camps" acted as a base for the mechanisms of salvage, temporary storage of materials and accommodation for the salvors who would also be keen to protect their investment. These sorts of facilities are sometimes mentioned in archaeological literature but rarely explored in detail, although they are often conflated with "breaking" sites where vessels were driven into the shallows (deliberately stranded) where they could be dismantled, for instance *Lady Harvey* at Queenscliff or *Light of the Age* at Pt Lonsdale (Fanning 1892c).

For wrecks which were not directly accessible from shore, vessels could be hired to transport salvage crews and their equipment to the site, used as work platforms

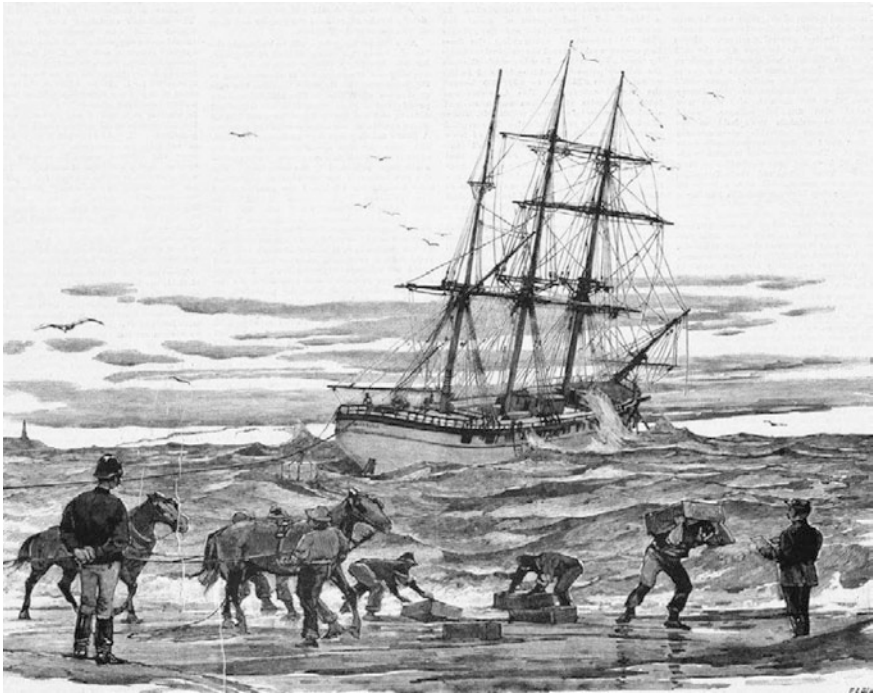

Fig. 5.3 Official salvagers at work on the *Glaneuse* shipwreck. Note the police guarding the operations (Sleap 1886, SLV collection)

Fig. 5.4 Salvors at work on *Sussex*. Note the use of tramway and corduroy road to the wreck (*Image* after Roberts & Co 1872, SLV collection)

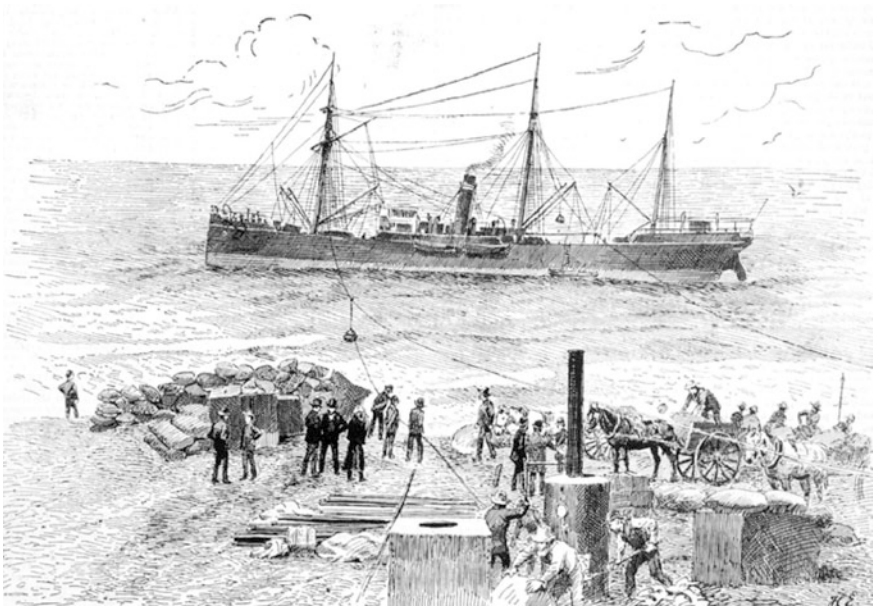

Fig. 5.5 Salvaging at stranded vessel *Bancoora* (Syme 1891, SLV collection)

and to take off any materials. The Queenscliff vessel *Aphrasia* derived a substantial income from the transportation of shipwrecked and stranded passengers, and towing numerous derelict vessels (*Victory*—MMH 19/8/1850:2; *Isabella Watson*—GA 24/3/1852:2; *Sacramento*—GA 3/5/1853:2). During the salvage process, these vessels would be fastened above or adjacent to the wreck, depending on whether it was fully submerged or still above the waterline. Queenscliff-based fishing boats were sometimes engaged for this purpose, although larger vessels and lighters were usually brought in from elsewhere. From the later part of the nineteenth century, steam vessels were particularly favoured as they were able to use their power more effectively to manoeuver around the wreck and transport materials.

In some cases, the salvage vessels, operating in hazardous conditions and in close proximity to a derelict, were themselves sunk. The iron screw steamer *Blackboy* was wrecked on Pt Lonsdale Reef at The Heads in 1883 while engaged in salvage operations on *George Roper*, when a rope became entangled in her rudder. The steamer was smashed repeatedly against the vessel she was supposed to be salving, before being swept onto the outer reef. The vessel later sank after the crew and some of the salvaged cargo from *George Roper* had been recovered (Love 2006: 79). Similarly, the salvage barge *Eleutheria* sank in central Port Phillip while engaged in wreck salvage operations (Anderson 1997: 29; Strachan 2000: 25). Although materials removed from a wreck through ship-based salvage operations might be transported to a wharf or permanent holding facility, if the wreck site was located at distance or if time was of the essence, material might also be stored at an adjacent temporary land base (salvage camp). Similarly, the

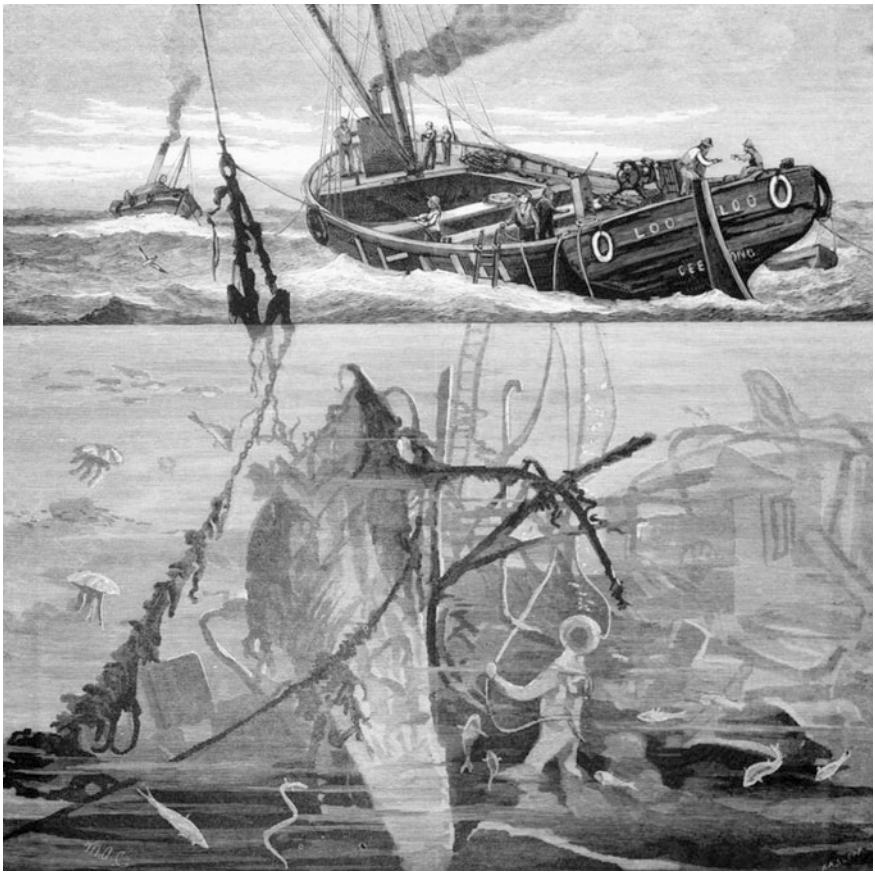

Fig. 5.6 Salvaging *George Roper* (Sleap 1884b, SLV collection)

vessels *Maud*, *Pilot* and an unnamed barge were also wrecked when involved in salvage attempts on the wrecks of *Glaneuse*, *Cape Verde* and *Kakriki,* respectively (Love 2012).

The order and extent to which the different categories of cargo, fittings and structural material including engines were removed also varied depending upon an array of environmental and cultural factors, not the least being risk, access, expense and perceived value. For vessels which were still above the waterline, stevedores were used to offload cargo. However, vessels which had partially or fully sunk required hard hat divers to undertake salvage (Fig. 5.6). One of the difficulties for salvage divers within Port Phillip but close to The Rip was the strong current which made it difficult for them to stay on their feet (South Australian Register 3/11/1891).

There was no ship building or breaking yard in the Queenscliffe area, so refloated vessels would be taken further into Port Philip, such as to Williamstown near Melbourne, for further repair or demolition. A vessel that could not be refloated

would either be broken in situ or abandoned. In many instances, in situ structural salvage required some use of explosives to break apart the wreck. Examples include *Hurricane* (QS 22/2/1908) and *Gambier*, with 300–400 tons of material subsequently recovered by divers from the latter (QS 26/11/1892). The use of explosives usually indicated a decision that refloating or removal of the vessel complete was not possible or worthwhile. Salvage operations could be intermittent or alter in nature as conditions changed or equipment became (un)available. Salvage would cease once the cost or risk outweighed potential benefits, although as noted in Chap. 2, value was a relative notion depending upon economic, social, technological, environmental and other factors, changing over time and for different groups. Different conditions and participants could mean a new cycle of salvage.

In many cases, the wild Southern Ocean defeated attempts at organized salvage on vessels outside The Heads. Wrecks and what were originally strandings were quickly pounded to pieces in the large ocean swells of Bass Strait and floating items of their superstructure and cargoes spread by the seas. For months or even years after the initial wreck event, successive winter seasons and storms would continue to break apart derelicts and disperse structure and cargo. Debris from derelicts near to The Heads was often caught by the tidal currents in the channels and scattered on beaches throughout The Bay (e.g. *Marmion*-GA 30/5/1853:2; *Ontario*—Ferrier 2001–2004; *George Roper*).

The number and regularity of wrecks near The Heads sometimes meant that floating and submerged debris became a hazard to vessels, especially the smaller fishing boats (see Fig. 5.7). For example, in 1912, fishermen were forced to use the southern channel extremity to avoid shipwreck debris (QS 5/10/1912). Knowledge of local coastal dynamics was used to advantage by official salvors, who on occasion threw buoyant items overboard (e.g. masts and yards) as they knew where

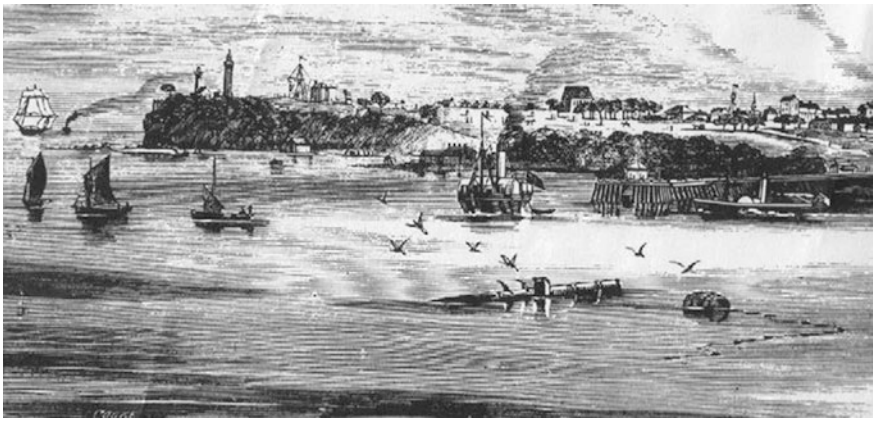

Fig. 5.7 Floating wreckage (possibly *Lady Harvey*) marked by a *wreck* barrel buoy in Queenscliff Bight, c. 1863 (*Image* Cooke 1863, QHM collection)

they would float ashore for later collection (GA 15/1/1872). In a legal sense, any wreckage from a ship as well as flotsam, jetsam and especially lagan remained the property of the original owner, so this material should have been secure. However, as will be described below, this was where understandings diverged between official salvors and opportunistic local collectors who held different views as to their rights to whatever washed up on their shores.

Newspapers include several types of notice relative to the disposal of wreck salvage. First were announcements for the auction of the derelict and/or cargo. Next were calls for claims against the cargo (including personal possessions). Eventually, there would be auctions of any salvaged materials, whether structural, scrap, fixtures and fittings, or cargo. In some cases these auctions took place in Melbourne, but at least some were held in Queenscliff. While much of the salvaged wreck material left the Queenscliff area, that which remained became an important part of the local economy. Salvaged cargoes provided unexpected supplies of normally hard to access goods which were then offered for sale at competitive prices. Numerous grocers advertised sales of shipwreck materials in local newspapers, advising of the availability of newly acquired produce ranging from cans of kerosene to cases of seafood (oysters and tinned fish), or even axe handles (e.g. QS 27/6/1891:4; 18/7/1891:4). In 1866 when the steamer *Barwon* was stranded in Lonsdale Bight, the coal removed from its bunkers as a means of lightening the vessel for refloating was sold directly to the local community (GA 28/6/1866:2). In the modern period, many older residents still recalled using household goods resulting from the formal salvage of wrecks:

> My family had a big bag of sugar from the wreck of the *Time*, and I can clearly remember using the sugar, which was very hard and raw, from this bag on my cornflakes as a kid for many years. (Irving-Dusting 2002–2006)

Wreck materials sold beyond the Queenscliff area can sometimes be traced. For instance, the bell from *Joseph H. Scammel* ended up in the steeple of the Anglican Church in Morwell, situated some 300 km east of Queenscliff (*The Maffra Spectator* 15/3/1915:3).

Although many wrecks were abandoned in situ after salvage had taken place, another possibility was for the derelict to be physically removed (if possible) for storage, re-use, or abandonment elsewhere. One example of the re-use of derelicts which was common in this area was their deployment as erosion control devices. In 1914, fishermens' houses north of the Fishermens Pier were threatened with inundation from high tides and storm surges (especially during easterly winds), (QS 14/2/1914, 18/7/1914; Ferrier 2001–2004). Despite dykes, raised paths and repairs to the sandstone seawall, the backyard fences of the houses were often flooded or washed away at regular intervals (e.g. QS 8/4/1916, 18/7/1914; Mouchmore 2001–2004; Werry 2003–2004). In c.1914, the former Victorian Naval Torpedo Boat HMVS *Lonsdale* (Fig. 5.8) was placed on the beach as a breakwater, which appeared to solve the problem (Wright 2001–2002). The derelict was also

Fig. 5.8 The hulk of the HMVS *Lonsdale* on the Queenscliff foreshore (*Photograph* QMM collection)

utilized as a change room and informal toilet by local residents using the beach in this area (Werry 2003–2004).

Elsewhere in the area, the hull of the former tourist Bay Steamer *Ozone* was deposited and used as a breakwater at Indented Head, fittingly to provide shelter for a recreational beach. The hulks of the torpedo boat *Countess of Hopetoun* and another unidentified vessel were also used for erosion control at Swan Island military base to protect the beacon and the fort (Ferrier 1991: 5; Irving-Dusting 2002–2006). In 1926, *J3* submarine was moored off Swan Island for the dual purpose of erosion control and as a power supply (using its generators) for the naval depot, but eventually abandoned (Anderson 1984; Thompson n.d.: 2). Less usable derelicts were moved to the ship's graveyard area to the west of The Heads and sunk in waters where they would not be hazardous (Duncan 1994). In later periods, this discard area would become a tourist attraction in its own right (see Chap. 7).

Opportunistic Salvage: Flotsam/Jetsam Traps and Beachcombing

Following the rush of spectators and would-be looters to wreck sites as documented in the previous chapter, various forms of opportunistic (and sometimes illegal) salvage might continue over the longer term. Even when formal controls were established over a derelict and systematic salvage began, Queenscliff people would continue to have opportunities to access materials through beachcombing. The fishing community in particular knew intimately the currents and conditions

surrounding the peninsula, and therefore, those areas likely to receive flotsam and jetsam deliberately ejected from vessels or any materials resulting from a vessel breaking apart. Local people generally considered that wreckage washed ashore was a legitimate economic by-product of any shipwrecks in their area (QS 10/12/1892), especially over the longer term. As a result, the formalities of legal ownership were often ignored or paid lip service.

The Point Lonsdale back beach (extending to Barwon Heads) and Lonsdale Bight became especially known as a wreckage and flotsam trap, with newspaper accounts reporting the area strewn with timber and materials after various shipping disasters at The Heads (e.g. *Sacramento* GA 2/5/1853:2; PPH 4/5/1853). Flotsam traps also provided concentrations of non-wreck materials such as items washed overboard or discarded from passing shipping. However, in the right conditions, even material from older wrecks and strandings would be brought ashore. The deposition processes associated with these flotsam traps were cyclic, and local people knew where and when to go to collect wreckage and debris brought in by successive tides and in particular seasons (Beazley 2001–2004). They also knew what wreckage would be available at which sites (Ferrier 2003) and would anticipate the availability of flotsam both at the immediate wreck site and elsewhere based on the prevailing weather conditions. Even in the twentieth century, it was known that a SW storm would "cast all manner of stuff onto beach and rock shelf" (Jermyn n.d.). The sheer volume of flotsam enabled one Pt Lonsdale resident to build his cottage entirely from shipwreck timbers, with the beach there described as "a great timber yard" (Simpkin n.d.: 4). Flotsam was also known to wash ashore at Shortlands Bluff near the Pilots station

Fig. 5.9 Wreckage below Shortlands Bluff Timber Lighthouse tower 1860 (*Image* Cossamore 1863, QHM collection)

(MMH 20/4/1850), as well as at Pt Nepean Beach (GA 16/6/1848), Queenscliff Bight (Fig. 5.9), Swan Spit, Swan Island, and at the Mud Islands (Ferrier 2003). A case of boots from the *Sussex* wreck was found a fortnight after at Portarlington, about 25 km further within The Bay (GA 15/1/1872).

Beachcombing was always a popular pastime but also economically rewarding for the disadvantaged parts of the community.

> We collected dunnage off the beach. You used to get planks 15ft long and an inch wide. Johnny Geats lived on Swan Island, and he built a shack from dunnage and lived in it. We used to find this beautiful timber on the beach. We would tie a rope to it and we dragged it back along the beach to where you came down, and then would get someone to help lug it back to your house. Old Miss Siddle… had seats in her garden made out of driftwood. Some of that was proper timber that would have been sold, and came from the timber boats from Tasmania. They would sometimes lose some of it, it got washed off, and you were lucky if you got that… The timber was very important, as dressed timber was quite expensive then. (Patrick 2004–2012)

When a small coastal sailing ship went aground during a storm at Swan Island in the early 1900s, the sheep that scrambled ashore were quickly corralled in the centre of the island and used for meat for several months. While residents relied on the exploitation of flotsam material for everyday resources, the potential for more exotic rewards also fixed some of these events into popular memory:

> One night during a storm a cargo ship [probably the *Wyrallah*] was cut in half during a collision with another ship in The Rip, and cases of chocolates were washed up on our island. The contents were quite alright as each case was wrapped in zinc, so you can see it was like Christmas for us, in fact it was even better as our Christmas morning gift was 1/- and an orange …We would often find bunches bananas/coconuts washed overboard from ships, timber planks and square kerosene tins… which were always taken home and all our outside sheds were made from them. (Thompson n.d.)

The short- and long-term benefits from shipwrecks could have wide-ranging consequences on the life of the community, especially those at the lower end of the economic spectrum. Long after the occurrence of shipwreck or stranding, flotsam and jetsam would washed ashore in areas close to the previous mishap site. One of the shipwreck and stranding-derived resources most commonly mentioned in Queenscliffe historical and oral accounts is coal, which also provides a case study of how beachcombing operated within the community. Bulk coal was carried both as fuel for vessels and as cargo for use by shipping lines and for colonial consumption. As a result of a wreck or stranding, efforts might be made to offload the coal for sale, such as when the SS *Barwon* stranded in Lonsdale Bight in 1866 and part of her coal cargo was salvaged and sold locally as a cheap alternate fuel source (GA 28/6/1866:2). However, depending on circumstances, bulk coal would often be simply jettisoned overboard, would spill from a breached hull or be left behind in the derelict after all other salvage had ceased. Being relatively light, coal would be moved by the strong currents of the ocean and Bay and washed ashore and since the early days of settlement has been extensively accessed by the community in Lonsdale Bight, providing a much needed economic resource (Ferrier 2001–2004; Mouchmore 2001–2004; Naylor 2004; Patrick 2004–2012; Smitt 2004; Springall 2001; Werry

2003–2004). The coal in the area was so abundant that fishermen sometimes pulled it up in their lobster (locally referred to as crayfish) pots (Mouchmore 2001–2004).

The Ferrier fishermen were a large family and relied heavily on any supplementation of their income (which was a common situation among that social group), and fisher women often collected coal for their fires from the Shortlands Bluff Back beach after large storms:

> My grandmother would wear several petticoats down to the beach and would walk along at low tide mark collecting coal. She would pull up one petticoat hem and fill it with coal that had washed ashore, and when that was full, she would pull up another and use them as a basket until they were all full. All the kids would nick off if she asked us to go for a walk with her, as we knew we would have to carry coal. Needless to say she preferred the small pieces… You can still find lots of coal at Shortlands Bluff and at the *Milora* stranding site after a strong easterly gale, which with its short swell brought it up on the beach. There is also lots of coal from the *Time* shipwreck in that area. (Ferrier 2001–2004)

Another informant recalled that:

> As fishermen were poor, they often couldn't afford to buy materials for heating, and used to heat their houses with coal picked up off the beach which was washed ashore from wrecks/strandings. Fishermen (and families) often survived on rabbits and fish and picked coal up off the beach to burn. My father had a dog sled that he used as a kid [around 1925-30] to go along the beach each morning before school to pick up coal to keep the fires going. I still heat my house with coal found on the beach (Irving-Dusting 2002–2006)

Nor was this practice restricted to fishing families or poorer community members. A former Pilot recalled that as a child he would pick up ten bags of coal after a gale and that everyone was burning coal in their winter fires (Springall 2001). Even the more affluent undertook this practice:

> They were wealthy people… Old Mrs Hart would come over to the beach… She had a carpet bag, and she had a proper fur coat and she would go along the beach in bare feet with her carpet bag collecting coal. Her whole idea was to be away from Melbourne and she enjoyed it. (Patrick 2004–2012)

Although the coal was regarded as communal property accessible to all and sundry like most other items exploited from the sea, there also appears to have been an informal etiquette in regard to its collection:

> We used to walk along the beach and collect the coal as we went along and make small piles as you went or put it in old fertilizer bags. You would drag the bag back along the beach to the track where you went up to home, and then you would get someone to help lug it back to your house. No one would steal your coal if you left it on the beach. It was just something that wasn't done if you knew someone else had collected it. (Patrick 2004–2012)

The regular availability of coal after storms (Springall 2001) led to the development of special implements to harvest this resource in the littoral zone:

> A ship came ashore in 1934 in Lonsdale Bight, and had to dump its cargo of coal to get off. That coal kept many a house warm for years in Queenscliff. People went down to the beach and used rakes meshed into baskets to scope it out of the water. They stored it in tanks in their backyards. It was a blessing in the depression—it kept everyone warm. (Werry 2003–2004; Figs. 5.10 and 5.11)

Fig. 5.10 Harvesting using coal rakes in Lonsdale Bight (*Photograph* QHM collection)

Fig. 5.11 Harvesting jettisoned coal using coal rakes in Lonsdale Bight (*Photograph* QHM collection)

In part, the necessity for coal collection and its prominence within oral histories was a consequence of industrial activity in the Queenscliffe area. By the early twentieth century, Queenscliffe suffered a chronic shortage of timber fuel after the demand for firewood and bark for the Melbourne biscuit factories, and tanneries

had stripped most of the wood stocks from the Bellarine Peninsula (Patrick 2004–2012). Although a gas plant was installed at Queenscliffe in 1884 (QS 21/1/1884), gas reticulation was only available to the lower end of town. Shipwreck coal collected from the beach was also substantially cheaper than either the gas supply or ordering firewood from further afield.

Shipwrecks as Places

After the excitement (and sometimes tragedy) of the initial disaster event, ship derelicts usually became integrated into the landscape of the Queenscliff community. Some shipwrecks worked their way into local toponymy: "People would say lets meet at *Rosebud* [to loot it]. That is how the town got its name" (Rogers 1960: 50). Other places such as submerged rocks were named for their associations with wrecked or stranded ships: Lightning Rock, Victory Shoal [Pt Lonsdale], Corsair Rock, Petriana Reef, Cheviot Beach and Sierra Nevada Rocks [Pt Nepean]).

For the Queenscliff fishing community, many wreck sites became (and often still are) integral components of their maritime landscapes for various reasons, with structural components visible above water being used as seamarks. The boilers from the wreck of *Campbell* are often still used to delineate a narrow channel used by fishing boats to avoid the full force of The Rip:

> They would use the boat channel when the wind was blowing from the North West, and the tide was running inwards. They would use the channel between the *Campbell* shipwreck and Corsair Rock, when going out on an ebb tide. (Mouchmore 2001–2004)

Sometimes, these directions were later enshrined in official sailing directions, with *Australia*, *Orungal*, *Time*, *Wauchope* and several other derelicts formally used as sea marks for navigational purposes (PHB 1959: 189, 191).

A more enduring benefit of shipwrecks for the fishing community was that they provided environments which encouraged the aggregation of fish, particularly snapper (*Chrysophrys auratus,* also called silver bream*)* as the newly created topography resembling the rough ground favoured by this species. The derelict of the clipper *Hurricane*, wrecked near Rosebud in 1869, was a favourite location for Queenscliff and Rosebud fishermen through the later part of the nineteenth century. Unfortunately, salvors became interested in the contents of the wreck, and in 1908 explosives were used to salvage its remains (QS 22/2/1908). Similarly, *Eliza Ramsden* which in 1875 sank in the main shipping channel after being holed on Corsair Rock was known as a good location to catch yellowtail (Ferrier 2001–2004). These fish concentrations are known to attract seals to the area, which have in turn been used by fishermen to identify the locations of wreck sites and hence the fish schools (Hodge 2006; Taylor 2007, 2013). These sorts of long-term relationships between the Queenscliff community and shipping mishap sites are discussed at greater length in a later section.

Wreck Tourism

Wrecks visible above the water quickly became the focus for sightseeing on Sunday picnics, where the whole family would visit the site. Wrecks, stranded vessels and old hulks often provided a playground for local children. As early as 1867, stranded vessels in Lonsdale Bight proved to be popular recreational facilities for local boys, especially *Barwon* which was ashore for more than a year (Dod 1931: 66; Dunn 1949: 40; Fig. 5.12). The derelicts being used as breakwaters were also popular recreational haunts. Mouchmore (2001–2004) recalled playing submarines inside the hulk of HMVS *Lonsdale* before it sank into the sand, and many informants (Mills 2002; Beames R. 2003) played or fished on *J3* Submarine at Swan Island until access was restricted by the military. Similar behaviour was also observed at Lorne, 50 km west of Queenscliff, where wrecks and hulks were also used as diving platforms (Hunt 1999: 23).

While the spectacle of a wreck in progress provided a ghoulish draw card for some tourists (Chap. 4), the Queenscliff community also actively promoted its shipwreck heritage and activities to the hundreds of regular seasonal residents and day trippers who landed daily at Queenscliff Pier. The remains of shipwrecks themselves also played an important tourism role, with local newspapers actively promoting the exposed hulks as attractions (QS 22/2/1908). Many early photographs show locals or tourists in their Sunday best on the iconic rocks at Pt Lonsdale posing in front of shipwrecks (Fig. 5.13). These images were also subsequently produced as tourist postcards. If a shipwreck was being salvaged, that too became a performance for visitors. Carts were often used to transport sightseeing tourists to see attractions at Pt Lonsdale as well as wreck sites further along the coast (Dod 1931: 68).

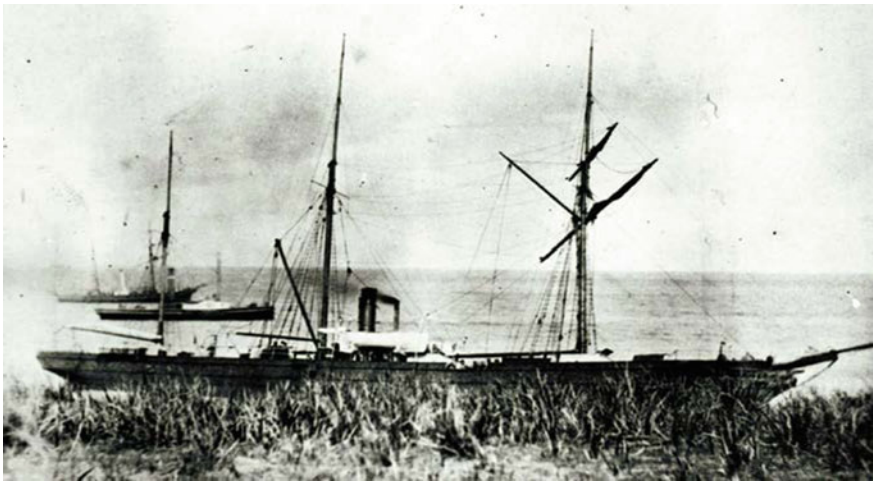

Fig. 5.12 *Barwon* aground at Lonsdale Bight in 1866 (*Photograph* PH41, QHM collection)

Fig. 5.13 Tourists watch salvage operations at the wreck of *George Roper* (*Image* Ebsworth 1883, SLV collection)

Visitors were also actively directed towards the lighthouse, Pilots' station, and the lifeboat and its shed at the end of the pier (Beavis and Raison 1984). The regular monthly rocket practice session by lifeboat crew also attracted large tourist numbers, where the crew launched the lifeboat and fired the lifesaving rocket that was used to pass a line to shipwrecks (Fig. 5.14):

> …once a month…they would fire off the rocket for practice. Everyone knew it was coming, but we would all jump when it went off, it made a hell of a bang, and it would go flying up high in the air over The Bay. Everyone in the town used to turn up to watch them practice, especially the kids. They came from miles around to see it set off. (Werry 2003–2004)

The Military Tattoos performed by Fort Queenscliffe included not only mock re-enactments of famous battles and trooping the colours but also displays of lifesaving in case of shipwreck (QS 5/1/1897). The latter was ironic given the military's limited involvement in such operations.

Even folklore was manipulated to increase the tourist market. Three local "legends" were identified which persist to the present day despite historical and archaeological evidence disproving them. Following interviews with the local community, it became evident that the origins and survival of these tales were associated with the past (and present) operation of the tourism industry.

The first "legend" involves a historically documented pirate, Benito Bonito, allegedly sailing into Swan Bay to bury his treasure before being captured and

Fig. 5.14 Rocket practice between the Queenscliff and Pt Lonsdale lifeboats c. 1921 (*Photograph* QHM collection)

hanged by the British Navy. This tale dates to at least the 1860s (Lawson 2004a) and was perpetuated by a local fisher (Kerosene Jack) who once lived on Goat Island and identified himself as the son of the pirate. According to Jack, after rediscovering the buried loot, he blew up the cave where it was located to make sure it was never found again. He was said to have had a treasure map tattooed on his arm and was subsequently pursued by numerous interested parties intent on getting him to reveal the treasure's location, although he never revealed its secret (Dod 1931: 26; Argus 7/7/1937; Anon 1938: 85; Van der Klouster 1980: 14; Hayden n.d.: 9–14; Irving-Dusting 2002–2006). Many different versions of the story abounded in Queenscliff, but all maintained that the treasure was buried along the Swan Bay foreshore of Queenscliff.

Many attempts were made to find Benito's treasure, beginning with visitors and locals digging and poking around the cliffs/foreshore (Hayden n.d.: 19; Anon. 1938), and coin hoards (some dating to 1816) that were discovered between 1909 and 1926 (QS 25/9/1909; Thompson n.d.: 8), along with a box marked "B.B." that reportedly contained a compass stamped 1777 (Hayden 1966: 15; Lawson 2004a). The legend had such veracity in the Victorian community that it even spawned several mining syndicates to undertake serious searches with heavy machinery from the 1920s until 1994 (Hayden n.d.: 19–21; Lawson 2004b: 9). Another similar legend also circulated about treasure on Swan Island in 1909 (QS 25/9/1909). These stories and the broader popular connection between shipwrecks and "treasure" have undoubtedly contributed to opportunistic and illegal salvage from sites throughout the area, as well as fuelled the continuing appeal for beachcombing among tourists (discussed further in Chap. 8).

Conclusion

Once the crisis phase of a shipping mishap had concluded, the Queenscliffe community tended to see these events (and the resulting sites and materials) in terms of the range of economic opportunities they offered to individuals, groups and the community at large. Systematic salvage employed a variety of technologies to extract structure, cargo and contents, continuing until the point where the economic or other imperatives rendered further work unprofitable. In some instances, further salvage might occur if new technologies or other drivers made further recovery of materials profitable. Local men were sometimes engaged as boatmen, divers or labourers during these projects, although direct economic returns for the Queenscliffe community were often limited.

In contrast to the formal processes of systematic salvage, opportunistic salvage melded with local perceptions of traditional rights and practices surrounding access to materials, regardless of formal legalities. The removal of shipping mishap materials, either directly from derelicts, from stranding sites, or through collection of flotsam and jetsam, might continue across years or even generations at various levels of intensity. It also involved a broad spectrum of community members.

Over time, what were originally vessels transformed into derelicts and then into places which may or may not have had any surviving physical remains. These places sometimes also became integral parts of the Queenscliff cultural landscape, which included their incorporation into tourist ventures. The narrative of the community's formal and informal engagement with shipping mishaps, as well as manipulation and creation of bodies of folklore and "legend", was also deployed to encourage tourism. The following two chapters move towards the physical and archaeological expressions of the shipping mishap landscape.

Chapter 6
Landscapes of Risk Prevention and Mitigation

Oh Pilot, 'tis a fearful night,
There's danger on the deep
(QS 10/5/1884)

While the preceding chapters have outlined the sequence and range of behaviours and processes associated with the Queenscliffe community's responses to shipping mishaps, the following discussion explores how these relationships manifest in space, site and place. One of the particular concerns in this study was to examine the archaeological signatures of these activities, raising the possibility for reading and understanding similar responses in other landscapes.

We have organized our discussion of the various classes of site and place around the same broad structure of response to risk and crisis as used for the preceding chapters. This chapter examines prevention and mitigation, while Chap. 7 documents evidence of rescue, exploitation and commemoration. Due to the overwhelming abundance of sites discovered in the study area, we cannot possibly outline every relevant landscape or archaeological feature discovered in the study area. We therefore offer representative examples and direct readers to the wider study undertaken by Duncan (2006).

Methods of Site and Place Identification

In Chap. 2, we noted that our survey of the maritime cultural landscapes of the Queenscliffe region was developed using a combination of methods. Initially, archaeological site and relic data were gathered from official government databases. The locations of potential archaeological sites were also derived from geo-referencing historical maps and plans to modern topographic coordinate systems and then extracting the probable locational coordinates from the GIS layer for relocation using a GPS. The more complex process was to derive new site and (potentially non-physical) place information through historical documentary sources and from oral history interviews with persons currently or formerly associated with the maritime services and maritime industries (especially the fishing community), other

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knowledgeable Queenscliffe residents, as well as local and non-local divers, collectors and avocational archaeologists.

There were various mechanisms by which members of the Queenscliff community remained aware of the presence of a shipping mishap site. Some had witnessed the original events or heard of them as part of the transmission of oral history. Community members often understood where the site is, or once was if it had been removed. Being on the water almost daily meant that the fishermen and mariners retained elements of this information as part of their active dialogue about hazards which had resulted in wrecks or were created by them, as well as understanding the relationship between particular wrecks and fish aggregations. They also became aware of wrecks as a result of fishing net snags, or even through raising structure and objects in their nets. In the modern period, sonar and imaging devices revealed more wrecks, with scuba divers (including archaeologists) ground-truthing these anomalies.

A particular area of interest for this research was how to encode the oral historical and folkloric information relevant to maritime cultural landscapes, inclusive of elements relevant to shipping mishaps. The role of GIS as a means of structuring and organizing the various forms of documentary and oral information recorded on site, place and other activity areas and traditions was significant. Potential sites and places identified through analysis of the stories, observations and discoveries of community members could be correlated as GIS coverages. Further data pertaining to environmental modification (e.g. dredging and seabed or coastal manipulation) were also garnered from historical bathymetric charts and plans, documentary and oral sources. A more detailed insight into the methodology of using GIS in this way, as well as on the terrestrial and marine archaeological survey and recording techniques, is presented in Duncan's thesis (Duncan 2006: 69–76).

As is often the case in cultural landscape studies, the identification and exploration of sites and places associated with shipping mishaps was recursive in nature, with a strong interplay between the historically documented indicators of past activity (weather maps, written accounts, or images), archaeological site identification and recording, and the information solicited from knowledgeable local informants. As many archaeologists have encountered, sharing documents and archaeological data with oral history informants inspired further identification or narrative and allowed them to make connections between previously disparate pieces of physical evidence and knowledge of past activities. While cognizant of the dangers of "folklorism", (where new stories are introduced into a local community, including from later reading of historical documents and then become incorporated into local folklore), collection and analysis of these other bodies of knowledge, including modern insights into historic events and their physical or place correlates, offered a powerful mechanism for accessing the cultural landscapes of the Queenscliffe region.

Navigational Structures and Facilities

The most readily apparent physical signatures within the Queenscliffe landscape were within the pre-impact category, especially those aimed at wreck prevention. Evolving knowledge of hazards learned through successive shipping mishaps, the progressive shift towards ordered risk management (providing new or improving existing services), as well as the constant monitoring of shifting local conditions (such as channel locations) required that locations and mechanisms also had to be changed as they became redundant. Constant exposure to the harsh elements meant these many of the key preventative structures on land and especially on water were vulnerable to deterioration and damage, if not complete destruction, necessitating periodic rebuilding or replacement. Technological innovations also rendered some processes and mechanisms redundant, or created opportunities for different prevention strategies.

Lighthouses and Associated Structures

Lighthouses are by their nature constructed to maximize visibility within the landscape. In Queenscliffe, the lighthouses were constructed on the elevated ridges of the Bellarine Peninsula and Shortlands Bluff, rather than in the water. Primary (first landfall) lighthouses were placed near the entrance to harbours and exhibited much stronger beams than those for channel navigation. It is notable that primary lights tended to exhibit clusters of wrecks close to them, whereas secondary (channel marking or lead) lighthouses did not. It has been demonstrated elsewhere that the installation of lighthouses may actually have attracted shipping to areas where previous shipping mishaps had not occurred, as the installation of the device gave a false impression of the safety of the area to decrepit older vessels which stayed close to the coast to avoid sinking further offshore in storms (Duncan 2004a). Similar observations were made by another researcher who noted a phenomenon which he called the coastal hand rail where steamers "hugged" the coast to avoid heavier seas further offshore (Riley 2004).

Terrestrial lighthouses did not occur in isolation, but in effect were precincts containing a variety of risk mitigation facilities and associated ancillary structures. These complexes of sites and structures were structured according to topography, aspect, weather conditions and formal regulations, creating a landscape within the wider maritime landscape (Duncan 2003a, 2004a; Sutherland 1888b: 55). Signal, tidal and telegraph stations, as well as lighthouses and beacons, were placed in prominent elevated locations with clear lines of sight to the sea. Empty space was also a notable feature of lighthouse precincts, especially where trees and bushes were removed from around the entire complex. This not only maximized visibility but also had the effect of enhancing the lighthouse's presence by drawing the attention of the mariner to it in contrast to the surrounding (often) "natural" landscape.

Signal/tidal stations and their associated sheds were usually octagonal, to reduce the effect of the wind on the structures. Other sheds associated with storage, warnings (foghorns) or lifesaving (e.g. rocket shed and morgue) were located further down the hill and/or in the wind's lee, and similarly connected by fences or walls, dependent on their degree of exposure. Early lighthouse accommodation (pre-1850s) was initially based within the lighthouse, but later usually located within at least 100 m of the light (and often was exposed to the elements to ensure a clear field of view). Accommodation consisted of at least two large houses of a standard design (each capable of housing a large family), which were linked to the lighthouse by a large wall or fence (to act as a guide and shelter in poor visibility and strong winds, respectively).

The nature of lighthouses changed as new design innovations and technologies, especially in fuel (from sperm whale and/or Colza oil to acetylene gas) and light beam design, were introduced. The initial permanent light built at Shortlands Bluff in 1847 reflected early New South Wales designs for lighthouses, where accommodation was attached to the main structure. The local sandstone proved to be a poor choice for construction, and it was demolished when it began crumbling in the damp maritime environment.

The site of the Shortlands Bluff Lighthouse itself was not evident during archaeological surveys, although the quarry from which the stone was taken is still visible below the Bluff. Based on analysis of documentary sources, the foundations may have been incorporated into later gun emplacements constructions in Fort Queenscliff. Local oral histories revealed that sandstone sections of the former lighthouse had been recycled for use in local buildings (Table 6.1).

A temporary timber leading light was built after the initial stone structure at Shortlands Bluff as an interim measure. This use of temporary timber lighthouses until more suitable materials such as bluestone (granite) and concrete could be sourced was relatively common. These timber lighthouses could also be dismantled and transported to other areas as required, as was the case when the Shortlands Bluff structure was dismantled and then re-erected at Pt Lonsdale in 1863 (Figs. 6.1 and 6.3). The site of the timber Pt Lonsdale Lighthouse could not be located although the

Table 6.1 Main lighthouses around The Heads

Pt Lonsdale	
1853	Signal master keeps oil light burning from Flagstaff
1863	Red Octagonal Timber Tower—moved from Shortlands Bluff
1880	Foghorn
1902	Concrete lighthouse
1993	Foghorn deactivated
Shortlands Bluff	
1842	First lighthouse built
1850	Red Octagonal Timber tower—1st Low Lead Lighthouse
1862	Black (High) Lighthouse
1863	White (Low) Lighthouse

Fig. 6.1 Original Shortlands Bluff Lighthouse in 1857. *Note* the Shortlands Bluff Low Light Timber Tower to the *right* (*Image* PH1, QHM Collection)

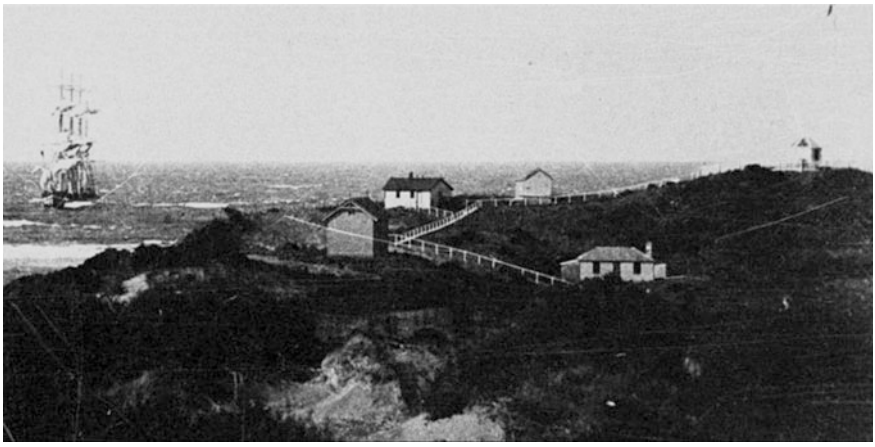

Fig. 6.2 Pt Lonsdale Lighthouse precinct: (from *left*) brick rocket shed, foghorn shed, former rocket shed, accommodation quarters in foreground (?), and tidal flagstaff and signals shed (c. 1889). *Note Holyhead* shipwreck on Lonsdale reef and the cleared landscape (*Photograph* PH532, QHM collection)

sandstone lighthouse keeper's house foundations (which also doubled as the telegraph station), a stone lined well, possible fence post remains, and exotic plants all evidence the nature of the complex and sit atop the highest dune in this area. A concrete pad from a later keeper's residence is situated further behind and below the primary dune (Fig. 6.2), presumably to provide better shelter from the wind.

The archaeological remains of the Pt Lonsdale tidal Signal Station consisted of a walled-in concrete pad, with remains of iron flagstaff base support and rope reel

Fig. 6.3 Pt Lonsdale timber light tower c. 1867, previously located at Shortlands Bluff (*Photograph* PH4560, C. Nettleton, QHM collection)

windlass bases, which originally displayed wicker basket signals (Fig. 6.4) which determined the tidal stream intensity and direction. The former signals shed is now located at a nearby guesthouse (Fig. 6.5). A foghorn shed and original steam boilers are still extant next to the current concrete 1901 lighthouse and lookout station, along with a *scend* shed, which was used to calculate the plunge or pitch of a wave in various swell conditions and its subsequent effects on vessel depth (Fig. 6.6).

Fig. 6.4 Pt Lonsdale tidal flagstaff whicker basket signals at Queenscliffe maritime museum

Fig. 6.5 Probable former Pt Lonsdale tidal signals shed. Kora-Weari guest house, Pt Lonsdale

Fig. 6.6 Pt Lonsdale Lighthouse and lookout station, fog horn shed and scend shed

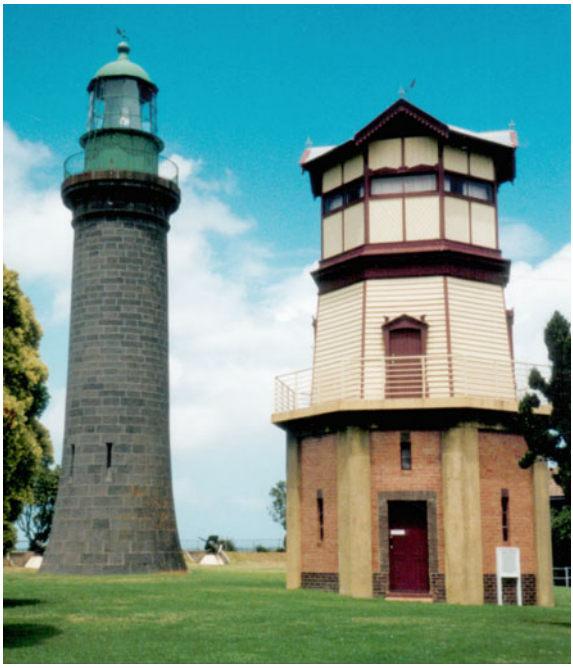

Fig. 6.7 Shortlands Bluff High Lighthouse and Signal Station

Later, permanent structures incorporated standard British models based on the ground-breaking Bell Rock Lighthouse (1810), including features such as raised entrance doorways despite being located on cliff tops (DTC 1988), discussed further in Chap. 8. These two extant bluestone (granite) leading lighthouses (built in 1863) are located at Queenscliff, along with the former timber signal station used for port control (Fig. 6.7). Two accommodation blocks (which are usually standard design for Australian lighthouses) were constructed, the upper made of brick and stone which also housed the telegraph station and the lower of timber construction (Table 6.2).

Table 6.2 Historical and actual archaeological signatures of lighthouse precinct landscapes

Lighthouses	*Lighthouse keepers cottages*
Elevated position visible to sea	Stone/concrete house pad
Lighthouse, timber, stone, concrete footings, batteries	Fence, fence posts, wire
Tidal signal station, signal station shed	Garden—exotic plants
Foghorn shed, scend shed	Rubbish dump on land/chute and submerged dump
Flagstaff, telegraph, observation station	Sheltered from wind if possible
Quarry	Wall, gardens, road, well, pathways, crane
Rocket shed, lifeboat shed, access pier	
Blacksmith shop	

Fig. 6.8 Shortlands Bluff Obelisk, Low Lighthouse and Hume tower, post-1924 (*Photograph* Rose Stereograph Co. c 1924, SLV collection)

It is notable that although the 1863 Shortlands Bluff lead lighthouses were both constructed of bluestone, one was painted white in order to differentiate between them at a distance. This was indicative of their multiple roles as leading lights used in conjunction with more than one other beacon. Other leading beacons were also constructed close to the Low (white) Lighthouse (Fig. 6.8), including a brick obelisk (whose remains are still located in the undergrowth) and an extant iron tower, which were used as leads for shallower safe channels through The Rip.

The abundance of lighthouses and beacons along the foreshore at Pt Lonsdale and particularly along the back beach at Shortlands Bluff effectively inhibited the development of other structures in this area which might have obscured or confused use of these navigational structures. Investigation of the back beach profile along Queenscliff Bight reveals that even though hotels and other prominent structures were built in this area, they are not visible from the sea. This suggests that a possible signature of navigational landscapes will be the exclusion of other structures, particularly in areas of high risk to shipping. Although beacons/lighthouses may no longer be evident in some areas, their former presence (characterized by these exclusionary landscapes) may indeed be indicated by a lack of development in these highly sought-after areas with ocean views.

Beacons and Buoys

In addition to relatively permanent lighthouse structures, the maritime landscape around The Heads and Port Phillip contained a host of less durable navigational facilities on land and at sea. Due to its unusual geology and bathymetry, Port Phillip has one of the most complicated navigational networks in Australia (Springall 2001), and large numbers of lead markers were installed in this area to navigate the many channels.

There are several extant terrestrial beacons used as formal leading marks for shipping, as well as archaeological remains of older structures. For instance, the brick remains of the base and scattered rubble of the obelisk beacon at Shortlands

Fig. 6.9 Portarlington Beacon

Bluff was identified during survey, consisting of a 1 m square brick base (level to the ground, with a scatter of brick rubble up to 20 m away. The remains of the Park Mast are also visible as a half-metre square concrete surround outside Fort Queenscliff's walls. A former concrete beacon, which would have been approximately 3–5 m high before collapse, was observed to the south-east of the Swan Island fort, but could not be accessed due to military base restrictions. Other iron navigational beacons were observed around the coastal fringes of Port Phillip Bay (Fig. 6.9), and some of which also served as primary trig survey markers.

As noted in Chap. 3, prominent buildings were often used in conjunction with lighthouses and beacons as lead markers to guide vessels through narrow channels. At Queenscliffe, the edges of the Telegraph Station and the Black Water Tower were used as easily distinguishable lead marks to guide vessels through the South Channel and The Rip, respectively. The spatial arrangement of the developing town of Queenscliff meant that the churches and their spires situated on the highest part of the landscape also provided navigational marks for mariners. Natural features (such as trees, knolls and mountains) and wrecks were similarly used as lead markers, particularly by fishermen navigating through Port Phillip and for the relocation of submerged features (used for fishing). These latter features were often known only to fishers, which further highlights the multiplicity of maritime navigational landscapes within the region.

Marine Beacons and Markers

The earliest and simplest marine navigational markers around Queenscliffe were buoys, originally painted barrels chained or anchored to the sea floor (Figs. 6.10 and 6.11). Probable archaeological evidence for former buoy locations consists of anchors

Fig. 6.10 Barrel buoy navigation marker, Queenscliffe Maritime Museum

Fig. 6.11 Iron navigation buoy, Queenscliffe Maritime Museum

and chains in the West and South Channels that run contrary to the direction of current, as opposed to lost ship anchors which would normally lie in the same direction as the current, or have large coils from their extended length. Most of these appear to have been left behind when the buoys were removed, lost or replaced (Ferrier 2001–2004; Love 2001).

Square concrete blocks and chain were also reported on the north-west side of the West Channel (Allen 2001). A navigational mooring block and chain was also found near the *Clarence* shipwreck, which suggests this may have been the original wreck buoy marking the site. A number of remains of the actual beacon mooring buoys included either intact barrels (Pt Lonsdale—Arnott 2004) or surviving barrel hoops (South Channel—Mills 2002; Staniforth 2004). Iron mooring buoys and

Fig. 6.12 Archaeological remains of the old West Channel Pile Light

isolated finds of mooring chains were also reported outside the study area at Melbourne (Taylor 2007).

Numerous stumps representing former singular beacon piles were evident in the West Channel (Rogers 2003; Venturoni 2004), having been blasted or sawn off when they were replaced. Pile and beacon sites were also often evidenced by broken lens glass (1 cm thick clear, red or green), or remains of batteries (Love 2001; Ferrier 2001–2004), and were observed at Pt Nepean pier and the West Channel Pile Lightsites (Fig. 6.12). Ballast stone was used around isolated channel marker piles along the western edge of the West Channel (Argus 21/1/1933:23) probably in an effort to prevent toe scouring erosion and/or subsequent rocking movement in strong tidal currents. Divers have reported several discrete discoveries of small circular cairns of unconsolidated bluestone (granite) approximately 1–1.5 m high and 2 m diameter which delineate the old channel edge (Love 2001; Ferrier 2001–2004). This pattern was reinforced by a former lighthouse keeper (Ferrier 2001) who observed similar behaviour in the 1950s to reinforce a leaning pile (#3) in the West Channel.

Due to the size of Port Phillip, many pile lights (lights mounted on isolated dolphin structures) were installed as guides through the channels. Several navigational sites were explored in southern Port Philip, as well as in Hobsons and Corio Bay (see also Duncan 2004b: 260–263). Extant pile lights consisted of a cylindrical central tower constructed upon square timber dolphin structure approximately 5–10 m square. These sites are characterized by either square or octagonal arrangements of piles or stumps, along with structural timber beams and planks and

iron fittings. Many of these lights were occupied by lightkeepers in the nineteenth century (Swan Spit, South Channel, West Channel and Gellibrand Pile Lights) and thus presented a marked contrast to their later unoccupied counterparts. Occupied sites were immediately identifiable by the presence of nineteenth-century bottles, ceramics and other artefacts, along with structural materials of the accommodation quarters (e.g. fireplace/chimney bricks, lead water tanks and downpipes, tidal signals, iron rails and corrugated iron) in cases where the structure had been demolished (Love 2001; Mills 2002; Ferrier 2001–2004). In some cases (Swan Spit Pile Light), personal items such as dolls heads have been found in the immediate area indicating the presence of children on board, despite oral traditions from former lightkeepers that regulations restricted access to staff only.

Pile light locations varied, with three out of four situated on the edges and heads of channels, except for the Gellibrand Light (Melbourne) which was located near a peninsula in shallow water close to Hobsons Bay entrance. Most lights were erected in shallow depths (under 10 m) on the edges of the banks which they delineated, except for the South Channel Light which by necessity stood in 18 m of water to mark the dogleg turn of the South Channel. Several divers reported that artefact scatters were limited to within 10 m of manned lights, an observation that was reinforced during Duncan's inspection of the West Channel Pile Light (Figs. 6.12, 6.13 and 6.14). The Swan Spit Pile Light lies in two separate locations after the vessel that struck and demolished it carried the upper structure on its bow for approximately 250 m before it fell off and sank. These manned pile lights are much more robustly constructed than their unmanned equivalents.

Other unmanned navigational structures surveyed included the Coles Channel Pile Light (Fig. 6.15) which, apart from an acetylene gas bottle rack and a sparse scatter of other fallen structural components around the extant modern pile, was archaeologically sterile. The superstructure on these unmanned lights was more lightweight than manned piles, with much smaller huts built on top of a concrete base. Similar structures (Grimes and Woodrift Pile Lights) were simply pushed over into the water when replaced by singular pile beacons, and archaeological evidence of these structures is still evident near #5 and #6 West Channel lights (Rogers 2003; Venturoni 2004). This practice of not recovering demolished material was continued until relatively recent times (2006), when similar unmanned pile lights marking the Hopetoun Channel at the entrance to Geelong were simply sawn off their base and pushed over to be replaced with large steel channel marker piles.

Lightships

Lightships are essentially lighthouses mounted on a vessel in locations where environment or logistics limited the ability to construct essential infrastructure, or as an interim measure in emergency situations (e.g. when the Swan Spit Pile Light was demolished by an out of control ship—Fig. 6.16).

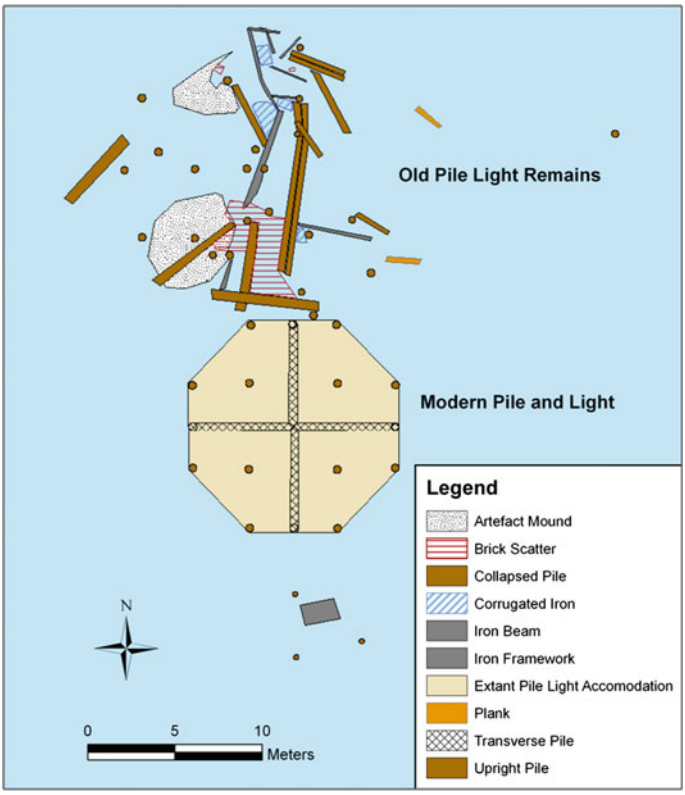

Fig. 6.13 Underwater survey of old and new West Channel Pile Light remains (From a survey by B. Duncan 2002)

Fig. 6.14 Lyall Mills and Brad Duncan at the current West Channel Pile Light

Fig. 6.15 Unmanned pile light—Coles Channel Pile Light beacon (also known as White Lady)

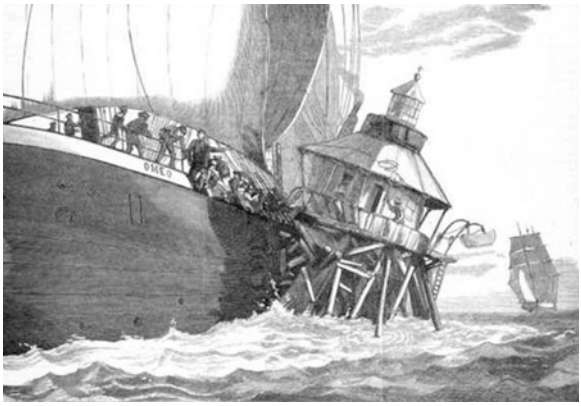

Fig. 6.16 Vessel *Omeo* collision with the Swan Spit Pile Light (*Image* Syme 1881, SLV collection)

Lightships in the Queenscliffe area consisted of a central light tower mounted on either an old sturdy vessel or on a round floating platform, moored in place using specialized clump anchors. Two admiralty anchors and two clump or mushroom anchors [with 6ft (1.8 m) long shafts and 4ft (1.4 m) diameter bowls] arranged in a cross pattern and connected with chain were reported by a number of informants at the northern end of the West Channel (Love 2001; Mills 2002; Ferrier 2001–2004; Arnott 2004), which coincides with historical documentation for the West Channel Lightship. Historical observations of lightship mooring configurations in England provide further verification (Goldsmith Carter 1945: xix). A similar set-up associated with the Swan Island Lightship (Fig. 6.17) is located on Swan Spit, where a diver reported a large anchor and length of chain (Ferrier 2001–2004) (Table 6.3).

From cartographic analysis and archaeological investigations, it appears that lightships were initially installed to delineate dangerous shoal areas, with later succession to manned pile lights, and then isolated singular pile beacons. This theory was tested at the location of the former Geelong lightship, where isolated

Fig. 6.17 Swan Spit (floating) Lightship #2 in 1886 (*Image* Calvert 1886, SLV collection)

artefacts dating to the 1860s were found, but no anchors or chains were evident. However, a former beacon pile was discovered contiguous to this location in the anticipated area. Many circular lightships were used in Port Phillip in the nineteenth century, and at least one of these, the Gellibrand Lightship (Swan Spit Lightship #3) was converted to an occupied pile light by removing its above water superstructure and placing it atop piles. This structure was visited for comparative analysis, and a substantial ballast mound (15 m wide at the base, 5 m wide at the top and 6 m high) was discovered within 2 m of the surface. Scattered deposits of nineteenth-century glass and ceramic artefacts and remains of numerous timber piles, structural iron and iron wire strewn around the site. Ballast stone was installed in 1906 when the piles (which had been insufficiently driven into the seabed as they struck bedrock) began to move in the large swell and fetch generated in southerly winds (Gibson 2000: 10). Further stone was added in 1938. Remains of the upper tower structure of the pile light were removed prior to the deliberate burning of the light in 1976 and are now located at the Polly Woodside Museum in Melbourne.

Other Mechanisms of Risk Mitigation

Although tidal gauges were previously installed on the Queenscliff Pier as indicators of tidal movements, none of these has survived. A modern tidal gauge is mounted on the Pilots' pier, and it is likely that one was also mounted there previously. A tidal trig mark (survey bench mark) in the shape of a cross at Pt Nepean was also used as an indicator of tidal movement (Ferrier 2001–2004). Tidal gauges were used to calculate the rise and falling of the tide and were extensively consulted in conjunction with bathymetric charts to calculate safe water passage of vessels through and around shallow waters. Tide gauges at Melbourne were usually mounted at either the root or head of the piers or jetties. Early tidal gauges often consisted of octagonal stone buildings, the size of a large sentry box, typically on

Table 6.3 Historical and actual archaeological signatures of channel marking landscapes

Channel markers	*Channel pile markers*
Beacons, lead lights	Piles
Channel buoy	Bluestone mounds
Channel pile	Batteries
Lighthouses	
Lightships, pile lights	
Pier lead lights	
Lead stakes, trees (as bearings, leads)	
Towers	
Cognitive leads	
Channel marker buoys	*Beacons, lead lights*
Anchors/Mooring chains run across current	Brick or concrete base, scattered bricks
Barrel Hoops	Iron-framed tower
Concrete mooring blocks	Trees (as bearings, leads)
Located in or on edge of shallow water	Primary survey marker plate at base or head
	Wrecks
	Located on land or beyond end of channel
Pile lights—occupied	*Pile lights: unoccupied*
Piles, glass lights lens, surrounds, batteries	Piles
Accommodation hut, chimney, toys, bottles, ceramics and other personal discard, communications cable	Batteries
Rainwater tank, lead pipe, roof and fixtures, bricks, fire bricks, corrugated iron	Acetylene tank racks
Ballast mound	Structural discard only (no personal artefacts)
Bullets, cartridge cases	Located along channel in shallow water
Located at the head, foot on edge of channel entrance in shallow water or deep water at turn of channel	
Lightships	*Pier lead lights*
On edge, at mouth of channel in shallow water	Batteries on seabed
Clump and admiralty anchors, connecting chains (at least 2, possibly 4)	Concentration of bottles around pier lights underwater
Bottles, ceramics and other personal discard	

government piers or jetties. Later, these were adapted into an enclosed timber box structure with a central graduated pipe inside which a floating ball rose/fell with the tide (Duncan 2003a: 245).

Tidal signals were maintained at Pt Lonsdale to indicate the top and bottom of the tides and particularly the slack water period which represented the safest time for passage through The Rip. The remains of the last tidal station were still partially

Table 6.4 Historical and actual archaeological signatures of other risk management landscapes

Flagstaff, telegraph	*Tidal Signal Station*
Concrete base surrounds, wall	Concrete pad and wall
Extant building, building footings	Elevated position visible to sea
Flagstaff iron footing,	Iron post base
Telegraph cable	Rope reels, windlass
Miscellaneous	
Barometer	
Compass swinging buoys	
Heliograph	
Radar	
Scend (wave intensity) device	
Timeball and cannon	
Weather vane	
Wireless radio tower	

visible at Pt Lonsdale and consisted of a brick wall around a rectangular concrete pad on a hill above the lighthouse. A small iron winch for raising and lowering basket signals used to indicate the state of tide was still in situ, along with a replica signal mast (which resembles a ships mast with a yard). The locations of flagstaffs which were used for signalling incoming vessels were evident by small concrete surround footings at Queenscliff. It is probable that these flagstaffs doubled as tidal signals and semaphore stations, with later technological developments for transmitting this information including the Marriott signal system, the telegraph system, radio and ship to shore electric light signals.

Early tidal signals were also displayed from hulks in Hobsons Bay (e.g. the Water Police hulk in 1855—Ferguson 1854: 127). These facilities were extensively used in conjunction with later timeball towers (which often also displayed tidal signals), used to set ships' chronometers. Although no timeball tower existed in Queenscliff, permanent towers were constructed at Williamstown (near Melbourne) and Geelong (Duncan 2003a: 264, 2004b). These towers were either large stone structures close to the waterfront (Williamstown), or situated at elevation vantage points above the port (Geelong) where they could be seen by all shipping. At 1 pm each day, a cannon would be fired and a ball attached around a mast would be dropped, allowing ships masters to calibrate their chronometers (an essential service which allowed calculation of longitude when at sea) (Table 6.4).

Several other forms of risk mitigation device were encountered both inside and outside the study area. These included barometer glasses installed on the end of the Queenscliff Pier (Fig. 6.18), a weathervane (formerly from the West Channel Pile Light) atop the Ports and Harbours building (Fig. 6.19), scend shed (for measuring wave intensity), and compass swinging buoys or dolphins located at Hobsons Bay and Eagle Bay, Gippsland Lakes (Figs. 6.20 and 6.21) which were used to calibrate ships compasses, an essential requirement for accurate navigation (Duncan 2003a: 352, 2003b).

Fig. 6.18 Fishermen's Pier barometer

Fig. 6.19 West Channel Pile Light weathervane on the Queenscliff Ports and Harbours building 2005

Hydrographic Service

The presence of the early surveyors and later Hydrographic Services based in Queenscliff is visible in several ways. Hydrographers left a lasting legacy of charts and associated sailing directions, which dictated and ordered movement through The Bay. Archaeologically, their legacy is evident through the myriad of archaeological remains of navigational sites outlined above. Perhaps the greatest indicator of their presence is evidence of environmental change which they instituted through

Fig. 6.20 Eagle Bay compass swinging dolphins (Gippsland Lakes)

Fig. 6.21 Eagle Bay compass swinging dolphins (Gippsland Lakes)

the removal of obstacles and creation of new channels through blasting around The Heads, and the maintenance of channels through dredging and its subsequent effects on local coasts through erosion and progradation (see Duncan 2007). Furthermore, by directing vessels to use particular channels, they also actively increased the depth of these normally shallow channels through the effects of ship propellers further scouring the seabed along these routes.

Toponymy of Risk Management Landscapes

The influence of early naval explorers and later hydrographic surveyors is also evident in more subtle ways. Many of the landscape features around The Bay were first named after members of the original naval survey crews (e.g. Shortlands Bluff, Symonds Channel, Popes Eye—aftercrew members from HMS *Rattlesnake*) and Loelia (which was a survey vessel). This tradition was continued by the hydrographers, their working descendants, with the naming of the many pile lights around The Bay (e.g. Knopwood, Grimes, Tuckey, Wedge, Woodriff). This custom may reflect the recording of traditional official names only for an area, a practice that has also been observed by O'Sullivan (2001: 263) in Ireland. Dutchies Island, an artificial island created between Swan Island and Queenscliff, was named after the dredge operator who dumped dredge spoil there. Furthermore, fisherman had adopted unofficial names for some otherwise unnamed navigational features (such as "Qa" for the Queenscliff approach pile beacon).

Navigable Channels

The study of archaeological remains of navigational structures in conjunction with historical charts and sailing directions provides opportunities to investigate the changing nature of ordered risk management in The Bay, which is also directly linked to environmental changeability. The discovery in shallow water areas of linear deposits of artefacts discarded from passing shipping, along with channel markers located in very shallow areas far from channels, indicated that there had been substantial bathymetric change in the lower sections of Port Phillip. This was confirmed by comparison with geo-referenced historic charts and maps overlaid onto modern day charts. Geomorphologic change is indicative of not only natural processes within The Bay, but also the effects of other anthropogenic processes including channel deepening and creation using dredging and explosives, and the knock-on effects of constructing seawalls, piers, training walls and recreational bathing facilities (see Duncan 2007 for further discussion). These observations provide significant tangible evidence in their own right of the effects of risk mitigation strategies within the region, even if the actual remains of these sites are no longer present.

These archaeological signatures all provide potential information regarding former navigational and sailing routes through the landscape. For instance, oral history that the course of the West Channel had altered since it was first navigated (Ferrier 2001–2004; Love 2001) could be validated through geo-referencing old and modern charts for comparison, combined with observations of an abundance of artefacts in the shallows on the west bank of the West Channel. The identification of archaic navigational features can inform of former trading routes and channels, which also has ramifications for the positioning and relocation of historically

Table 6.5 Historical and actual archaeological signatures of channel modification and use

Channels	*Vessel use of channels*
Blasting—craters, deepened channel, missing features from chart	Differentiation between channel artefacts is dependent on the origins of vessels
Environmental change—channel creation, dredging, coastal geomorphologic change, erosion, progradation	*International/interstate/intercolonial shipping*: Ceramics and tableware, foreign and non-local bottles, etc.
	Deeper channel depth potentially = later date of use
	Shallower channel depth potentially = earlier date of use
	Local shipping: Locally produced merchandise
	Local boats: Alcoholic and soft drink bottles, fishing lines and tackle, no ceramics tableware

known shipwrecks and other types of underwater archaeological sites whose positions are described in relation to them. Differences between artefact types identified by divers in the West Channel and South Channel further demonstrate how risk mitigation practices were being undertaken over time (Table 6.5).

The West Channel revealed artefacts predominantly from two distinct periods and origins:

- Early artefacts (bottles and ceramics) from the UK (England, Ireland and Scotland),
- Later ceramics and bottles from manufacturers around Port Phillip (including Geelong, Queenscliff, Sorrento, Rye, Mornington, Portsea, and Melbourne).

In contrast, artefacts from the South Channel were predominantly bottles and ceramics of intra- and intercolonial origins (with the colonies later to become states in the Commonwealth of Australia), as well as of international origin.

Historical accounts reveal differences in the types and origins of vessels using these two waterways. The West Channel was originally used by early colonial shipping as the preferred passage to Melbourne and Geelong. Due to restrictive British trade laws, most early shipping in the area originated from the UK. However, as larger shipping began to use the port, the shallow waters of the West Channel (and dynamic sandbanks surrounding it) proved hazardous, and another route through the longer South Channel to Melbourne was utilized predominately by foreign and interstate shipping. Smaller vessels that did not possess the local knowledge required to navigate the West Channel also used the South Channel route as it was safer and deeper and were also the Pilots Service's preferred route.

Generalized observations of smaller channels within The Bay indicated similar archaeological signatures related to the types of vessels using them. Waterways used only by small boats as part of local traffic, such as the Lonsdale Channels, usually only evidenced alcoholic and soft drink bottles (both modern and historic),

along with fishing lines and tackle (see Duncan 2006: Appendix D-4). The Sorrento Channel, which hugs the shoreline between Rye and Sorrento, was used almost exclusively by Bay Steamers from the Excursion Trade vessels and demonstrates predominantly aerated water and alcoholic bottles, but almost no ceramic tableware. This is consistent with the expected archaeological signature for that trade, as vessels were exclusively used for day pleasure cruises and no facilities were provided for meals onboard. It should be noted that some of these scatters might be confused for shipping mishap materials, so the context of relics is significant in determining their possible origins. It is suggested (pending further investigation) that channels and their associated linear distributions of artefacts may also be distinctive markers of Westerdahl's (1998) concept of transport zones landscapes which have been driven by risk mitigation strategies. These linear landscapes of risk management therefore demonstrate the degree to which shipping movement was directed and shaped how and where vessels used The Bay.

The Pilots Service

Evidence of the Pilots' Service manifests in various ways at sea and on land. The Pilots Reserve is a sheltered area on the eastern side of Shortlands Bluff that was initially named after the Pilots who camped there before permanent accommodation was available. Oral histories indicate that the reserve consisted of an industrial landscape associated with logistical support of their offshore activities (Fig. 6.22). Facilities here included a boat slip and maintenance shed with sliding doors wide enough to admit a boat (Fig. 6.23), a boat building shed (for small boats which transferred Pilots between ships) and the associated carpenter's accommodation. Another shed divided into three sections was used for daily deliveries of perishables (milk bread, fresh produce), petrol store and for non-perishable food stores (Patrick 2004–2012). All these buildings were extant until the 1970s, when the introduction of small motorized Pilots launches led to the demolition of the storage sheds in the reserve and the construction of a concrete operations centre and accommodation block (Port Phillip Sea Pilots 2009). The maintenance and support facilities were also transferred to the Queenscliff Harbour inside the Queenscliff Creek. All that now survives is the boat maintenance shed. The area further to the north was occupied by the Marine Surveyors Shed. Access stairways for deliveries are evident in the cliff face behind. The remains of timber groynes and a rough cut seawall installed in the 1920s along the edge of this area indicate that the area had been subject to coastal erosion.

The Pilots' Pier (Fig. 6.24) was also located in the reserve in the lee of the Shortlands Bluff headland. This was extended over time as the size (and draught) of Pilot vessels increased and the area began to silt up from shoreline progradation, resulting in a "bent"-shape structure (see Duncan 2007). A haul-off post was also installed ahead of the pier, whereby sailed Pilot vessels could be physically pulled out and away from the pier in contrary onshore winds. The Pilots' Pier was an

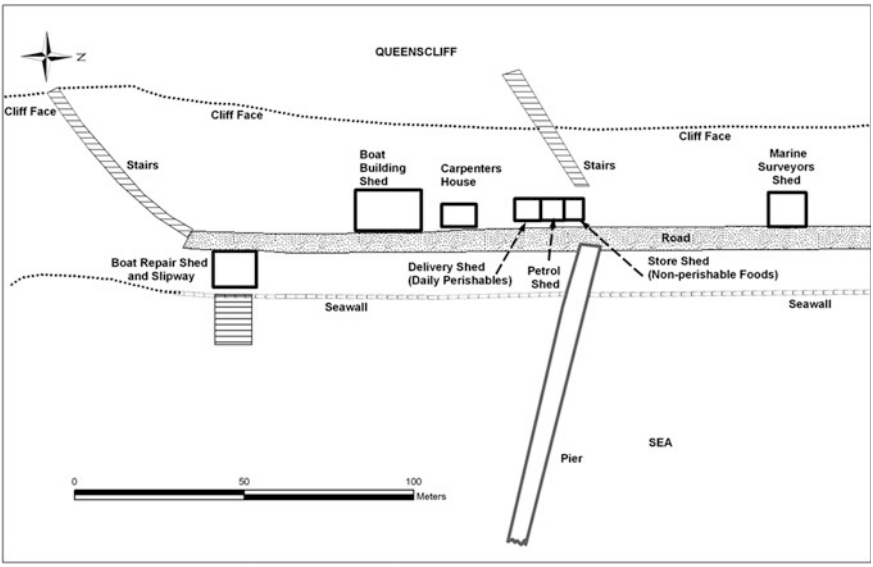

Fig. 6.22 Sketch of Pilots' Reserve (Queenscliff) layout in c 1959 (after Patrick 2004–2012)

Fig. 6.23 Pilots boat repair shed, Pilots' Reserve. *Note* seawall on *right* and stone groyne on *left*

Fig. 6.24 Pilots Pier, Queenscliff

essential facility for the service, as it housed backup transfer boats (in case one was damaged) for the cruising vessels moored offshore in the Pilots' anchorage (see below). These boats were hung on davits on from the pier. The boat maintenance shed where minor repairs were carried out is still extant on the foreshore of the Pilots' Reserve and it is likely that extensive boat-building materials, tools and discard associated with these activities remain in situ under and around this structure. The Pilots' Pier varied markedly to the main town pier in that it was narrow (only wide enough for two men to walk abreast), did not have a tramway to transport goods and was restricted in its access to the public as it was a private pier.

Although the Pilots' Service had a zero tolerance to alcohol (Springall 2001), Noble (1979: 8–9, 15–18) recorded that alcoholism was a problem with some of the very early Pilots. Ferrier (2001–2004) and Love (2001) have reported the discovery of large quantities of alcohol bottles dating from around 1870–1890 in the area directly in front of the Pilots' Pier (near Drapers Reef) and around the Pilots' Anchorage/moorings, but given the proximity to the Queenscliff fortress and general anchorage these could have originated from those sources. However, Ferrier (2001–2004) reported that when the buildings were demolished, large quantities of foreign coins were unearthed, along with numerous broken alcohol bottles from under the buildings, suggesting some early Pilots may have indulged despite prohibitions.

Pilot Accommodation

Early Pilots' accommodation (c. 1840s) consisted of tent camps, initially located on the beach, so Pilots could tend their boats and respond immediately whenever ships entered The Rip. Their water supplies were also obtained from open-ended barrels dug into the dunes there (Dod 1931: 16, 17; Ferrier 2001–2004). Subsequent tent camps were located on top of Shortlands Bluff Headland, which also provided a better lookout location for incoming vessels. Permanent housing for Pilots and crew was built by the government from 1853 to 1854 (Pilots' Row). Pilots Row (Fig. 6.25) later expanded to become a precinct for maritime service providers such as the Quarantine and Health Officer, Police and the Customs Service, although these were situated further down the hill (Allom Lovell & Associates 1985: 42–45).

Pilots also built their own privately funded houses throughout the town, which were usually much more substantial than most other residences in the town. The Pilots Row residences were high-quality timber cottages, whereas Pilots' private residences were often brick or stone buildings, with many bedrooms and sometimes with their own water supply from underground brick lined vaults. The later development of Fort Queenscliff atop Shortlands Bluff means there is low potential for archaeological evidence of the early Pilots' camp. There is, however, high potential for in situ deposits in the Pilots' Reserve itself, particularly in areas outside the new operations centre as the shoreline in this area has prograded since first occupation.

Fig. 6.25 Original Pilots cottages, Pilots' Row, Gellibrand St Queenscliff

Pilot Anchorages

Two Pilot vessels were always on duty to guide visiting ships through The Heads, while one Pilot boat patrolled the waters outside The Heads providing pilotage expertise as required, another vessel was stationed just inside, moored approximately 1 km offshore to the east (and in the lee) of Shortlands Bluff. This vessel also provided backup, should the outer vessel discharge all its onboard Pilots or require assistance due to rough conditions. The reserve vessel was located at a permanent mooring, where a backup crew resided for up to two weeks at a time. While at anchor, the crew continued daily life, and hence it is probable that an archaeological deposit of deliberately and accidentally discarded material would have accumulated under this location.

The two cruising Pilot vessels each had their own anchorages and/or moorings which changed location at least twice over the years as the shoreline in the area prograded (Fig. 6.26). The locations of these moorings were identified from a number of charts (Norgate 1883; Larkin 1929), with archaeological deposits discovered at these sites by local divers. These remains can be readily identified as originating from the Pilots' Service, due to their distinctive crockery showing several different types of crest changing over time (Ferrier 2001–2004—See Fig. 6.27).

A former Pilot suggested that the stewards on board sometimes avoided cleaning by simply throwing the dishes overboard instead.

> The stewards were sometimes lazy, and they often threw crockery overboard rather than wash it up. When the unions had more say, that was when it started to happen, and there was more laziness amongst the crews. (Springall 2001)

Alternatively, it has been suggested that these intact dishes may have been lost overboard during scraping the leftovers from plates (Patrick 2004–2012).

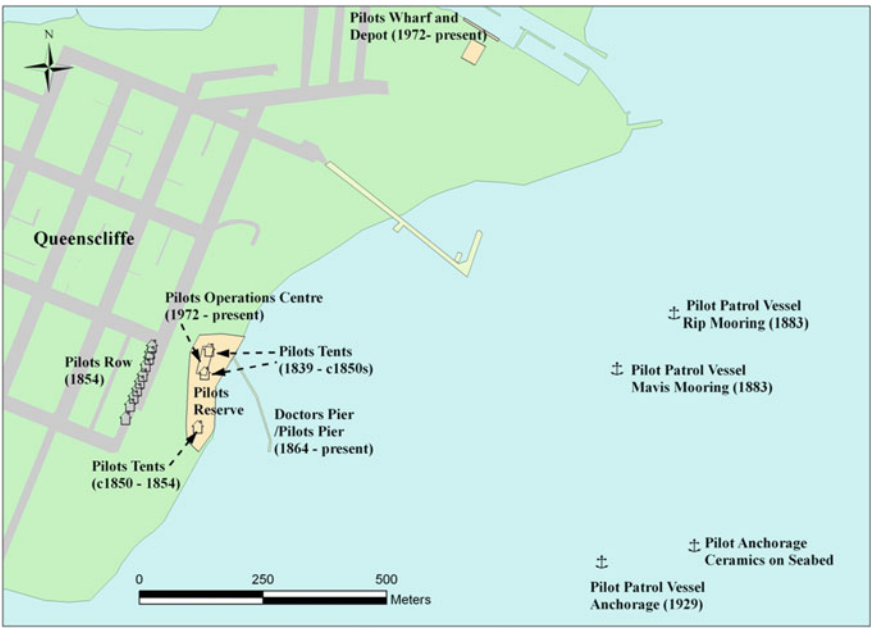

Fig. 6.26 Pilots' landscape features and change

Many divers have also reported discovering an accumulation of broken ceramics and bottles that starts just inside The Rip near Point Nepean, but which peters out further up the channels. These observations are consistent with the many historical (e.g. GA, 13/9/1853; GA, 8/11/1855:3) and oral accounts (Springall 2001) that show many vessels suffered broken crockery when ships heaved to (broadside to the ocean swell) to board the Pilot, and it appears these items were discarded as soon as the ship was through The Rip. These archaeological deposits in themselves are tangible reminders of the presence of the Pilots Service. Divers have also suggested that physical cracks identified in the submerged rock substrate in this area may have been caused by Pilot vessels' anchors striking the seabed.

Pilot Boats

In the early days of the colony, pilotage was provided from yawls from the Pilots' Reserve. The later introduction of sailing cutters, followed by steam powered cutters, motorized vessels, and finally, diesel launches demonstrate the effects of technological advancements on the scope and geographical extent of Pilots Service landscapes. Originally, whaleboats or yawls were utilized to row out The Heads to awaiting vessels, due to their solid construction and ability to handle rough seas. However, after several accidents due to bad weather, Pilots were located onshore

Fig. 6.27 Port Phillip Sea Pilots tableware and logos (Peter Ferrier collection)

and met vessels inside The Rip. Eventually, these vessels were replaced by sleek cutters whose deep keels and robust construction handled heavy seas well, but were still able to negotiate the current of The Rip. Consequently, the range of the Pilots' landscape increased markedly. With the introduction of these more seaworthy vessels, Pilots boarded vessels offshore and maintained cruising stations which allowed them to stay at sea for extended periods. Pilot vessels after the 1870s were timber, and iron vessels capable of withstanding long periods stationed in the open ocean outside The Heads, serviced by smaller vessels as required. The introduction of a former minesweeper (*Wyuna*) capable of staying at sea for 6 months markedly changed the dynamics of the service and their subsequent landscapes, which enabled Pilots to stay at sea longer and forced their living together onboard. Technological developments in communications (e.g. radio and telegraph) then led to reduced patrol areas as incoming vessels could signal their arrival remotely and be met at precise locations.

The design of the Pilot transfer boats was based on years of hereditary experience, and those used on the *Wyuna* (the last of the cruising stations) were very

similar in construction to those used by the sailing Pilot vessels (Noble 1979: 53). Perhaps the most interesting development is the evolution of the modern Pilot boat, which combined the speed required to traverse the rough waters of The Rip with the capability of handling large seas in most weathers. This design represents the adaptation of many of the features of earlier sailing and steaming craft, into a deep streamlined hull with modern propulsion systems. Furthermore, until the high-speed launches were introduced, all Pilots were transferred via small clinker built, single-ended boats to incoming ships. Their introduction also saw Pilots again living ashore and (often based in Melbourne), an unexpected return to the earliest pilotage model of shore based facilities. These observations demonstrate Westerdahl's concept of "transport zones" (1998) and how they are constantly adapted and reconstituted over time with the introduction of new technology (see Figs. 6.28, 6.29, 6.30, 6.31, 6.32 and 6.33).

Pilotage activities were also archaeologically evident in the form of the two wrecks located at Pt Nepean. It is likely that wrecks associated with Pilots in other areas worldwide will also be encountered in dangerous sea areas, making them hard to access archaeologically. The presence of Pilots might also be indirectly indicated

Fig. 6.28 Health Officer's yawl c. 1864, at Pilots' Reserve. Similar vessels were used by Pilots' Service in 1840s–50s (*Photograph* PH42, QHM collection)

Fig. 6.29 Pilots tender boat from Pilot cruising vessel *Wyuna* (QMM collection)

Fig. 6.30 The disaster with of Pilots schooner *Rip* (*Image* George 1873, SLV collection)

Fig. 6.31 Pilot schooner *Mavis* (*Image* Geoff Hewitt collection)

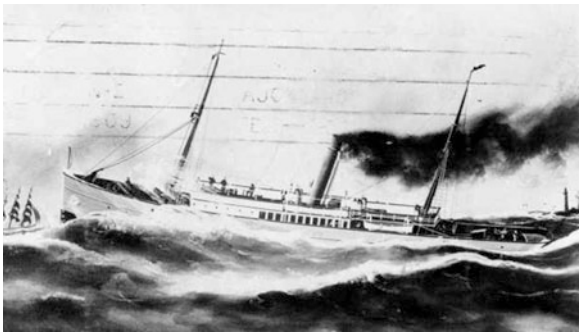

Fig. 6.32 Pilot boat *Victoria*, (*Image* Gregory n.d. SLV collection)

Fig. 6.33 Pilot motor vessel *Wyuna* (*Photograph* Green 1940 SLV collection)

by corresponding reductions in shipping mishaps after their introduction to a region. The dangerous work of transferring Pilots on to incoming vessels also accounted for extensive damage to the tender vessels, and hence, pilotage landscapes are also likely to be characterized by the presence of extensive boat building repair facilities and associated debris and discarded vessel parts, in addition to small boat wrecks in highly dangerous areas that might normally not be considered appropriate for use in these regions.

Offshore Activities: Transferal of Pilots

The detection of offshore Pilots landscapes is more problematic. Although Pilots lived on–board, the offshore cruising station vessels, the extensive range of these patrols and the relatively limited discard that they left on the sea floor when operating outside The Heads makes it extremely hard to detect their archaeological signatures. Although it is likely that Pilot vessels discarded debris such as broken crockery, rubbish and signal flares, as well as lost tools and equipment overboard, it is highly unlikely that this material will ever be found in sufficient concentrations or quantity to be able to recognize its association with the Pilots Service (unless it is branded Pilots' Service ceramics). Despite the lack of detectable archaeological evidence in these areas, they still represent significant places within of the Pilots' landscape. As local divers are unlikely to venture into the more hazardous deep water and recreationally bland submerged areas far offshore unless there are interesting sites (such as shipwrecks) to investigate, there were no reports of potential sites in isolated offshore areas.

Pilot Folklore and Toponymy

Pilots experienced their landscape differently to other mariners in the area. Unlike fishers and other mariners in smaller vessels, piloting large vessels effectively restricted the Pilots to the deep water channels within The Bay. Movement through their landscape was therefore guided by a structured network of signposts in the sea and ashore, which included not only navigational facilities such as lighthouses and beacons, but also leading marks formed by lining up two distinct features, and other intangible knowledge. They developed their own "ancestral" knowledge which was passed down through the Pilots' Service and included their own lore about navigating through The Rip, including their "four fingers rule":

> …in the South Channel, in the old days low powered ships used The Rip towards the end of the ebb tide. You would sail 4 fingers east of the lead marks, which were the obelisk lined up with the lookout tower, and this would lead you to clear Corsair Rock by 500ft. The ebb pushes to the SE and if you wanted to get a course of say 039º you would have to steer 020º. You would then sheer to port and the wheel was held over hard to starboard. You would go around and come out when you were 4 fingers to the west of the rear leads on Shortlands Bluff…. You had to use the landmarks you had memorized, in case the channel buoys were gone. (Springall 2001)

Other lore included knowledge of the effects of tides weather, sea state and swell on local conditions for various sized vessels. This knowledge was often akin to the detail recounted by Pacific Island Navigators and was closely guarded by the Pilots themselves (Tables 6.6 and 6.7).

Although the Pilots have not been as prolific as those involved in navigational landscapes, they also marked their landscape by naming areas of The Bay. Drapers Reef, to the east of the current Queenscliff Pier near the Pilots Anchorage, was named after an early Pilot. Pilots' Reserve and Tobin Drive (named after the first

Table 6.6 Sensory landscape indicators for bad weather or approaching land

Sight	*Sound*
Seaweed on pier	Gun
Clearing visibility	Cannons
Flares	Foghorns
Lights	Gongs
Cows facing into wind/sheep facing opposite	Whistling buoys
	Wreck bell
	Level of wind intensity
	Rustling of trees
	Lowing cows
Smell	*Touch*
Smoke	Wind on face
Farm animals	Pain in joints
Mown crops	

Table 6.7 Historical and actual archaeological signatures of Pilots' Service landscapes

Infrastructure	*Pilot boats and wrecks*
Anchorage—close to shore in lee—anchors, discard evidence on seabed	Yawls/sloops
Pilots Shoreward Station/Reserve	Cutters/Schooners
Pier/warping buoy or pile	Steam/motor yachts
Lookout station/elevated area	Motor vessel
Boatbuilding facilities/stores and storage sheds	High Speed launch
Accommodation—tents originally/luxurious houses close to vessels	Lighterage tenders
Associated rubbish and ceramics	*Offshore cruising station/ working areas*
Close to other maritime services (e.g. Lighthouse/Customs/ Health Services)	Assoc. rubbish and flares on seabed
Communication systems	Sounding leads
Navigational devices	

Port Phillip Pilot) reflect the long history of Pilot occupation in this area. Two reefs were also named after the wrecks of Pilot vessels, Corsair Reef and Anonyma Reef. It is probable that much deeper understandings of the Pilots' cultural landscapes could be drawn from further oral histories or Pilot log books/diaries, but restraints on the original study limited the depths to which this could be explored. Comprehensive histories of the Port Phillip Sea Pilots are available in Fanning (1892a), Emerson et al. (1897), Draper (1900), and Noble (1979).

Customs Service Landscapes

The migratory nature of the Customs Service within Port Phillip along with the restricted presence of this service within the Queenscliffe area meant that archaeological and landscape expressions were at best fragmentary and often invisible. Quite substantial Customs buildings such as Bond Stores, Customs Houses and piers or landings are usually present in and close to major ports. However, in regional areas such as Queenscliffe early or temporary Customs service structures often consisted only of timber sheds, flagstaffs or even tents erected on the beach (Figs. 6.34 and 6.35) which in themselves are most likely to be archaeologically invisible due to their temporary nature (Duncan 2003a: 215, 220, 373). Furthermore, where the Customs Department shared the maritime infrastructure of other maritime services, their presence was often indicated by the construction of guard posts, fences and gates installed to control traffic into/out of the pier or wharf areas (e.g. see Station, Princes and Gem Piers in Hobsons Bay—Duncan 2003a: 229, 358, 367).

Despite the establishment of a local Customs Reserve on Gellibrand St, which included a stone Customs building and accommodation built in 1855, these

Fig. 6.34 Customs camp at the *Sierra Nevada* shipwreck 1900 (*Photograph* Des Williams collection)

Fig. 6.35 Customs Officer at *the site of the Sierra Nevada* wreck. *Note the* wreckage along the shore (*Photograph* Des Williams collection)

Table 6.8 Historical and actual archaeological signatures of Customs Service landscapes

Infrastructure	*Resistance Landscapes*
Customs houses/bond stores/Customs Reserves/flagstaffs/hulks	Caching evidence
Exclusionary devices—guard posts/sheds/gates/fences	Arson
Piers/jetties/landings	Looting activities
Tents on beach/accommodation houses	Evidence of over-indulgence
Wrecks of yawls/revenue cutters—fast vessels	Smuggling evidence
Close to ports/shipping activities and areas of economic importance	

buildings were demolished after the Customs Department was removed from the area (Allom Lovell & Associates 1985: 34). As Customs boats were also stationed in the Pilots Reserve, their presence was archaeologically indistinguishable from the other vessels present. The role played by Customs Officers during early hydrographic surveys of The Bay and Heads regions has already been discussed in Chap. 3, with the archaeological signature of these activities is explored below in regard to navigational services landscapes (Table 6.8).

Perhaps the best archaeological indicators of the Customs Service in any relatively remote area emerged as a result of responses to its presence. The abundance of historical and oral accounts outlining the widespread practice of burying smuggled goods, along with the extreme measures to which people would go to hide contraband, is indicative of an authoritative landscape. For this reason, any study of the Customs Service is inseparable from considerations of smuggling, theft and looting associated with shipwreck materials.

Conclusion

In the Queenscliffe study area, the pre-impact risk prevention and mitigation strategies associated with shipping mishaps were primarily developed and implemented by formal government maritime services. Each group developed complex understandings of the marine landscape of the area, evolving over time as a result of their constant engagement with the area as well as through hard lessons learned from successive vessel incidents. This changing perception and response is evident in a rich and diverse archaeological landscape, ranging from subtle features such as debris trails and channel markers, through to a range of infrastructure items on shore and in the water, and monumental structures including the lighthouse and beacon system.

Despite the shared intent of preventing shipping mishaps, the different services developed maritime cultural landscapes based on the particular needs of their group. For instance, the ordered nature of navigational and Pilots landscapes are evident by their use of networked linear landscapes which were tightly controlled

and structured, which are key features of risk management regimes. It has been shown that people associated with these various risk mitigation services worked cooperatively to achieve mutually desirable outcomes that prevented wrecks.

The ordered nature of pre-impact risk mitigation landscapes, often developed over lengthy periods of time, stands in stark contrast to the apparently chaotic events of the shorter duration crisis phase of shipping mishaps. The rapid nature of these events and their associated responses and processes led to markedly different types of actions and interactions with and between the vessels, the environment and the local community. These activities produced markedly different signatures and landscapes to those outlined above. However, some aspects of the crisis phase response were obviously a consequence of the success or failure of pre-impact prevention and mitigation strategies, and there are clear relationships between them and will be explored in the next chapter.

Chapter 7
Landscapes of Crisis and Long-Term Response

> *Yes, the people here used to pinch a bit of stuff off of shipwrecks. My old man told me about the when the Sierra Nevada wrecked ... there were dead pigs and bodies everywhere, and barrels of whisky washing ashore. Some soldiers found one of the barrels, and they collapsed sand over the top to hide it.*
>
> (Shapter 2001).

Crisis Response

As demonstrated in Chap. 4, despite popular perceptions of the crisis (impact and immediate post-Impact) phase of shipping mishaps as being chaotic and unstructured, there are in fact readily identifiable patterns of behaviour with corresponding archaeological and landscape signatures. In this chapter, we will explore how these responsive cultural landscapes are expressed both physically and cognitively around The Heads and the wider region.

The Wreck Bell

In the opening passage of this book we described the Wreck Bell, rung to summon the lifeboat crew as soon as word was received that a vessel was in peril (Fig. 7.1). As explained in Chap. 4, the location of the bell would initially appear to be ill-considered, situated in the town's northern extremity far from the town centre, without direct line of site to The Heads where most wrecks were likely to occur, and distant from those who would seem to be the most experienced seamen (i.e. the Pilots, Customs and Health Officer's boat crews). In fact, the original location of the bell was at the telegraph and signal station (now demolished) close to the High (Black) Lighthouse. This put it into close proximity of the lighthouse keeper (who was always superintendent of the lifeboat), as well as the original composition of the lifeboat crew from the several maritime services whose crews lived in this area

B. Duncan and M. Gibbs, *Please God Send Me a Wreck*,
When the Land Meets the Sea 3, DOI 10.1007/978-1-4939-2642-8_7

Fig. 7.1 Queenscliff Wreck Bell

and on the beach (Fig. 7.2). With the shift towards having fishermen form the majority of the lifeboat crew, the bell was moved (after 1867) to the lower end of town and closer to their homes. The prevailing weather associated with shipwrecks was predominantly from the south-west or south-east, which meant that if the bell was placed at the top end of town, then it would probably not be heard by those who needed to respond to it.

> The wind would determine if you could hear the wreck bell. A phone was used by the Lightkeeper to ring the coxswain, and he would get the crew together. The coxswain would go down to the lifeboat. The bell was located in this area as all the essential people lived there, the fishermen, and they were the ones who manned the boat. In the early days the Health (Officer's) and Customs boat crews formed the nucleus of the lifeboat crew, and the fishermen were later included. Later on the fishermen formed the foundation blocks of the lifeboat crew. (Ferrier 2001–2004)

Observations by the authors of other similar structures in Victoria (at Lakes Entrance and Port Fairy) have reinforced that the presence of fishing communities is likely indicated by the proximity of a wreck bell structure.

Lifeboat Service

Although life-saving landscapes are also a long-term mitigation response to shipping mishaps (Chap. 6), they have been included in this section because the

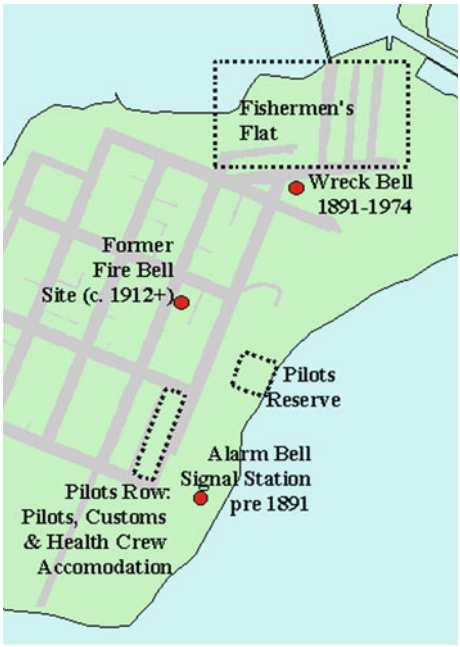

Fig. 7.2 Historical locations of lifeboat alarm bells

operation of the service focussed on response during the crisis phase. Initially, the Queenscliffe lifeboats were whaleboats or yawls and were launched off the beach in the lee of Shortlands Bluff without the assistance of any associated infrastructure. The ordinary ships lifeboat subsequently used for rescues was kept on a mooring offshore at this location in 1856, but no archaeological remains of these activities were evident. As technological developments in lifeboat design increased their size from 1858 onwards, lifeboats were mounted in purpose-built lifeboat sheds on davits built onto the lee side of local piers or appended landings. These sheds were usually open to the elements on the exterior side, with room for equipment on the pier side.

The introduction of a motorized lifeboat (Fig. 7.3) in 1926 led to the installation of an all-weather gravity launched slipway cradle with associated guard rails at its

Fig. 7.3 Queenscliffe lifeboat, Queenscliff Maritime Museum

Fig. 7.4 Queenscliff new pier lifeboat shed

extremity (to keep the lifeboat upright as it was launched). The change from oar to motor extended the range of life-saving in and around The Heads, with the remains of the motorized lifeboat shed and launch ramp still extant at the extremity of the Queenscliff Pier (Fig. 7.4).

A purpose-built (but largely unsuccessful) lifeboat pier was constructed at Pt Lonsdale (Fig. 7.5), close to The Rip in a highly dangerous area where even medium-sized vessels are unable to dock. The pier itself is narrow, without tramway lines (which are usually evident on commercial fishing piers), and includes davits used to launch smaller boats. The proximity of the pier to the brick rocket shed (also used as a morgue—Fig. 7.6), lighthouse precinct and clustering of wreck sites is significant as they provide further indications that this type of structure was part of an organized life-saving landscape.

Rocket sheds were built to house rocket and rescue equipment (Fig. 7.7) close to known wreck locations at Pt Lonsdale and Pt Nepean. Although rocket sheds in the Queenscliffe region were constructed of either brick or timber if built on the piers, other similar structures recorded in Victoria (Portland, Port Fairy, Andersons Inlet, Lakes Entrance) were constructed of stone and/or brick, predominantly to decrease the chance of peripheral damage in case of accidental rocket explosions while in storage. An octagonal elevated structure at the Shortlands Bluff Signal Station was also used as a lookout tower for shipping mishaps, later supplemented by another observation and Port control station at Pt Lonsdale Lighthouse. It should be recalled that the lighthouse service was responsible for coordinated any rescue efforts (see Chaps. 3 and 4).

The location of lifeboats around Queenscliff changed periodically not only as new piers and facilities were developed to accommodate increased boat sizes and changed technologies, but also due to anthropogenic environmental changes that caused extensive silting and consequent loss of depth around the piers (see Duncan 2007; Figs. 7.8 and 7.9). It is probable that discarded or lost relics associated with the Lifeboat Service are present at all the former lifeboat shed locations, which have now been substantially buried by prograding beach. Older members of the lifeboat

Fig. 7.5 Pt Lonsdale lifeboat shed and pier, c. 1890 (*Photograph* QHM collection)

Fig. 7.6 Pt Lonsdale rocket shed and lifeboat pier

Fig. 7.7 Life-saving rocket launchers display. *Note* rockets projectile in barrels tubes (QMM collection)

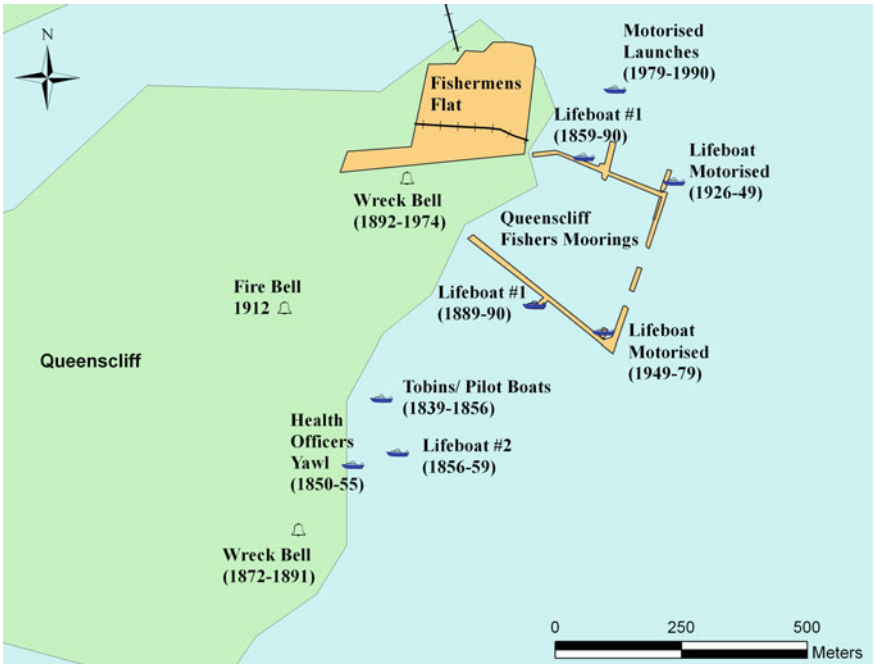

Fig. 7.8 Changing lifeboat landscapes at Queenscliffe

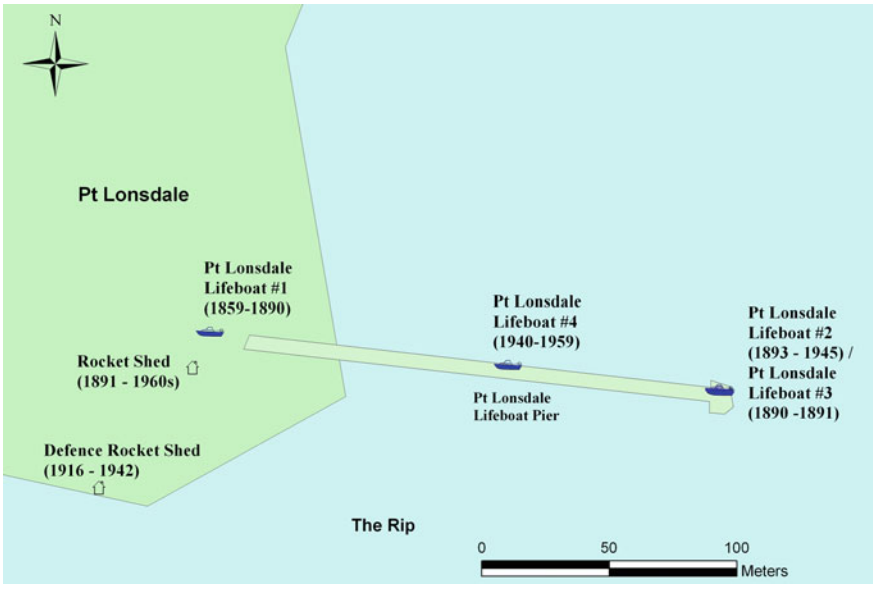

Fig. 7.9 The changing lifeboat landscapes at Pt Lonsdale

community still recall the former location of the motorized lifeboat on Fishermen's Pier as a significant place in their worlds, even though the area of sea where it once sat is now prograded land with the pier buried beneath dry land. It is therefore notable that the cultural landscapes of each lifeboat crew changed markedly over time based on the nature and location of the various shipping mishap incidents and progressive changes in environment and landscape.

As mentioned in Chap. 4, pathways were cut along the cliff tops of the Nepean Peninsula and down through the thick coastal vegetation to provide access for beach wreck rescues (McMeekin and Braithwaite 2004). In some instances, these tracks are still in use today as beach access routes.

The geographical area of life-saving landscapes expanded and contracted with the advent of shipping mishaps and technological developments. Lifeboat rescues were routinely undertaken around the reefs within and on both sides of The Rip and inside and outside The Heads. However, they could on occasion extend markedly to include wrecks up to 50 km along the coast in either direction and far up into The Bay. At sea, life-saving landscapes were predominantly located in dangerous areas close inshore, often among rocks and reefs. Signatures of the Lifeboat Service might include small kedge anchors left close to the wrecks, which were used to haul the lifeboat away from the scene after rescues in heavy weather. Divers have also reported what were described as three scuba tank-shaped objects located off Swan Island (Allen 2001), which may be the remains of the projectile rockets used for the breaches buoy lifelines. These particular relics could either designate the locations of actual rescues or also indicate rocket firing practice areas where lines were fired between the two Queenscliff lifeboats.

The incidence of shipping mishaps created new places in not only the landscapes of the lifeboat crew, but also among all mariners in general. There are place names not only connected to wrecks (e.g. Corsair Rock), but also to stranding and groundings (e.g. Victory Shoal and Lightning Rock, respectively). These places are still recalled today, even though some of these hazards which caused the shipping incidents have now been removed (e.g. Lightning Rock).

Important components of the lifeboat landscape included the use of alternative sensory perceptions other than visual stimuli. In the thick of gale force winds and mountainous seas, in what could be a featureless or obscured seascape, the lifeboat men often relied on subtle signs to tell them where they were. The sound of the wind and the force of its touch upon their faces, the movement of the swell over rocks, or the smell of exposed seaweed or smoke from fires ashore often helped them place their location in relation to submerged reefs or nearby land and helped guide their approaches to wrecks. Knowledge of weather lore also played a key role in determining the likely location of where disabled vessels had gone ashore. Trees and other natural and cultural features were used as lead marks to guide the boats in and around submerged and (often invisible) reefs. Coupled with their familiarity with inshore coastal features acquired through their own daily experience or inherited knowledge (predominantly from fishing), the lifeboat men were able to negotiate hazardous areas in conditions that other mariners would never contemplate.

Table 7.1 Historical and actual archaeological signatures of the Lifeboat Service landscapes

Infrastructure	*At wreck site/surrounding area*
Lifeboat pier	Kedge anchors
Lifeboat shed/davit/slipway	Lifeboat wrecks/equipment
Lifeboats	Paths cut through dunes/bush
Lifeboat haul off warp buoy/anchor	Rocket/flare cases/ropes/wire
Life-saving tracks—now beach access tracks	Tripod mount for rocket apparatus —marks in foreshore
Rocket shed/rockets/flares/ladders/life-saving equipment signal station or observation tower	
Wreck bell—close to fishing communities or lighthouse service	*Lifeboat/rocket practice areas*
	Rocket cases

These intangible aspects were key components in the landscape of the lifeboat men. Furthermore, the episodic nature of the Lifeboat Service meant that this was a transformative or liminal landscape that predominantly only existed in times of emergency. This factor had marked implications for the social standing of those involved in the service, which will be further explored in Chap. 8 (Table 7.1).

Shipwrecks

The history and archaeology of the shipwreck resource of the Queenscliff area have been well documented with the works of Loney (n.d. a, b, 1971, 1989a), Anderson (1997), Anderson and Cahir (2003), Foster (1987, 1988, 1989, 1990) and Love (2006, 2012). The distribution of wrecks is shown in Fig. 3.3. These sites provide tangible archaeological evidence of the types of vessels and the patterns of shipping traffic using The Bay.

Cultural processes acting upon shipwreck sites, such as salvage, are discussed in detail below, although these activities were often determined by the environmental conditions in which these sites were situated. Preservation in particular was largely dependent on the environmental topography in which vessels wrecked. Shipwrecks on the oceanic coast were usually pounded to pieces if they grounded on rocky ledges or reefs exposed to oceanic swells. In contrast, if they were stranded high and dry on intertidal reefs above the full force of the ocean, then they might remain intact for extended periods and often years if not purposefully salvaged or removed (e.g. *Holyhead*, *George Roper*, *Time*, and *Australia*). Other wrecks that went ashore on oceanic sandy beaches sometimes also suffered this fate, or quickly sank into the sand (e.g. *Columbine*). Derelicts inside The Bay were usually either trapped on reefs or hard sand banks and broke up quickly or were swallowed by submerged dunes leading to many relatively intact wrecks in this region (e.g. *William Salthouse*).

Stranding Sites

As suggested in Chap. 2, strandings represent a previously unexplored resource in Australian maritime archaeology, as well as elsewhere in the world. Aside from the recovery of isolated anchors lost from vessels when anchored or aground, few deposits from stranding sites have been documented (c.f. Henderson 1980: 90; Knuckley 1988: 3; Duncan 2003a, 2004c, 2006). However, several researchers have recognized the potential significance of archaeological investigation of stranding sites for informing on wider patterns in the cultural landscape (Duncan 2000: 56, 2004a; Gibbs and McPhee 2004: 46–47; Taylor 2013).

Oral and documentary sources demonstrated that several major underwater deposits of artefacts in The Bay almost certainly originated from ship strandings. Prior to this research, artefact scatters from the stranded vessels *Antoinette Cezard*, *Dumfries*, *St George* and/or *Marie* on Swan Spit had already been documented by local researchers and divers (Ferrier 2001–2004; Love 2001, 2006; n.d.). Several further probable stranding sites were identified and/or inspected during the course of fieldwork (Fig. 7.10). All of the potential stranding sites revealed varying deposits of archaeological remnants (some of them substantial), which are summarized in Table 7.2.

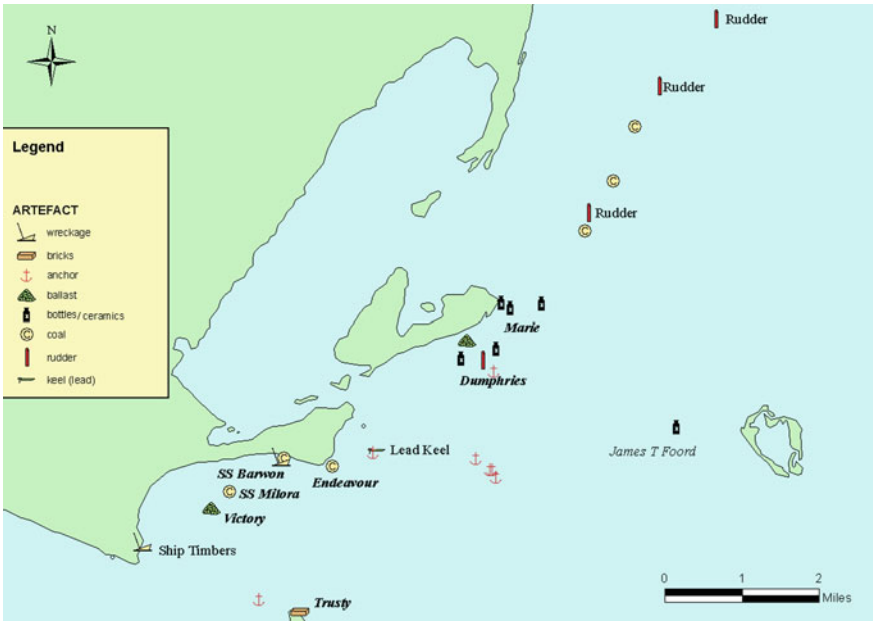

Fig. 7.10 Archaeological evidence of possible stranding sites. *Note* occurrence along edge of Swan Island and West Channel sand banks

Table 7.2 Historical and actual archaeological signatures of stranding sites in Port Phillip

Structural/shipboard	*Cargo*
Timber/ships/structural wreckage	Bricks
Anchor(s)	Ceramic
Ballast mound	Coal
Ballast mounds (parallel)	Glass/bottles
Boiler slag keel—yacht (lead)	Iron pots
Rudder	French luxury goods
Stone/ballast mound/slate	Local environmental damage
Pig iron ballast	

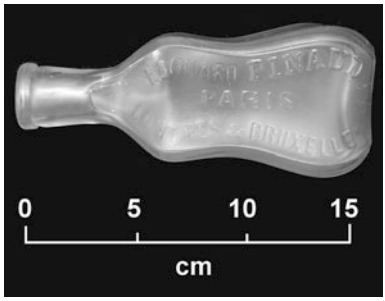

Fig. 7.11 French perfume bottle recovered from Swan Spit (Peter Ferrier collection)

In one interesting example, substantial deposits of French luxury goods were discovered at Swan Spit in relatively shallow water (<10 m) (Fig. 7.11; Table 7.3). Although bottle collectors had removed most of the deposits from this area, inspections also revealed early patterned ceramics that became more concentrated closer to the sites. Despite the lack of structural remains from a wreck, this stranding assemblage succinctly demonstrates emergent international trade links with the colony of Victoria, as well as changing social hierarchy and status within the fledgling community as a result of its newly discovered gold wealth.

Coal accumulations in Lonsdale Bight formed the largest deposits from stranding sites, not only evident in a number of underwater locations, but from the volume of material washed ashore and sometimes even found in crayfish pots (Mouchmore 2001–2004). A dense scatter of coal was also identified along the West Channel which may represent another stranding site or could be from the

Table 7.3 A sample of French luxury items from Swan Spit stranding ground (Ferrier collection)

Type	Embossed marking
Champagne	E & H Rey, Cognac, 1811, Champagne, Bordeaux
Fish paste jar	Lovit Frere's and Co, Bordeaux
Perfume jar	Edduard Pinaud, Paris, Londres & Bruxelles
Pickle jar	Vase Brevetes Sanscarantte Du Gouvernmenta F. Nantes
Vinegar bottle	Vinaigre Aromatique, De Jean Builly

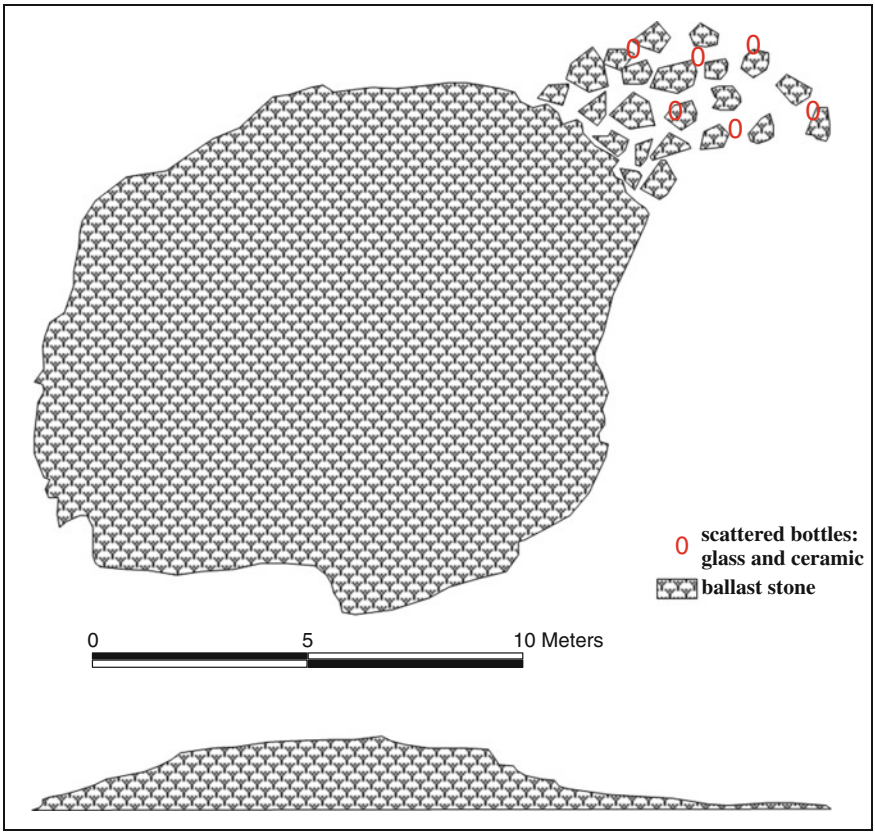

Fig. 7.12 Survey of Hobson's Bay ballast mound

wreck of *Faugh a Ballaugh*. Substantial brick deposits were discovered from the *Trusty* stranding site near the ammunition pier in Nepean Bay (see site plan in Duncan 2006, Appendix C-6). Several anchors were found in shallow water near Popes Eye Shoal and Swan Spit, which could either have originated from strandings, near mishaps or cut lines (deliberate or accidentally parted). Several rudders were located in the West Channel and on Swan Spit, along with a lead keel and ballast mound on the latter (Fig. 7.12).

Post-crisis/Post-trauma Phase

Once the immediate threat to life and property had receded, post-crisis responses and processes could then occur over a range of time spans from hours to years and even decades. These encompassed activities on and around the wreck or stranding

site itself and potentially in many other contexts across the landscape. As noted previously, one of the weaknesses of existing approaches in maritime archaeology has been the failure to recognize that community connections to shipping mishap sites, whether at sea or on land, not only continued for extended periods but also transformed over time based on shifting social and economic values and perceptions, as well as technological innovations and other factors. In many instances, they were also cross-generational and became grounded in aspects of traditional knowledge and practice.

Shipwreck Victims

Given the proximity to Queenscliff and the existence of the various maritime services, survivors of wrecks were generally removed to the town or other accommodation quite quickly after rescue. Consequently, there is no clear historical or archaeological evidence for the existence of sites where survivors were forced to live while waiting for rescue (c.f. Gibbs 2003). Similarly, formal burial areas were available soon after the European occupation of the area, meaning that except for the earliest years, there were no ad hoc burials of fatalities in sand dunes or near wrecks, as seen in other areas. There are, however, various physical indicators which we might associate with the victims of shipping mishaps.

As described in Chap. 4, a morgue formerly stood on the Fishermen's Pier (Fig. 7.13), while the rocket shed at Pt Lonsdale was also occasionally used as a temporary mortuary (Ferrier 2001–2004; Jackson 2003; Naylor 2004). Other archaeological evidence includes shipwreck victim grave sites at the Pt Lonsdale cemetery and potentially at the sites of the earliest burial grounds beneath the

Fig. 7.13 Former fishermen's Pier morgue, now located in Queenscliff Maritime Museum

Fig. 7.14 Capt. Colin Springhall in Priddle's coffin maker's workshop

current Queenscliff Football Ground and to the south of the Low Lighthouse (GA 20/11/1866; 29/11/1866; McWilliams 1865). The subsequent development of these areas has obscured and removed all traces of any monuments related to these grave sites, but the opportunity exists to pinpoint their presence. It is also probable that where early wrecks occurred further out from town, such as at Pts Lonsdale and Pt Nepean, bodies were buried close to the wreck sites, possibly in mass graves.

The extant coffin-making workshop of the former H. Priddle builders and undertaker survives at Colin Springhall's property in Hesse St (Figs. 7.14, 7.15, 7.16 and 7.17). The original workbench, sharpening grindstones, tools, coffin storage and office survive (now used as an informal workshop), along with the former morgue, which is still located on the property. The workshop included marks indicating prefabricated coffins of various sizes stored in the rafters, suggesting that these were kept in stock in anticipation of multiple burials such as might result from shipwreck.

Fig. 7.15 Coffin making workbench, Priddle's coffin makers

Fig. 7.16 Former coffin maker's workshop from Andrews St, Queenscliff

Fig. 7.17 Former morgue in Andrews St, Queenscliff

Other shipping mishap victim sites include a conglomeration of memorials on the south side of Shortlands Bluff (Fig. 7.18) and the St Georges Church memorial to a recent Pilot boat tragedy (Fig. 7.19). It is notable that all the memorials in the Queenscliffe area are dedicated to either local loss of life in wrecks, or military personnel lost elsewhere, but that nowhere in the town is there a memorial to the victims of the numerous other shipwrecks that occurred in this region (see Chap. 8). Figure 7.20 shows the locations in and around Queenscliff associated with death and commemoration, while Table 7.4 summarizes the signatures of shipwreck victim landscapes around Queenscliffe.

Fig. 7.18 Shortlands Bluff memorials

Fig. 7.19 Pilots memorial lights, St Georges church

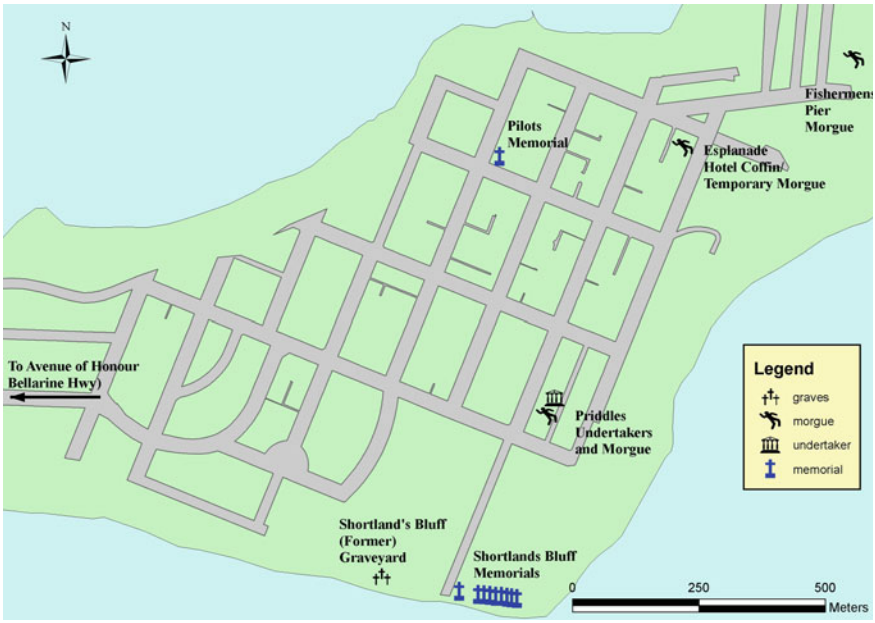

Fig. 7.20 Sites in Queenscliff associated with the dead

Table 7.4 Historical and actual archaeological signatures of wreck victims landscapes

Graves in dunes/graveyard	Morgues
Memorials	Undertakers and coffin makers workshops

Official Salvage

Historical records and oral histories identify that salvage was extensively undertaken in the Queenscliffe region, with some of these processes already described in Chap. 5. The absence of structural elements and cargo from wreck sites (including removal as a means of accessing the interiors of vessels to allow recovery of machinery and bulkier items) is the most commonly recognized marker of salvage activity. However, much of our knowledge of salvage activities is derived from scant historical records and images (Figs. 7.21 and 7.22). Much remains to be done in terms of explicitly identifying the order and modes of removal as indicative of the processes and decisions being made by owners and communities (see Chap. 2; Gibbs and Duncan 2015). Various devices and mechanisms used during salvage of vessels and cargo such as lines, grappling hooks, or buoyancy devices such as watertight ships tanks used to assist removal of items from wrecks, have been found on Queenscliffe sites. Explosives or evidence of their use (e.g. on the *Hurricane* and *Time* wrecks) are also indicative of particular salvage processes. Successful repair

Fig. 7.21 Salvors camp at *Sierra Nevada* 1900. *Note* the ship (water) tanks possibly later used for transporting material ashore (*Photograph* Des Williams collection)

Fig. 7.22 Salvor camp at *Joseph H. Scammel* wreck. Note the reuse of a sail as a tent (*Photograph* Des Williams collection)

and refloating of a vessel is evidenced by its absence, although some structure, cargo, coal or ballast removed to assist the process may be left behind to indicate the location as seen for stranding sites. The remains of flotation devices might also be found to indicate successful or unsuccessful refloating efforts, such as the purpose-built Mackay flotation devices found on the site of *City of Launceston* (Strachan 2000: 24).

As described previously, the remains of salvage vessels are also important indicators, such as the tugboat *Black boy* (at Pt Lonsdale) and the barge *Eleutheria* (in central Port Phillip), both of which wrecked when engaged in salvage operations on other vessels (Anderson 1997: 29; Strachan 2000: 25). These vessels represent two very different forms of salvage vessels, as the former was a small steamer used to lighter material from the wreck, while the latter was the hulk of a 3-masted barque used to as a floating pontoon for salvage operations on *City of Launceston* (Love 2006: 77, 2012: 54–56). Other sites might be associated with the remains left behind by stranded vessels during salving operations (e.g. *Phoenix*—Love 2006: 57).

Archaeological evidence of salvage operations was also found on shore, with several informants indicating their belief that a sand blowout (erosion area) immediately opposite the *Light of the Age* wreck site was a result of operations to salvage sections of the vessel (see also Hunt 2003). Others suggested that structural remains of a wreck were formerly evident in these dunes. Historical research has shown that the salvor who bought the derelict of *Light of the Age* cut a track through the cliffs and sand dunes and used drays to carry salvaged material to Geelong (Love 2006: 57). The marked erosion immediately behind the wreck (which is still visible) led the authors to investigate whether this phenomenon was evident in other locations where wrecks occurred close to the shore.

Initial investigations of wreck sites close to the shore revealed large blowouts directly behind the wreck of *Columbine* near Ocean Grove, as well as behind an unidentified wreck approximately 3 km west of Pt Lonsdale. A donkey boiler reported to the west of this site (Anderson and Cahir 2003: 237) may also be associated with shipwreck salvage efforts, and this is also located close to a blowout area. If blowouts behind wreck sites are archaeological signatures of salving activities, then their presence may in themselves hint at the probable locations of currently un-located nearshore shipwrecks.

As we have discussed elsewhere, there are few instances where archaeological evidence of shipwreck salvage activities has been specifically explored (for exceptions see Strachan 2000; Steinberg 2008; Anderson 2010; Taylor 2013), offering significant opportunities for future research (see also Gibbs and Duncan 2015). Intangible aspects of salvors landscapes are similar to those for the lifeboat crew, as these activities were also undertaken within the same geographic regions and hence dangerous conditions that caused the wrecks in the first place.

Other types of exploitative sites associated with derelicts include ship-breaking area where vessels were dismantled after being deliberately or accidentally run aground in shallow water (e.g. *Lady Harvey* at Queenscliff, *Light of the Age* at Pt Lonsdale) (Fanning 1892c).

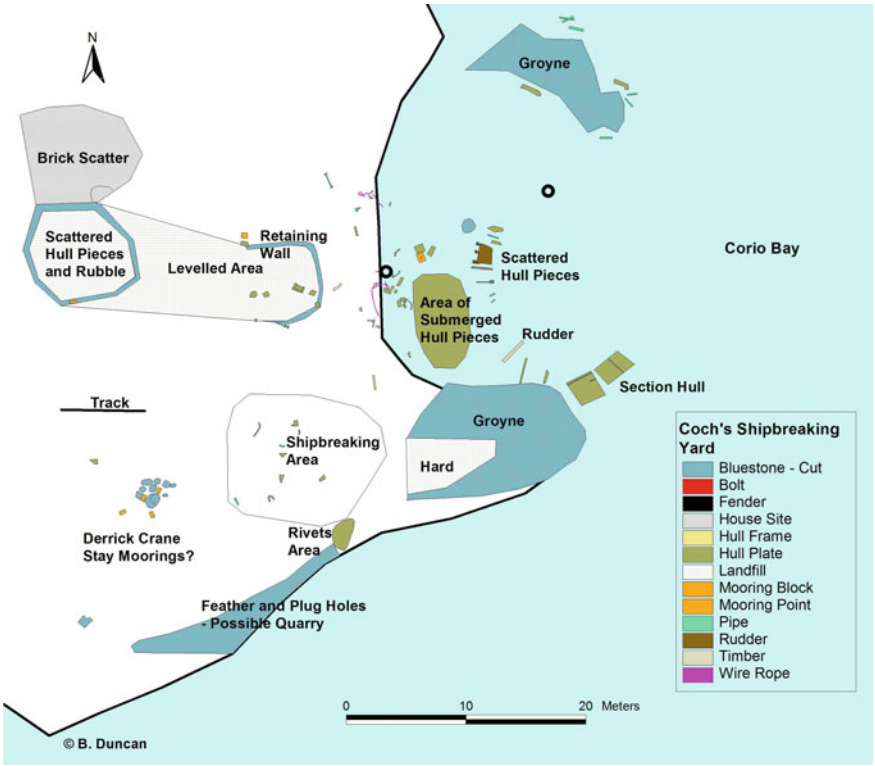

Fig. 7.23 Survey of Coch's ship breakers camp at Pt Lillias near Geelong

In order to understand what constituted an archaeological signature of shipbreaking, a number of shipbreaking sites were also visited outside of (but close to) the study area, including *Kakariki* which lay approximately 500 m offshore in shallow water (3 m) at Williamstown (Melbourne), a shipbreakers yard in the Maribyrnong River (Melbourne) where the bow of the former Bay Steamer *Edina* was evident projecting from the river bank (Duncan 2003a: 111) and a number of shipbreakers yards at Geelong (Duncan 2003a, 2004b, 2008a, b). The latter sites were characterized by the remains of vessels (and sometimes multiple vessels in close proximity), in shallow water or onshore with stone access piers, and crane/derrick remnants (consisting of anchor points in rocks, concrete filled drums and wire cables) which were used to haul the hulks or sections of structure ashore over artificial rubble "hards" (Fig. 7.23). These facilities were generally situated on the periphery of populated areas. These types of sites represent a component of shipwreck utilization which with a few exceptions has only been sparsely explored (e.g. Pastron and Delgado 1991).

Salvage activities might also be evident within the community itself. Chapter Four has outlined how mariners, especially early Pilots, government officials and

Table 7.5 Potential and actual landscape features associated with ship salvaging or breaking

Technical equipment and plant	*Sale of goods*
Anchors and chains/rope	Luxury goods in poor/remote districts
Buoyancy and flotation devices	Mismatched ceramics/dinnerware
Buoys—barrels and drums	Ship materials incorporated into local buildings, fences/local vessels
Corrugated road on beach/foreshore	
Derrick cranes/bases	
Diving equipment and pumps	*Absence of evidence*
Donkey boilers, engines, winding drum/cables	Absence of cargo Absence of sections of structure
Explosives or evidence of their use	Absence of vessel (refloating)
Flying foxes (structure and foundations)	*Salvors' camps and storage areas*
Grappling hooks	
Hard (surface)	Remains of houses/sheds
Jetties—stone/piers	Tents—rigging and sail remains
Piers (temporary) on side of wrecks	Relic clusters
Pumps and hoses	Evidence of burning (to remove fastenings from timbers
Rail or tram lines to wreck sites	
Ships tanks	
Structural remains of wrecks in shallow water or onshore (storage areas)	*Environmental*
Tramways	Degraded dunes—transport routes through dunes/Salvors' camps
Winch, cables and wire	Modified underwater landscape features (e.g. reefs or seabed)
Wrecks of salvor vessels	

salvors sometimes benefited directly from assisting at shipping mishaps, resulting in windfalls that led to early retirement or the generation of new businesses (see Draper 1900:10). These circumstances have potential archaeological ramifications in the form of examples of unexpected affluence in poorer communities.

Salving also produced more subtle archaeological signatures through the incorporation of resources and materials within the community. The appropriation (legally or otherwise) of wreck timbers for integration into buildings or local boats was well known around town (see below). In a more extreme example, the entire deckhouse from *Joseph H, Scammel* was dragged off the wreck by bullock trains and converted into a house, which is still extant and recognizable in the suburb of Torquay (30 km west of Queenscliffe). As described previously, residents of the Swan Bay region recall that timber panels from the luxury steamship SS *Time* were used to line their houses (Beames D. 2003, Beames R. 2003). Shipwrecks were also a common source of school and fire bells throughout Victoria.

Salvage activities could introduce expensive or otherwise unavailable goods into the local community. The scope of resources made available as a result of shipping mishaps is too vast to contemplate in this volume, but Queenscliffe examples included high-quality building materials, luxury foods, beverages and tableware ceramics, to name but a few. This observation demonstrates the potential for alternate explanations of expensive items within an otherwise "poor" community, an aspect which is explored further below in regards to looting behaviour. The potential landscape signatures of salving and ship-breaking sites are summarized in Table 7.5.

Shipwreck Looting and Caching

Despite the oral and historical evidence for widespread looting of shipwreck materials, no direct physical archaeological evidence of looting or caches was located during this study. Historical documents and oral histories revealed that several caches had been discovered in the recent past, predominantly in isolated areas or under or around public buildings. It is probable that when the remains of these hoards have been discovered in the past, their significance has not been recognized or incorrectly interpreted simply as rubbish discard. Aspects of this behaviour are consistent with Schmidt and Mrozowski's (1988: 36–39) consideration of the archaeology of smuggling in the USA, where they suggest that evidence of this sort of activity including black-market trading may be found in various forms, including through close archaeological analysis of the cargoes of wrecked ships, caches or rubbish dumps containing imported exotic alcohol and perfume bottles.

As for salvage, looting may be also be evidenced by the presence of maritime or uncommon luxury building materials and/or goods in local houses and adjacent properties (e.g. copper bolts or spikes, shipwreck timbers, dressed timber paneling or furniture). The authors recorded oral histories in Port Fairy (200 km to west) where several local people reported that after ships carrying timber had wrecked in the area, every house suddenly had new fences.

A possible example of this sort of illicit cache deposit was unearthed during excavations behind Beach St (Fishermen's Flat), in an area which oral history indicated fishermen had traditionally used to conceal loot from wrecks (Figs. 7.24 and 7.25). It is notable that these relics were discovered in association with a former timber sand groyne (a beach erosion control device) and buried approximately 1.5 m below the current surface. The bottles were deliberately buried below the then contemporary beach level in a public area rather than within a private yard, suggesting that they may have been deliberately placed in this area to avoid detection and attribution. Furthermore, it is interesting that oral histories (Ferrier 2001–2004) and historical records (QS 20/4/1918) both suggest that people actively sought out used bottles for resale. Given that the fishing community was known for being cash poor, the burial of bottles which might have been sold is an intriguing anomaly.

Fig. 7.24 Bottles in situ discovered on behind the fishers house fronting former Beach Street seashore (*Photo* Cathy Tucker)

Fig. 7.25 Bottles discovered in situ behind the fishers houses fronting former Beach Street foreshore

Another cache of predominantly alcoholic bottles was also found at remote Snake Island (170 km to the east) and may have been associated with looting of nearby wrecks around Port Albert (Fig. 7.26). Given that fishermen from the Queenscliffe area frequently moved along this coast following migratory fish

Fig. 7.26 Bottle cache discovered at Snake Island, Port Albert Victoria (*Photo* Heritage Victoria)

species, it is possible that if this is an example of looting caching, then it may also be demonstrating the widespread practice along the Victorian coastline.

Based on oral and documentary descriptions, the archaeological characterizations of looting and caching behaviour may also include isolated clusters of similar types of artefacts close to wreck sites, individual barrel remains above the high-water mark, trenches lined with corrugated iron or timber, or isolated boxed/tinned/barreled artefacts in unexpected places (e.g. fields, sand dunes, etc.). A number of potential areas for looted material were identified from documentary and oral histories, many close to wreck sites in sand hills, but also in remote areas away from the wrecking event, such as Swan Island, Mud Island, Nepean Bay and Lonsdale Bight.

Examination of the Pt Lonsdale and Lonsdale Bight foreshores revealed that the high (often vertical) sand dunes still offer opportunities for detecting caching behaviour (Fig. 7.27), as they are continually eroding with storm surges and high tides, revealing buried materials. Furthermore, the prevalence of reburying looted items may explain the origins of several coin hoards discovered at Rabbit and Swan Islands (QS 25/9/1909; Thompson n.d.: 8) and the discovery of an ancient compass which was subsequently used to reinforce the Benito Bonito pirate treasure legend which will be examined in Chap. 8 (Hayden 1966: 15; Lawson 2004a).

As we discuss further in Chap. 8, the landscapes and archaeological signatures of looting and illicit behaviours (including attempts to cache or hide looted material) are indicative of the presence of authoritative powers such as the Customs and Police services, who were brought into the region to quell looting activities. By logic, if these government agents had not been present, then there would be no need to hide illicit goods. Oral histories have indicated that arson was also used to either distract official attention from other acts of theft, stop the removal of (valuable) stranded vessels and materials, or disguise evidence of prior looting. This observation may provide alternative explanations for evidence of burning on wrecks or

Fig. 7.27 Eroding sandhills in Lonsdale Bight

landward sites. Furthermore, the presence of government officials also seems to have promoted the overindulgent and often frenzied behaviour noted by many, where looters would drink themselves into a stupor in an attempt to consume as much of the illicit goods as they could before being stopped (either on-site or at remote caching sites). As shown in Chap. 4, resistance behaviour also was expressed, where if they could not steal goods, they would smash them instead in sport. These landscapes of resistance may therefore also be archaeologically expressed through evidence of arson, caches, large quantities of empty alcoholic bottles and broken goods (especially ceramics) or unexpected luxury goods.

Underwater deposits of spirit bottles (including some *Belfast Whiskey* bottles) on the northern tip of Swan Island are consistent with historical accounts of excessive drinking among looters of the wrecks of *Will o' the Wisp*, and *Sierra Nevada* shipwreck (both of which carried similar cargoes). The proximity of these deposits to the nearby fishers' anchorage in Stingaree Bight (Swan Island) provides possible indications of the identity of the looters (Ferrier 2001–2004; Love 2006). These observations are consistent with the excessive types of behaviour outlined in Chap. 4, and it is postulated that overindulgence sites will be characterized by large quantities of alcoholic containers (bottles, ceramics, barrels, etc.) and large quantities of broken artefacts (which are possibly luxury goods e.g. ceramics). Given the repeated insinuations of the involvement of the fishing community in these activities, archaeological evidence of looting is also more likely to be found close to areas used by the fishing community (e.g. anchorages,residences, camps and piers).

As may be obvious from this discussion, at times it can be difficult to distinguish between the sources of these goods, since official salving, looting, local black-market activities or beachcombing (see below) may remove items from wrecks and standing sites. However, close examination of context and deposition processes,

Table 7.6 Historical and actual archaeological signatures of looting landscapes

Arson	*Looting/black market activities*
Fire damage (ship)	Luxury goods in poor/remote districts Mismatched ceramics/dinnerware
Fire damage in foreshore foothills	Ship materials incorporated into local buildings, fences/local vessels
Caching/looting	Wealth in poor communities
Artefacts (various types) buried in sand dunes	
Barrels buried in dunes/goods hidden in	*Overindulgence*
Coin hoards	Concentrations of broken crockery/same alcohol bottle types close to wreck Imported/ alcohol bottles and luxury goods close to wreck site
Kerosene tins—buried/goods hidden in	
Imported/alcohol bottles and luxury goods close to fishing anchorages/residences/camps/ remote locations	*Absence of evidence*
	Absence of cargo
Lined trenches—corrugated iron or timber	Absence of sections of structure/ships equipment
Luxury goods hidden within houses/ household or communal rubbish dumps	Absence of vessel (refloating)
Ships structural material used in houses/ structure/fences/local vessels	Flotsam traps—absence/lack of material at known flotsam traps

as well as interrogations of the historical circumstances of wrecks and salvage processes in the area, may provide interpretation as to the source. These circumstances present interesting new research challenges which demand careful correlation with local oral histories. The range of signatures of looting landscapes is outlined in Table 7.6.

Beachcombing and Flotsam/Jetsam Traps

Archaeological evidence of several flotsam traps was identified in the study area. This included Lonsdale Bight where ships' timbers were wedged between rocks in the intertidal zone and several isolated finds of ships spars around Pt Nepean and in The Rip, all of which concur with historical or oral historical data on expected flotsam traps. Further evidence of flotsam traps may exist under prograded or collapsed sand dunes in Lonsdale Bight, the eastern shoreline of Swan Island (which could not be inspected) and at the Mud Islands. The lack of visible archaeological evidence could also be attributed to community knowledge of these locations, and the prolific systematic and opportunistic salving undertaken in these areas in historic times (Fig. 7.28).

Fig. 7.28 Flotsam trap near the *Sierra Nevada* shipwreck, Portsea Back Beach (*Photograph* Des Williams collection)

With the removal of historic materials, the only indicators of flotsam traps may be the abundance of modern debris at these locations. Even when currents push flotsam and jetsam into particular areas, it might not wash completely ashore, eventually floating back out or becoming waterlogged and sinking. Concentrations of archaeological material on or in the seabed adjacent to known or suspected flotsam traps may be worth further investigation.

Flotsam and jetsam traps arguably produced the longest term impacts on the Queenscliffe community (see Chap. 5). The availability of coal led to the generation of unique material culture for harvesting this resource, along with the creation of a perception of this region as a reliable resource extraction area. A surprising but nonetheless significant consequence of this practice of collecting coal might also be evident through the examination of the effects it had on local stoves which were designed for wood burning. Oral histories revealed that the salvaged coal burned too hot for local wood stoves, causing the iron firebox plates to burn out very quickly. This led to increased work for local plumbers engaged in fixing the affected ovens (Patrick 2004–2012), with potential that above-average discard rates of firebox plates may be archaeologically visible at local rubbish dumps (Table 7.7).

Flotsam and jetsam traps generated places where, although the quantity of the resources was not known, there was a relative certainty regarding the seasonal availability of resources of various kinds at these sites. This behaviour generated new communal (and ancestral) knowledge networks regarding not only the places where the resource would appear, but also under what conditions (i.e. wind, sea, swell and tidal direction) it was likely to wash ashore. This knowledge was used by the various local and external groups who economically exploited wrecks, salvors

Table 7.7 Historical and actual archaeological signatures of flotsam traps and jetsam traps

Flotsam traps	*Jetsam traps*
Barrel remnants	Material washed up on beach
Cargo cases/tea chests	Coal
Driftwood/dunnage	Burnt out oven plates in rubbish dumps
General cargo	New material culture—coal rakes
Kerosene tins	Coins
Material on seabed	Ballast
Timber/spars/wreckage	Slate
	Other heavy material

and looters alike. These sites also developed intricate histories associated with their use, which was only accessible through local oral histories and folklore often only known among the local population.

Deliberate Wrecking Behaviour Revisited

We considered in Chap. 4 the historical evidence for and against the possibility of deliberate "wrecking" having occurred in the Queenscliffe area. Before closing this chapter, we would like to review the folkloric structure in how several informants pointed to the doorways of the lighthouses as evidence that wrecking was a genuine threat. The first lighthouse built in the area in 1842 and the subsequent timber lead lighthouse (1852) both had their doors set at ground level (Images PH1; Ph 4560 and WD 54, QHM Collection). However, both the high- and low-lead lighthouses at Shortlands Bluff built in the 1860s originally had their doorways set approximately 4 m above the ground, later changed to set the door at ground level (Figs. 7.29 and 7.30). A local historian (Raison 1997) has suggested that the raised doorways were part of a standard design imported from Britain, intended for lighthouses which were otherwise set at sea level and under threat of inundation (similar to the Bell Rock Lighthouse). However, as these structures were designed by the Victorian government's Public Works Department in Melbourne (GA 28/4/1862: 2; QS 11/5/1912), the opportunity existed to modify the British model prior to construction, especially as the lighthouses were set 74 ft (23 m) and 93 ft (28 m) above sea level (respectively) and there was no need for a raised doorway. Furthermore, the slightly earlier Cape Wickham Lighthouse (built at King Island in Bass Strait in 1861) was of a similar style to the Shortlands Bluff lighthouses, but the access door was set at ground level (Walker 1998: 104; DTC 1988: 70–1).

British lighthouses set at water level had doors several metres higher than the Queenscliff versions (Bathurst 2000), with solid bases for added strength,

Fig. 7.29 Former raised doorway in the Shortlands Bluff High Lighthouse

Fig. 7.30 Former raised doorway in the Shortlands Bluff Low Lighthouse

suggesting that the local lighthouses were not a standard design. Similar raised doorways in Britain were also rumoured to have been implemented to stop wreckers extinguishing lights to cause shipwrecks. This raised the possibility within local folklore that the elevated doorways were designed to restrict access to the light and therefore, by inference, that deliberate wrecking may have been a concern when the lights were constructed. The emergence of this kind of story may also be a function of the burgeoning tourist industry of Queenscliffe, adding colour to the existing local landmarks in order toad value to the visitor experience.

It was therefore necessary to examine other possible explanations for the raised doorways, and an examination of the contemporary political scenarios at the time of the building of the lights revealed a more plausible explanation. The Shortlands Bluff bluestone lead lighthouses were installed in 1862/1863 (GA 1/1/1863: 2) and coincided with the period of the threat of war with America in 1861 (Barkley 1861) and a visit to the colony by a Russian warship in 1862 (Scratchley 1863: 29; Tate 1982: 50). Although at this time the first three guns for the fort had been delivered to a battery where works were underway, they were not supplied with ammunition until at least 1862 (VPD 1862: 420, 718), and a volunteer force only manned the battery location on the weekends.

It is worth recalling that the 1850s to 1860s was a period of great paranoia surrounding the possibility of the gold-rich colony being invaded, while the Queenscliffe area was indeed very isolated from the main defences at Hobson's Bay. As the lighthouses were essential elements for guiding ships through The Rip, they represented key strategic targets to any foreign power that might want to lay siege to the colony or attack its shipping. The lighthouses were possibly perceived as being under threat at this time as they were essentially unguarded. It is also *possible* that the installation of the above-ground-level doorways was implemented to curtail any deliberate activity by privateers and/or a foreign power to close the harbour or deliberately wreck vessels while they held the port to ransom. Notably, the installation of the lighthouses coincided with the fortification of the gateways to the colony against such events. This is supported by the observation that the doorway entrances were lowered to ground level well after the fortress was built around the upper light in the 1880s.

Further investigations into whether the raised doorways were a result of oil storage within the structure were inconclusive. Until evidence is found to the contrary, it would appear that the doorways were raised to prevent access to the lighthouse by undesirable parties who threatened to extinguish the light and that it is likely that the raised doorways were actually part of the defence system at The Heads. These observations in themselves provide further potential examples of risk mitigation strategies designed to prevent potential shipping mishaps. Further discussion of this issue is contained in Duncan (2006: 270–275).

Conclusion

Although the remains of vessels are still the most direct evidence of shipping mishaps, other aspects of the crisis and post-crisis phases are clearly evident in a range of archaeological sites as well as through more subtle expressions such as isolated relic finds and changes in the physical landscape. The tables of potential archaeological remains and landscape features listed in this chapter are based on the Queenscliffe evidence and are intended to be indicative rather than definitive. Different situations in different time periods might offer other possibilities.

An important consideration is that the crisis phase and associated responses might be measured in minutes or hours, whereas post-crisis responses could extend for years or even generations. Both formal and informal processes of salvage in particular might have cyclic aspects depending upon changes in real or perceived value and other factors as outlined in Table 2.5. Some of the motivations for why and how the Queenscliffe community responded to shipping mishaps, how these responses changed over time, and implications for archaeology and the cultural landscapes are discussed in the following chapter. This includes several themes mentioned in Chaps. 2–5 that could not be pursued here, especially the tourism landscapes associated with the different stages of shipping mishaps and their aftermath. Aspects of these engagements with landscape, as well as the social implications of these activities, are discussed in the following chapter.

Chapter 8
The Social Landscapes of Shipping Mishaps

> *Maritime Culture is substantially a life mode and includes all possible combinations of subsistence strategies at the sea. The social factors are paramount: sometime maritime communities could be a better term than maritime culture stressing the social aspect or societal connection… maritime culture indeed covered all possible angles of mans relationship with the sea and the coasts.*
>
> (Westerdahl 2011: 337).

The central theme of this volume is that it is possible to identify a cultural landscape associated with the Queenscliffe community's responses to shipping mishaps, manifesting through what might seem to be otherwise disparate and disconnected social and economic practices as well as in a range of places and archaeological sites. In this chapter, we review some of these social and physical elements within Queenscliffe's cultural landscape and interpret them within the framework of risk perception and crisis response as described in Chap. 2. We also consider how these have been woven into aspects of identity and tradition within the community.

Community and Crisis

The Queenscliffe community was not passive with regard to the multiple shipping mishaps that occurred on the waters surrounding them. Their decisions to respond and the nature of those responses were determined by subtle interactions of social, economic and political conditions and forces surrounding each event, as well as by prevailing environmental circumstances and technological capabilities. These factors originated internally and externally and changed over time, potentially with every incident. The position of an individual or group in relation to a crisis, their perception and understanding of events, the nature and extent of their participation, their training or preparedness to cope with physical and psychological impacts, and their shifting roles across the course of an incident all contributed to their short- and long-term responses. Modern literature on disaster shows that these sorts of events had strong psychological aspects, impacting upon all phases of response and

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potentially influencing individuals and communities for many years to come and even across generations (discussed further below).

Chapters 3–7 have demonstrated that the sequence of responses to shipping mishaps, as well as resulting landscape and archaeological features, can be structured using the same dynamic (temporal) framework used in disaster studies: pre-impact (threat and warning), crisis (impact, recoil, rescue) and post-trauma/post-crisis phases. In contrast to the models which we have previously applied to shipwrecks, within a landscape (and shore community) framework crisis events occurred repeatedly and could even be concurrent (i.e. new disaster events commencing even as other were at more advanced stage). There was sometimes also a seasonal or cyclic aspect, as well as internal and external forces (such as war or even the threat of attack) shifting the likely incidence and nature of mishaps. The experience of disaster usually led to refinement of risk identification, hazard removal and crisis mitigation strategies, and further changes in the cognitive and physical structure of the cultural landscape.

Shipping mishaps were often at the intersection between natural crises (environmental hazard), humanly caused crises (e.g. via poor decision-making or deliberate action such as violent attack), and technological crises (failure of mechanisms). The origins and progress of a crisis, including the post-impact actions of rescuers, may have involved elements of all of these (c.f. de Mond 2008). Another important point is that not all shipping mishaps were catastrophic. In fact, many were relatively low-impact events and had minor intervention or consequences, although this may in itself have been a consequence of the existence of successful formal and informal risk management and disaster response strategies.

There are other structural ways of understanding and classifying crises and the extent of physical, psychological or behavioural impairment to victims and rescuers by considering factors such as follows:

- the duration of the impact (i.e. a single collision or a longer process)
- whether there are repeated episodes (including within one disaster event),
- the degree to which the life of an individual is threatened,
- the degree of bereavement felt by the individual,
- the length or prolongation of suffering suffered by a victim,
- the amount of geographical displacement required,
- the proportion of a community or group affected and,
- the underlying cause of the disaster (natural, cultural, technological) (Leach 1994: 2–4)

One of the common principles behind studies of cultural landscapes and of disaster preparedness and response is the multivalent quality of each. There were many different individuals and groups, internal and external to the Queenscliffe community (and in multiple combinations and permutations), who can be identified as participating in different short- and long-term aspects of shipping mishaps and the landscapes that arose from them. While by no means an exhaustive list, we might consider the following:

- Those aboard vessels (with many potential groups—officers, crew, passengers, etc.).
- Formal locally based services for prevention, mitigation and rescue (lighthouse, Pilots, lifeboat, etc.), including those with some training for risk or crisis management.
- Non-local government decision makers, authorities, policies and structures.
- Informal internal and external persons or groups hoping to assist.
- Those with a personal, political or financial connection to or stake in the vessel, or in the shipping mishap prevention, mitigation or rescue systems.
- Internal or external passive spectators.
- Those hoping to make financial profit via salvage.
- The wider local, national and international communities.

Disasters might be central or peripheral to a geographical community such as at Queenscliffe.

> …a central type of disaster would be one in which the whole physical and organized structure is affected. This can occur in floods, hurricanes and so on. A peripheral type of disaster would be one in which the victims had come together by chance, such examples would be aeroplane [sic] crashes, some types of fire (as in a night-club or theatre) and shipwreck (Leach 1994: 5)

There might also be intermediate scenarios where only some components of the community were affected. In most instances, the persons aboard vessels were not from Queenscliffe, so the involvement of the shore community was of a peripheral sort. That noted, the act of assisting with shipping mishap was potentially traumatic, as each incident might mean a risk to personal safety or to the safety of family or friends participating in rescue and recovery operations. There also were the stresses of dealing with severely injured, distressed or grieving victims of disaster, or with the bodies or potentially mutilated remains of those who had died, with personal connections and relationships being established through these processes. These factors might become exacerbated depending upon the degree to which an individual or group identified or connected with the victims or the situation, further influenced by the composition of those aboard (such as if women or children were involved) and especially if victims included family, friends, or community members.

When considering the nature of response, we should also take into account contemporary cultural perceptions of shipping mishaps and wrecking. By the nineteenth century, shipwrecks had a well-established meta-narrative reinforced by popular imagery and literature (including newspaper reporting). These fit over individual events and in some respects preconditioned peoples' understandings and expectations (if not responses) during and after such events.

> Shipwreck narratives record moments of crisis in which social conventions are tested in isolation from the conditions that normally support them. Providence, about national character, about gender roles, about civilized behavior, are placed at risk or thrown into unusually sharp definition. (Lincoln 1997: 156)

As we have discussed elsewhere shipwrecks were sometimes seen as a doomed battle against the implacable forces of nature: as an "act of God", or as an absence of God (Gibbs 2005). These concepts are very much an integral part of the iconography of shipping mishaps, rescues and wrecks (c.f. Landow 1982) and are evident in the examples for Queenscliffe seen throughout this volume.

In the public mind of the nineteenth century, shipping mishaps had also become metaphors or symbols of foolish errors of judgment by captain or crew, of heroism or nobility during crisis, or shame in the failings of individuals, groups or government (Gibbs 2005: 6). Conduct during wreck events also potentially spoke of flaws in national character. For instance, when the American steamship *Monumental City* wrecked off Gabo Island on the Victorian coast in 1853, the captain and 52 of the crew and male passengers made their way to shore as the ship broke up, leaving the women and children aboard. Thirty-two persons ultimately drowned and the captain and crew suffered intense vilification from the Australian authorities, press and public (Smith 2000). In some instances, there were powerful cultural and religious responses to wreck events (the sinking of RMS *Titanic* being perhaps the best modern example) with these incidents becoming a metaphor or cause célèbre for a range of contemporary social and moral issues (Biel 1986). For instance, the 1943 Japanese torpedoing of the unarmed hospital vessel *Centaur* just off the Australian coast with the death of 268 nurses, patients and other non-combatants aboard became a pivotal rallying point for Australian involvement in WWII (Milligan and Foley 1993). For others, shipwreck embodied fears surrounding new technologies or the failure of aspects of society (c.f. Wells 2011).

From the perspective of marine and shore communities, the human aspect of disaster might include a miscarriage on the part of maritime services (i.e. of the ordered risk management strategies) to identify, warn about, remove or mitigate hazards. This might include decisions to not implement new technologies or improve existing services, or to respond appropriately or effectively to crisis. Technological disaster on the part of shore communities might come through the failure (or inadequacy) of maritime systems for warning. Each wreck or stranding, damage or loss to vessel structure or cargo, injury and especially loss of human life was therefore indicative of the shortfalls of these systems at some level. It is likely that many of the Queenscliffe community also shared these conceptions and responded to these as much as to the reality of the events.

In Chap. 4, we described how the lifeboat crew was often the first to come into contact with those aboard endangered vessels during the immediate pre-impact or crisis phases of the disaster event. They potentially had to face impaired or even irrational decision-making by panicked masters, crew and passengers. In the midst of crisis, persons might be in denial about events, become confused, be incapable of decisive action or effectively paralyzed, or conversely become ineffectually hyperactive. As described previously, in some instances lifeboat crew had to manhandle distressed people to get them off sinking or imperiled ships for their own safety. Once ashore, other members of the community would be left to deal with sometimes dozens of victims (and in extreme cases such as *Sacramento* in 1853, several hundred—Loney 1971) who might be suffering mild to critical injuries,

hypothermia or other physical or mental conditions. Although we have only a handful of descriptions from Queenscliff, disaster studies suggest that victim psychological responses might have ranged from disorientation, depression and despair, withdrawal, dependence, severe lethargy, grieving, and various abnormal behaviours, to guilt or even anger at themselves and others, having lost their belongings, family or friends. The intensity of these reactions (which could change over time), their duration and the pathways to recovery could vary depending upon a range of personal and situational factors (Leach 1994).

Modern studies of disaster have shown that the psychological impacts of crisis events can be almost as great for persons assisting with rescue and recovery as for the victims of the core event. In the midst of the crisis and also under stress, rescuers or those rendering assistance are also subject to the same range of responses, including impaired or irrational decision-making. Many rescuers, including trained or experienced personnel, are now known to suffer various degrees of post-traumatic stress as a result of dealing with the physical and psychological distress and injury to others (Johnsen et al. 1997; De Soir et al. 2012). However, little attention has been given to the short- and long-term effects of disaster upon communities such as Queenscliffe. Thankfully, Queenscliffe had relatively few notable catastrophic wrecks or deaths within its catchment area. This was possibly a consequence of the early existence of the formal prevention and rescue services which meant that disaster could be averted. In contrast, other parts of the Victorian coast had major loss of life involving men, women and children, such as *Monumental City* (1853—32 dead), *Loch Ard* (1878—50 dead) or *Sierra Nevada* (1900—23 dead). Even when an incident was not catastrophic, these were deeply stressful situations which the formal services and the townsfolk had to deal with, repeatedly.

In times of crisis, normal social boundaries among the Queenscliffe townsfolk were transcended as they banded together to support rescuers, saw to the needs of survivors, and handled the dead (see below). The generosity of the community cannot be doubted, and (as described in Chaps. 4 and 5) there are numerous descriptions of them assisting, housing and feeding survivors, as well as raising money through subscriptions and fund-raising events. The existence of a variety of informal services, even if partially economically motivated, indicates that the town maintained a certain degree of preparedness for shipping disasters. Queenscliffe also enjoyed the regular accolades for their (heroic) intervention in potentially catastrophic maritime incidents. This presumably helped reinforce the continuance of related philanthropic activities by the community as a form of tradition.

Although the actions of the Queenscliffe community were primarily oriented towards the preservation of life and property from shipping mishaps, we should not assume this has always been the case. For instance, during times of conflict there were systems in place to increase hazards to potential invaders and aggressively attack and if possible sink vessels. This included a host of defensive strategies and mechanisms such as gun batteries along the headlands, networks of sea mines and torpedoes, armed vessels, closure or restriction of some channels, restricted access to sea charts and pilotage information and removal of some warning and guidance

systems of Duncan (2006). Similarly, denial of aid to shipping mishaps, hostile response to survivors and rapid removal or concealment of wreckage without particular efforts towards economic salvage might occur, depending upon the circumstances and the priorities of the coastal group. Looking beyond Queenscliffe, there have been cross-cultural contact situations where outsiders (including wreck survivors) were viewed negatively and their death and the destruction of unfamiliar and potentially dangerous or polluting materials (in a spiritual or social sense) favoured over attempts at rescue and recovery.

What is evident through Chaps. 3–7 is that the cultural landscape of Queenscliffe has been in a state of near-constant change as a result of shifting perceptions and understandings of risk and hazard, as well as decisions about the appropriate responses to these and to any emergent crises. The diverse nature of the Queenscliffe community's responses to shipping mishaps, and especially catastrophic wrecking, might be seen as a process of adaptation. Changes occurred as new hazards were identified through a combination of increasing familiarity with local environment and conditions, and by proactive strategies to identify risks (such as by hydrographic surveying), allowing them to be marked, avoided and sometimes removed. The continuing incidence of shipwrecks and strandings also revealed the presence of hazards. In the following sections, we look at a few of the different perspectives and responses towards shipping mishaps and especially crises.

Formal Responses to Risk and Crisis

The most physically (and archaeologically) visible responses to repeated shipping disaster were the formal mechanisms for prevention, warning, and mitigation. In the earliest stages of the European settlement of Victoria in the 1840s, when there was limited understanding of the risks around Port Phillip Heads and negligible intervention of others to manage hazards or assist in crisis, mariners operated under a *Neo-Liberal* risk management strategy (Crook 1999; Duncan 2000, 2004a). They took a greater level of personal responsibility for identifying and responding to risk, with little or no expectation of assistance should they encounter difficulties. Although the early emergence of the Pilots' Service and some channel markings is indicative of a minimal level of management by colonial authorities, there was initial reluctance by government to invest in more elaborate systems.

By the 1850s, the expansion of population and settlement as a consequence of the Victorian gold rush resulted in a massive surge in shipping traffic. The corresponding increase in shipping mishaps saw not only a growing concern for loss of life and goods, but also for the reputation of the passage into Port Phillip as a safe or at least managed environment. A buoyant economy meant it was possible to make a shift towards *Ordered* risk management strategies far more rapidly than seen for many of the other Australian colonies. Formal (government) maritime services and associated physical structures aimed at hazard reduction and wreck prevention (i.e. pre-impact phase strategies) were in place by the 1860s. Similarly, Impact-phase responses,

especially the Lifeboat Service, were established early. Many of these formal systems and processes were based on contemporary British practices and technologies, with adaptations grounded in increasing knowledge of local environment. The result was that within a decade there was a rigidly structured and defined navigation network that provided tight controls over the way that Port Phillip was accessed and used by foreign and intercolonial vessels (e.g. Yule 1884). Local mariners such as the fishermen and smaller intra-colonial vessels were not, however, bound by the same restrictions.

A feature of this developing landscape of response to shipping mishaps was a cycle of review and revision of services. In particular, there is a strong correlation between changes and the formal government inquiries and reviews which were a consequence of particularly dramatic, catastrophic or otherwise socially, economically or politically significant wrecks. These demands for government action to identify those at fault and remedy any deficiencies can be seen as part of the communal response to disaster in the recovery and post-crisis phases. It was at these junctures that popular pressure upon politicians ensured that new technologies superseded older or redundant systems, major and minor structures were repaired, replaced or shifted to different locations, boats were upgraded, and systems and procedures improved.

Figures 8.1, 8.2, 8.3, 8.4, 8.5 and 8.6 show the patterns of navigation infrastructure versus shipwreck and strandings for the pre-1850s period, 1850–1869, and 1870–1880. In terms of archaeological sites, the earliest phase through to the

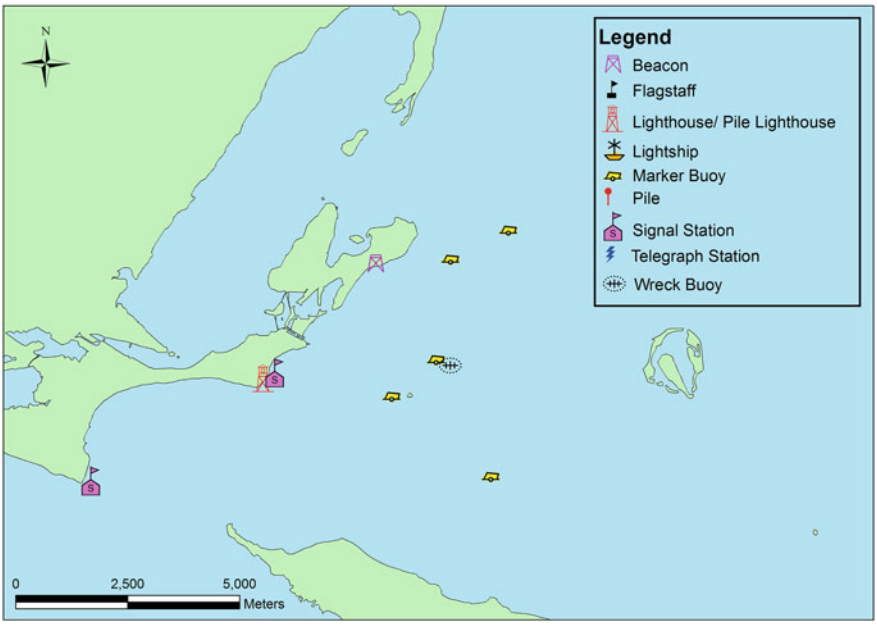

Fig. 8.1 Navigation infrastructure pre-1850s

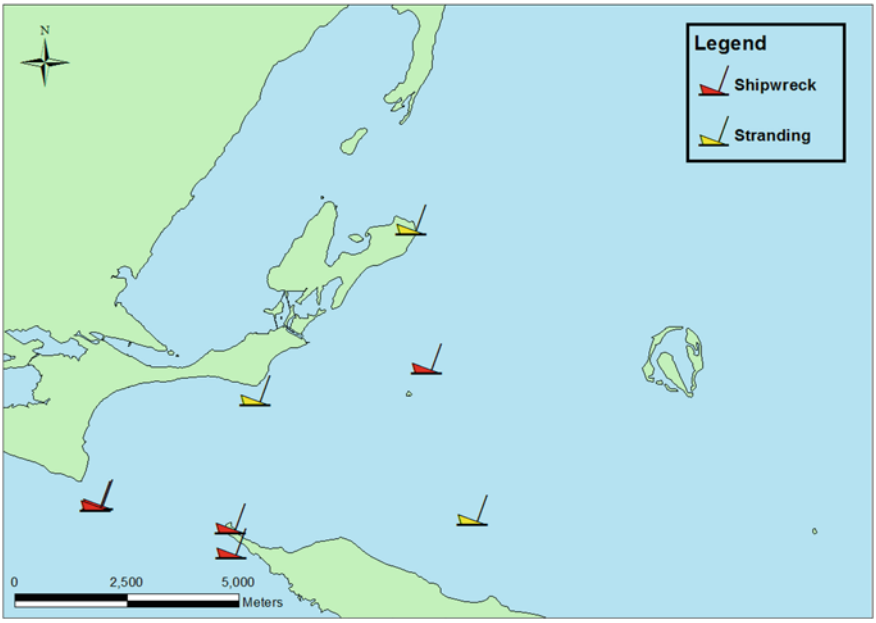

Fig. 8.2 Shipwrecks and strandings pre-1850s

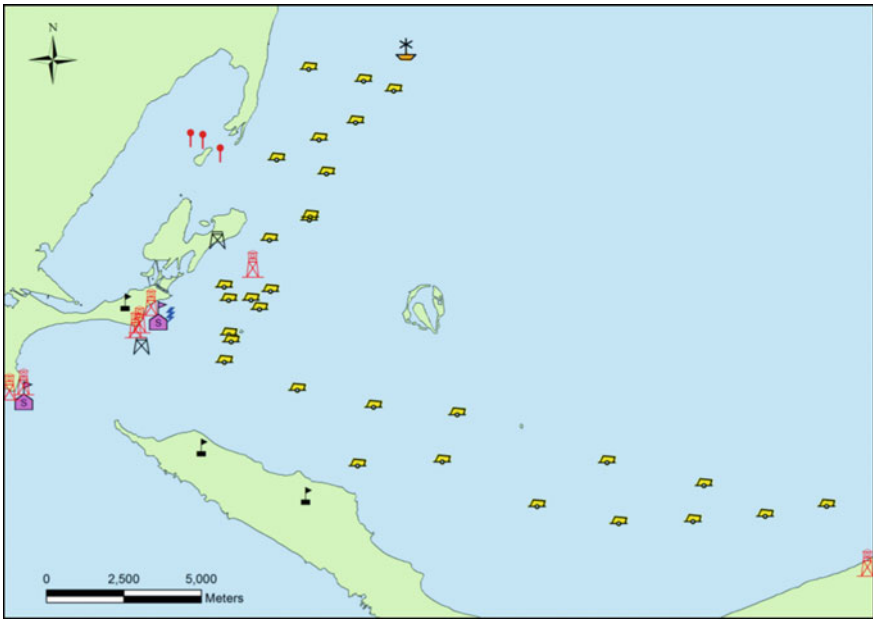

Fig. 8.3 Navigation infrastructure 1850–1869

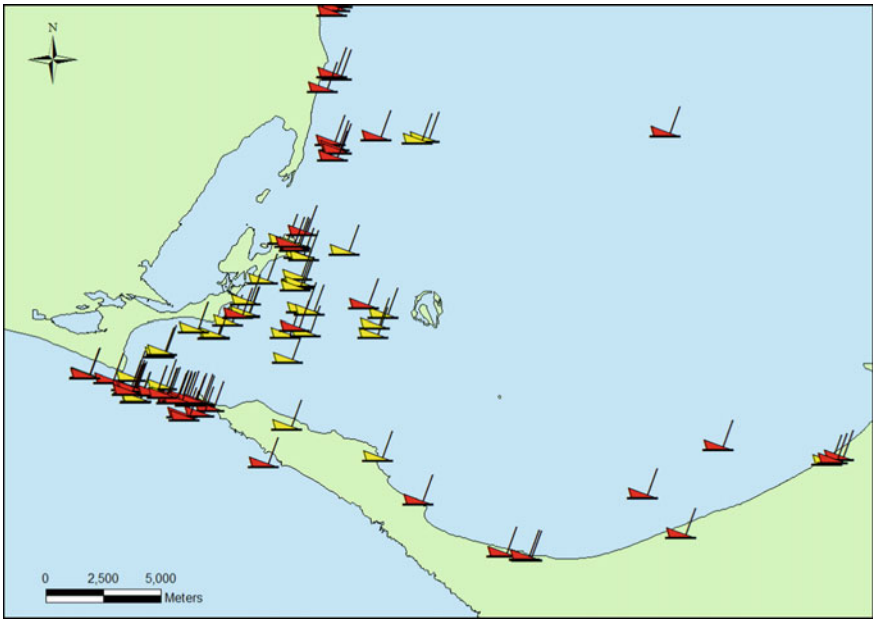

Fig. 8.4 Shipwrecks and strandings 1850–1869

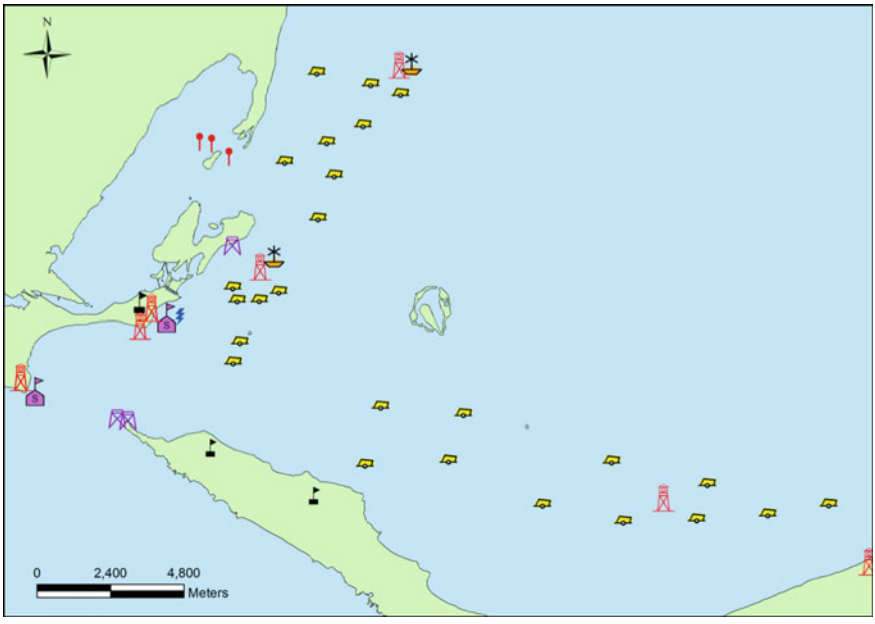

Fig. 8.5 Navigation infrastructure 1870–1880

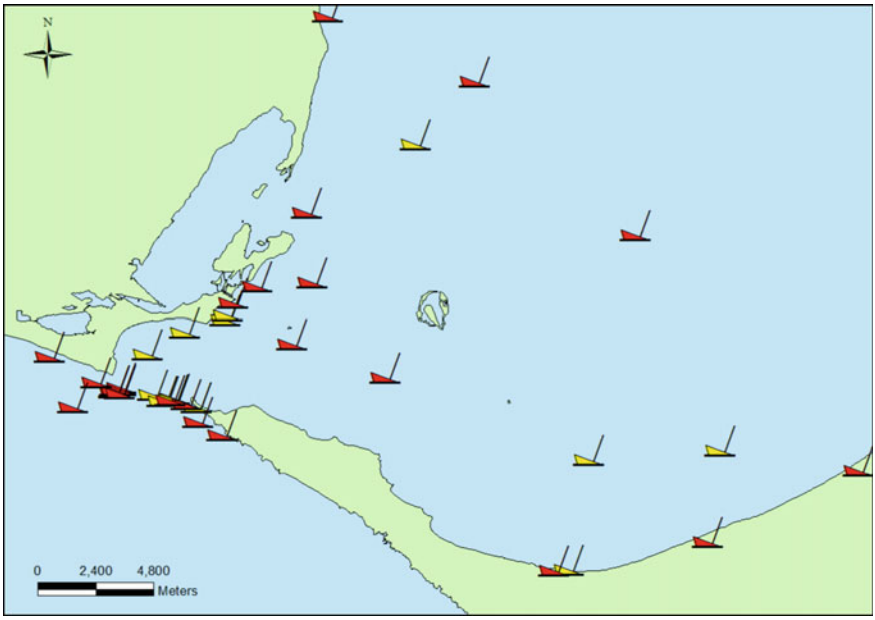

Fig. 8.6 Shipwrecks and strandings 1870–1889

mid-1850s might be characterized by an almost complete lack of physical features associated with the management or mitigation of shipping mishaps (other than wrecks and stranding sites). However, by the end of the 1860s there were numerous mechanisms within the landscape, and as a result of this review cycle there was a pattern of technological, structural and locational change. In reading the archaeological evidence of shifting locations, changing technologies, new services, organization or processes, etc., we are seeing evidence of progressive adjustment towards what might have been considered an acceptable level of risk management of the environment.

It is important to note that despite the institution of the formal maritime services and the resulting increase in preventative measures and regulation of large intercolonial and international shipping, the numbers of wrecks around Port Phillip Heads and adjacent coasts did not really fall as dramatically as might be expected. One of the consequences of the shift to ordered risk management is that ship masters appear to have transferred responsibility for the perception and management of risk and hazard to the formal systems, sometimes taking less care in their own practice. Masters could also decide to ignore or subvert at least some of the systems (at their peril) as a means of saving expense or time, or as a rejection of what might have been seen as authoritarian control. For instance, they might attempt to sail through The Rip without paying for a Pilot, claim not to see signals, or sail outside of areas noted in sailing directions.

Parallel to the development of the formal mechanisms of wreck prevention was the emergence of seemingly informal systems, in particular the use of stranding as a mitigation device (although it is possible that such strategies were being recommended by insurers). Over time, growing local knowledge of subsurface conditions and currents meant that several areas were identified as having characteristics such as a sandy and shelving bottom that would allow a leaking, damaged or otherwise imperiled vessel to be driven up to prevent sinking. The vessel could then be repaired, refloated or secured until further action was possible. This increasing knowledge of the local environment, garnered through continued use by shipping but also through the more mundane operations of local mariners, saw some degree of knowledge passing between the maritime groups and eventually into the formal systems. It was this intimate knowledge of local and especially near-shore waters and channels in a range conditions, built up through daily engagement with these landscapes, which saw the fishermen emerge as the most effective contributors to the Lifeboat Service (see below). These sorts of overlaps and interplay between the landscapes of different maritime groups are explored further by Duncan (2006).

By the 1880s, another spike in wreck numbers, possibly associated with the use of larger sailing vessels, led to a further review of navigational facilities. This trend was repeated whenever new dangers were noted, or as navigation channels were deepened or extended allowing larger and different types of ships to access The Bay. Over the following decades, the advent of steam engines freed ships from many of the environmental hazards which might befall wind-driven vessels as they entered The Rip, allowing them to navigate more freely. Channels were deepened to accommodate the deeper draft vessels and further hazards such as the pinnacles in The Rip removed by blasting. Added to this was progressive innovation in technologies and processes at sea and on shore, including the adoption of electrical power, radio communications and other new technologies leading towards the modern systems of navigation and hazard management.

Informal Responses to Risk and Crisis

While formal responses to risk and crisis tend to be overt and visible, informal responses (and the archaeological correlates of these) were more subtle and interwoven with other social practices.

Religion and Commemoration

Perhaps the most obvious informal coping mechanism for communities who had experienced calamity was recourse to religious practice and ritual. Surprisingly, given that Queenscliffe included large churches of several denominations, we have only limited historical record of commemorative services giving thanks for

successful rescues or mourning the loss of life, although we have no doubt that these events did occur. Queenscliffe Cemetery contains an assortment of headstones with maritime motifs including some headstones connected to shipwreck victims, although in some instances bodies were sent back to loved ones elsewhere rather than be interred locally. Once again this might be because of the relatively low levels of catastrophic wrecking and loss of life in the immediate vicinity, the limited number of local persons who died in these events, and therefore a reduced need to create specific memorials or places for commemoration.

In many other parts of Australia, we can see examples of religious and secular commemoration of loss of life through shipwreck. A well-documented example follows the 1857 wreck of *Dunbar* on the cliffs near the entrance to Sydney Harbour. Hundreds watched helplessly from the cliffs above as the ship was destroyed and 121 people lost their lives, leaving only 1 survivor. The catastrophe was especially poignant as many of the victims were relatives and friends returning from England, meaning the web of connection to the incident was widespread. In the weeks that followed, the whole community was in grief. When the funeral procession passed through the centre of Sydney, over 20,000 people lined the streets. "Banks and offices closed for the service, church bells tolled, every ship in the harbor flew ensigns at half-mast and minute guns were fired as the procession went past" (Hosty 2007: 26). In addition to the main memorial service, additional observances were held in most churches and the Sydney synagogue, with several burial services including a mass grave for the unidentified body parts. Several formal and informal monuments were raised at cemeteries and churches, as well as near to the wreck site. Stained glass commemorative windows were mounted in an English church but were eventually relocated to Australia.

One of the difficulties with death at sea has always been that probability that there might be no recoverable human remains from shipping incidents. As well as the long-recognized notion of the sea as a grave, there were long-accepted alternatives such as the empty grave, cenotaph or memorial as a substitute place to mourn (Auster 1997; Gough 2000; Gibbs 2005, Stewart 2011). Sometimes churches themselves became the focus for commemoration of loss or rescue, with votive offerings of various kinds ranging from paintings, plaques, tombstones in floors, or other fixtures and fittings such as the stained glass windows noted above (Hosty 2007; Coughlin 2012). There is a degree of ambiguity about whether in the past people viewed the wrecks (or sites) themselves as a form of gravesite, although there is increasing evidence that in the present there is popular recognition that wrecks comprise a form of memorial structure (Gibbs 2005).

There are few examples of non-cemetery commemorative memorials to shipping mishaps near Queenscliffe until the second half of the twentieth century. After WWII, the area near the Low Lighthouse overlooking Lonsdale Bight (edging the Shortlands Bluff car park) became the focal point for a series of memorials dedicated to maritime mishaps and events. The first memorial installed in this area overlooks where HMAS *Goorangai*, a small (223 ton) supply vessel, was accidentally cut in half in November 1940 by HMAS *Duntroon* (10,346 tons), making it the first Royal Australian Navy casualty of WWII. Of the 24 aboard, all were lost

and only six bodies recovered. The installation of the first plaque sparked a proliferation of memorials, which now accommodates 10 dedications to the military, the Pilots and Lifeboat Services, and the Australian Merchant Navy. Another nearby memorial is dedicated to commandos who were lost during exercise across The Rip in 1960 (Noble 1979: 76). The geographical locality of Shortlands Bluff is arguably of some significance, as the memorials are used to physically embody and draw focus to the imbued meaning/message that is not easily associated with or attached to the seemingly featureless landscape of the sea. Although annual commemorative services are sometimes held over the *Goorangai* wreck site itself, services are also often conducted at the memorial (QH November 2003: 1).

Within Queenscliff town, St Georges Anglican Church (also known as the Pilots' Church) houses significant memorials commemorating the death of several Pilots in recent times. The Pilots' memorial at the entrance to the church, erected after Pilot deaths in 1983 and 1991, displays the navigational light system codes which signified pilotage services. The use of these lights in the memorial not only acts as a gesture of memorial respect to the Pilots, but is also seen as symbolizing the church's role in guiding souls through troubled waters. The memorials themselves have great personal and communal value locally as tangible sites at which to remember and grieve for relatives and acquaintances lost at sea. However, it is also notable that there are no memorials to non-local vessels, suggesting an interesting difference in attitude towards commemoration of local maritime loss versus the loss of international or transient vessels.

A final question is whether modern plaques and historic or site interpretation ("heritage trail") markers which explain maritime incidents constitute memorials in their own right. This may be especially true when elements of the wreck, such as a propeller or anchor, have also been incorporated into the display. For wrecks which took place along the shoreline, the derelict initially constitutes a form of memorial. Over time, natural or cultural forces reduce the legibility of the remains and eventually remove it from sight. However, the installation of physical elements from the wreck at an accessible terrestrial location allows the vessel to be re-materialized for public consumption (Gregson et al. 2011: 305). This creation or reincorporation of a maritime cultural landscape via objects, monuments and information panels which provide a physical linkage (and historical context) to otherwise non-visible or non-accessible sites and places is an interesting phenomenon which will be discussed further below.

Superstition and Traditions for Risk and Safety at Sea

In addition to conventional religious observance, oral history recorded from the maritime and especially fishing communities of Queenscliffe provided several folk beliefs directly associated with safety at sea. Mariners are by nature among the most superstitious people in the world (Beck 1983: 279), and for them the sea is not an inanimate natural phenomenon, but a living breathing creature (Rappoport 1928: 10).

As noted previously, there is great depth of local knowledge about the seascapes in the vicinity of Queenscliffe, including the recognition of hazardous places and practices to avoid them. Significantly, a large number of informants spoke of The Rip in respectful (and in some instances almost reverent) tones. Several of the older fishermen detailed how achieving a safe passage through the area was the equivalent of an initiation ground for induction into manhood among the fishing community (Duncan 2006; 2011). How the community understood and represented important (including dangerous) maritime places, including through toponymy, has already been detailed in Chaps. 6 and 7. However, it is important to reiterate here that while there was a corpus of common information shared by local mariners, there were stories and bodies of knowledge about specific events or aspects of landscape which seem to have passed differentially through the community depending upon what branch of maritime service, industry, or familial links a person had (Duncan 2006).

Several fishers recounted local superstitions which were predominantly related to avoiding bad luck. Some of these were clearly grounded in generic western European traditions, such as the placing of coins under masts to pay the ferryman of the dead (Delgado 1997: 64; Jeans 2004: 306). This practice was seen in Queenscliffe and nearby Lorne until tabernacle (hinged) masts were introduced (Hunt 1999: 92; Mouchmore 2001–2004; Beazley 2001–2004; Ferrier 2001–2004). Another belief common in fishing communities worldwide was observed near Queenscliffe in 1863, when three Chinese fishers died after their countrymen would not go to their assistance as they were superstitious about rendering assistance to drowning men (Simpkin n.d.: 10).

There were local variants to traditions, such as one Scotsman who would refuse to go out on a trawler if a seagull landed on the mast. It was also bad luck to bring wild bird eggs or peacock feathers into houses (Beazley 2001–2004; Shapter 2001), even though collecting bird eggs was a popular activity among fishers' children (Dod 1931: 93; Mouchmore 2001–2004). Another commonly recounted belief regarding boating activities on a Friday: "you wouldn't launch your boat on a Friday, it was bad luck. You wouldn't launch on a Friday even if you had won lotto" (Shapter 2001). A former boatwright with the Pilots' Service confirmed the existence of this practice (Beazley 2001–2004), which had marked effects on the potential operating days for the Melbourne Fish Market (Duncan 2006: 175). However, other members of the community had no knowledge of this custom (e.g. Mouchmore 2001–2004).

Regardless of these observations of superstitions, several fishermen reported that formal religion did not appear to have played a major role among the majority of fishermen, particularly in the mid-twentieth century (Ferrier 2003):

> Fishermen weren't religious, not a bit. The only time they had seen a church was at weddings and funerals … I once heard a minister say that Queenscliff was the most unreligious town he had been in. (Werry 2003–2004)

Despite this apparent disregard for religious practices, the inherent superstition in the fishing fleet appears to have played a significant factor when in 1935 a ritual

that was to become known as the Blessing of the Fleet was introduced. This was the first of its kind to be undertaken in Australia (Ferrier 2003), although the practice was a tradition in other countries which had experienced a revival in the early twentieth century (Coughlin 2012: 380). This ritual placed a blessing on the commercial fishing fleet to ensure their safety from inclement weather over the coming year, with a ceremonial cross thrown into the sea as a symbol of Christ's blessing on the water. The service represented a ritual cleansing of evil from the sea, and/or a votive offering to the sea god (in this case Christ) to offset bad weather, which may have had earlier origins in pagan rituals. Blessing of the Fleet ceremonies became popular social events, which often overshadowed any spiritual component to the ceremony (Broeze 1998: 191), a sentiment echoed by Werry (2003–2004) who noted that "it was more for show" (than religious purposes). Despite this, the blessing of the fleet ceremony has continued to be well attended to the present day and has a distinct touristic aspect.

The institution of the Blessing of the Fleet is focused predominantly on the local fishing fleet, as opposed to any other maritime group in the town. This ritual demonstrates the importance of protecting the local fleet from danger, as opposed to protecting all mariners in the region. This is a significant observation, as it has parallels with previous observations about differences between memorialization of local dead versus outsiders.

Social Structure

Given the presence of maritime services within Queenscliffe from the time of its establishment, it is not surprising that these roles became woven into the social hierarchy of the town. As described in Chap. 3, by the 1860s Queenscliff housed or hosted examples of the entire Victorian social spectrum. In his larger study of the maritime cultural landscapes of Queenscliffe, Duncan (2006: 283) has documented the strong influence of social hierarchy in structuring relationships and demography within the town, even up to the present day. The concentration of so many different social classes within the small area of the Peninsula (less than 2 km^2) led to forced interaction between groups who would normally not have had, or who would have actively avoided, association. As noted by Queenscliffe historian Jocelyn Grant, this enforced close proximity meant that it the town was class *conscious* but not class *exclusive* (Grant 2001–2012). However, the hierarchies were well encoded into the landscape of even that small area, with separation largely based upon the topography (Fig. 8.7).

The maritime service groups generally occupied a middle class social status, with the most respected being the Pilots, who were often well educated, wealthy and highly esteemed for their bravery (QS 30/7/1910). The prominent location of Pilots Row at the top of Gellibrand St led distinguished neighbours to move nearby, and the area developed a reputation for affluence, particularly as Pilots often had

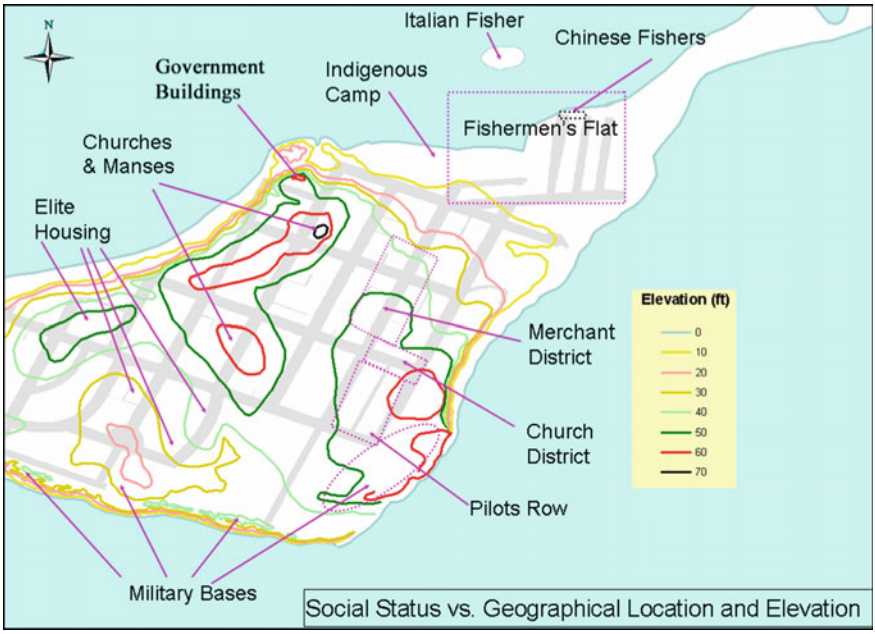

Fig. 8.7 Social status demonstrated by elevation in Queenscliff

their own water supplies and very solidly constructed houses. In contrast, other parts of the maritime community occupied the low end of the social scale.

In particular, the fishing community was considered the bottom of the social spectrum. They were sometimes satirized as illiterate drunks (Anonymous 1884; Simpkin n.d.: 10) and referred to as the "fishing class" (GA 1867: 3). An elderly local fisher recalled "people looked down on the fishermen. They were up themselves at top of the town" (Mouchmore 2001–2004). This was compounded by the group's ethnic diversity, with members from at least eight different nations included in their ranks, many of whom were considered of low or "unsavoury" ethnic origins (Werry 2003–2004; Mather 2001; Ferrier 2003).

> Large families lived in Wharf St, on the Fishermen's Flat. They were [considered] the lowest strata in Queenscliff society. The Governor of Victoria had his holidays here, and Western District graziers also came for holidays. You were the lowest form of life in Queenscliff, as a fisherman. Gunners in the fort were the next class, then sergeants and non-commissioned officers, trades people and grocers, and then the officers. (Mather 2001)

Despite their usual low status within the town's social hierarchy, during times of shipping mishaps the fishermens' situation changed markedly. Once the wreck bell had rung, the fishermen who responded were reincorporated as the lifeboat crew and became a focus for the Queenscliffe community's hopes. The lifeboat crew's knowledge of the local waters and bravery in saving life and property, often at great risk to their own safety, saw them lauded as heroes:

> …the lifeboat…deserves mention, as well as the brave men that are ready in all seasons to risk their lives in the endeavor to save and rescue the storm tossed victim. It is a sight never to be forgotten, to behold this handful of strong athletic fishermen man the lifeboat and bend the oar with a sturdy willingness which speaks volumes for the promptitude which may be expected from them when the real occasion arrives. They form a pretty picture and are deserving of a more extended description than our pen can spare. (QS 7/4/1894)

In 1919, Lifeboat Service was referred to "as valuable as digger's [Australian Soldiers] work… There are land diggers and sea diggers", drawing parallels between the crew and recently returned servicemen (QS 26/4/1919). As described in Chap. 4, the crews were sometimes compensated with rewards and awards, congratulatory dinners, and recognized in local and national newspaper reports (e.g. QS 30/7/1887; 4/7/1891, 13/8/1897; Fanning 1892a). Over time working as crew on the lifeboat became a familial tradition, with successive generations of fishermen joining the service.

In times of crisis, many of the normal social boundaries within the Queenscliffe community were removed, originally with the Pilot, Customs and Health Officer's boat crews uniting with fishermen in rescue efforts, bridging any past social differences and creating a new social group based on their shared activities and common cause.

Economies of Crisis

Another central theme of this study has been the duality of the Queenscliffe community's roles in the prevention of wreck and the rescue or treatment of survivors, versus the potential for economic benefit through the provision of services or various forms of salvage. At the least, the continuing possibility of shipping mishaps acted as the rationale for the different maritime services to maintain their operations within Queenscliffe, providing a consistent and reliable contribution to the local economy.

Shipwreck Exploitation as Traditional Practice

Beyond the formal government maritime services, the town developed short- and long-term mechanisms by which to profit from shipping incidents in various ways. In the immediate aftermath of a crisis, accommodation, food, transport and other goods and services had to be provided to victims, to visiting government officials, to salvors or prospective purchasers, as well as to the many tourists and spectators (see below). The out-of-season tourist infrastructure within the town could be rapidly reopened or re-deployed for the purposes of accommodating these unscheduled (if anticipated) events. Queenscliffe mariners also assisted with salvage operations, while at least some legally salvaged materials were sold into the local market.

In many ways, the informal economic practices surrounding shipping mishaps are more interesting, as Queenscliffe people clearly had local traditions concerning their right to materials from wrecks and strandings, regardless of legal ownership. In preceding chapters we detailed practices revolving around the collection of flotsam and jetsam in the short term and the existence of a black market for illicitly obtained materials. Queenscliff oral history includes a variety of stories related to looting of shipwrecks or associated with wreck materials. Many of these tales of resistance have a strong folkloric aspect, invoking some level of trickery or outsmarting legal authorities. For instance, an incident which was often recounted even by modern informants related how a local mariner towing back a hogshead barrel of whisky from the wreck of *Sacramento* (1853) was caught by a local Customs Officer, who confiscated the illicit goods. The barrel was raised on to the local jetty and a guard placed on it overnight. Incensed at losing his prize, the man rowed under the jetty in a small boat later that night and drilled a hole through the jetty deck and barrel, draining its contents into casks and buckets before rowing away (Loney 1989b: 10). In the morning, when five large men came to lift the barrel on to a cart, "they nearly launched it into space" (Ferrier 2001–2004).

It is notable that some sections of the Queenscliffe community spoke with pride of their personal, familial or thematic maritime group's involvement (e.g. fishermen) in looting activities, despite the potential illegality. This has resonance with sociological research on the recent rise in people making open claims to convict ancestry, formerly a desperately undesirable admission in Australian society, as a means of creating a sense of social location and identity (Tranter and Donoghue 2003). This of course has implications for the nature of the folkloric structures being generated and retained within the community, as well as the construction of local history and tradition.

It is interesting that the practice of taking illicitly obtained alcoholic booty for an orgy of excess drinking, predominantly to isolated locations on Swan Island and the Mud Islands, may live on in contemporary local practice. Even into the very recent past the young men in local sports clubs would head to these sites for binges in what were known as "barrel days". Knowles (1997) recognized the importance of these types of places (and activities) for male bonding, where men could let their hair down and indulge in what was normally considered antisocial behaviour, without the risk of hurting or offending other community members.

The presence of the authoritarian Customs Service within the area probably also amplified the behaviour of the local community during periods of looting (see Chap. 2). It is notable that, in the rush to obtain and conceal as many stolen goods as possible before the authorities arrived, normally law-abiding citizens suddenly began engaging in serious illegal behaviour including theft, deliberate destruction of property, smuggling, assault, and even arson. During times of shipping mishaps, people could put aside their normal identity to become faceless looters in opposition to the legal authorities, with the crisis events constructing a liminal or transformative space (c.f. Cook and Tolia-Kelly 2010). This might also be seen as part of wider efforts at resisting authority by some parts of the maritime community. The fishermen were especially inclined towards these acts of resistance, as demonstrated

by their involvement in smuggling, tax avoidance and overfishing, as well as their continual intrusions into restricted areas associated with military and quarantine services. This sort of blatant disregard for and resistance of authority is also evident in many other small maritime communities worldwide, which Westerdahl (2003a: 19) termed resistance landscapes.

In Chap. 5 we described the economic significance of longer-term beachcombing, especially for coal. One of the important elements of this activity was that it was not constrained to those of limited economic means (Patrick 2004–2012). Beachcombing, such as for coal, generated social interaction within the community on more subtle levels. While the coal was regarded as communal property accessible to all and sundry, there appears to have been an informal etiquette in regard to its collection:

> We used to walk along the beach and collect the coal as we went along and make small piles as you went or put it in old fertilizer bags. You would drag the bag back along the beach to the track where you went up to home, and then you would get someone to help lug it back to your house. No one would steal your coal if you left it on the beach. It was just something that wasn't done if you knew someone else had collected it. (Patrick 2004–2012)

These informal communal understandings of acceptable behaviour when collecting coal contrasts starkly to the almost frenzied behaviour observed at flotsam traps immediately following a wreck, where people would often steal material which had been looted and cached by others.

The traditional practice of coal collection was reinforced by the emergence of a new local material culture in the form of the coal rakes. However, there are other examples where particular items from shipwrecks became almost iconic parts of the community's identity. When a vessel went ashore at the back of Portsea, Queenscliffe fishermen looted the cargo which included boxes of farming implements (including sheep shears) and alcohol. The innovative fishermen, always ready to take advantage of any opportunity, split the sheers into two blades and added a handle to form a knife (Richardson 2012).

> We got them and put a handle on it… There were cases of them. It was a sailing ship that was bringing the sheep shears out for the farmers. All the wreckage was on the beach… That's what started the shear blades. They got the knives and started to use the shears. They used them as a knife, the shears. They got the idea that it would make a good knife to clean the fish with. (Richardson 2012)

The discovery that the toughened steel of the sheep shears blades retained their sharpness better than a normal knife, thus enabling the entire day's catch to be filleted at one time without the need for re-honing, led to their widespread adoption within the Queenscliffe fishing community (Mouchmore 2001–2004; Irving-Dusting 2002–2006; Ferrier 2001–2004). Use of these blades is not seen in other Victorian fishing communities.

There is strong historical and oral evidence that looting did become entrenched in the Queenscliffe community, especially during the early days when area was still relatively isolated. Despite later surveillance from the increased Police and Customs presence, as well as the legal risks to the looters if they were caught, these practices

continued well into the twentieth century. This is significant, as it demonstrates that the potential economic opportunities presented by opportunistic looting changed the behaviour of significant portions of the normally law-abiding community. A fascinating modern analogue is provided in Cook and Tolia-Kelly's (2010) discussion of the 2007 grounding of the 62,000 container ship *Napoli* on the beach at Lyme Bay in south-west England. There was initially some looting by the local community of the sea containers that had already broken open. As news media advertised the vessel's fate and the riches to be had, the nature of looting shifted as thousands descended on their beach, even coming from Europe, to indulge in a frenzy of pillaging. There was a sense of how horror within the Branscombe community as the theft and destruction of property shifted from the bulk cargo commodities to include what were clearly personal goods. Cook and Tolia-Kelly consider these events in terms of local narratives of landscape and character (especially the behaviour of outsiders), as well as the place of these pillaged goods as a form of consumption.

Further research is needed on the ways in which shipwreck material is removed, retained, displayed, or discarded on return home (c.f. Ramsay 2009: 209). Cook and Tolia-Kelly consider the material geographies of commodities from the *Napoli* wreck, as well as the possibilities for tracing the cultural biographies of objects (sensu Kopytoff 1986), but do not pursue any specific examples. Steinberg's (2008) work on the materials salvaged from the 1881 wreck of SS *Brisbane* (in the Northern Territory of Australia) is one of the few detailed studies of the trajectories of items salvaged from a single wreck. He makes a diachronic analysis of the social, economic and symbolic dimensions of historic and modern removal of material from the wreck of Brisbane in the north of Australia in 1881. Various themes are explored, of collected shipwreck objects as scrap, trophy, antique, decoration, historical curio or memento, as well as how items are reused, displayed or exhibited.

Tourism

Tourists and tourism were important elements in the social and economic life of Queenscliff from the time of its establishment. The town was the first resort in Victoria, offering fresh sea air and a classic British seaside model of promenades, hotels, bandstands, and other amenities. However, Davidson and Spearritt (2000: 35) make the point that it had no natural or cultural "sights" in particular. As a consequence, the Queenscliff community actively constructed a particular form of maritime cultural landscape for tourist consumption, based around shipping mishaps and the associated infrastructure and routines for prevention, rescue and salvage. This commodification of shipping mishaps operated in several different forms consistent with the framework for the progress of disasters. As detailed earlier, the announcement that a shipwreck about to happen, or in progress, invariably led to a rush of people from within and outside the Queenscliffe community to witness these

events unfold. Shipping mishaps and wrecks were not uncommon events, but nor were they predictable or identical in structure and outcome.

It would be wrong to assume that all spectators at shipping crises were simply voyeuristic or economic ghouls. The first motivation to rush to a wreck was usually an altruistic concern for the welfare of those aboard, as well as the possibility of offering assistance of some kind. Until the later twentieth century, most non-Indigenous Australians had strong maritime links through their own or recent ancestral passages by sea. Any vessel might contain family or friends, so people were drawn to wrecks out of personal connection and concern, or simply through a humanitarian urge to help out. In most instances, assistance was not possible until the formal mitigation and rescue services had acted, leading to a level of helplessness by spectators and a focus on the lifeboat embodying the hopes for safe outcome. Once rescue boats reached shore, informal assistance could be offered. In some cases, survivors might manage to get themselves into the water and even towards shore where they could be assisted to safety.

The spectacle of watching a wreck in progress was also a powerful draw card for those without a personal or economic connection to the vessel. The drama of a ship approaching shore, the battle against wind and current, the heroic and desperate efforts to remove passengers and crew to safety, and in some cases the potential ruin and disintegration of the structure in front of their eyes, was considered an authentic and powerful experience (Wells 2011). As described above, the meta-narrative surrounding shipwreck was well established in most peoples' minds thanks to popular literature and iconography. The chance to witness critical stages in the process of wrecking, speak to survivors, rescuers or local persons, offer opinions on the progress of the event and the effectiveness of rescuers and salvors, and even the possibility of participating in some way, was not to be missed (Sexton 1982; Knudsen 2011: 58; Hartmann 2013: 8). The spectators became part of temporary community which shared and discussed the experience and considered the meaning of it (Wells 2011: 65). Afterwards, the individual could return home and speak of the incident in an authoritative voice. Souvenirs also had a role in this process (see below).

Newspaper reporters rushed to the scenes of disaster to witness events or interview those who had and then to hasten this information into press for local, national and international consumption. These reports might range from sterile facts to lengthy narratives that sought to identify heroes, attach blame, highlight lurid, gruesome or tragic elements, or advance political, social, economic, or nationalist agendas. In many respects, they were very standardized in their form, as were the images drawn by on-site artists and later taken by photographers (c.f. Wells 2011: 66). The favoured mode was the "eyewitness account" of survivors, rescuers, or observers, presumably composed by the journalist after interviews (c.f. Lincoln 1997). Despite claims towards greater authenticity, these accounts raise various questions of veracity and accuracy, either on the part of the journalist or through the perspective or state of mind of the persons interviewed (Gibbs 2002: 78–79). In the absence of a formal inquiry, these descriptions may, however, comprise the only narratives of how events unfolded. Journalists and writers also sometimes rushed

into press separate publications of these events, with cheap pamphlets being a popular form of wreck narrative in the nineteenth century. Poetry, verse, songs and ballads, either as part of these longer accounts or independently produced, were also a popular form of retelling wreck narratives (Bergholtz 1975).

Although not strictly tourism, economic motivations beyond illegal looting could draw external persons to a shipping mishap. First was concern for economic investment, either in the structure of the vessel itself, or in the cargo aboard. Once the identity of a threatened vessel was known, owners or their agents would come to watch and see whether their property was lost in the wreck or removed safely, and to ensure that it was claimed before mishandling, confusion or deliberate looting saw it vanish. Insurance agents would similarly come to assess damage and monitor proceedings in advance of claims against their company. Salvors could attend with the hope of securing the rights to the derelict or to providing other services towards the recovery of the vessel and its contents. Individuals and groups also arrived with the hope of ill-gotten gains through looting; especially should a vessel break up. Additional authorities and services might also proceed to the site to assist operations, enquire into causes and fault, ensure probity and proper process, or simply prevent illegal activities such as looting.

Shipping mishaps could extend over a period of time depending upon the nature and intensity of the crisis and recoil phases, creating the opportunity for the composition of the tourist group to shift. Once the more active phases of the crisis were concluded, the derelict or stranding then became a new "sight" or place in the otherwise bland Queenscliffe tourist landscape. The potential to visit stranded or wrecked vessel(s) by boat or be taken overland to better viewpoints and hear stories from local guides, as well as to observe subsequent processes of salvage, removal or even further destruction by later storms, all added to the attraction. The deterioration of the physical evidence of the derelict over time, especially its reduction to non-visibility through removal or destruction, as well as (pre-SCUBA) non-accessibility under water, meant that other strategies were required to maintain a degree of visibility and presence within the touristic cultural landscape.

As described in Chap. 5, the infrastructure of shipping mishap prevention and rescue was also promoted as destinations for visitors to Queenscliff. Some of the routines such as lifeboat practice became a form of performance, as much as where the re-enactments of heroic rescues and events. Cemeteries, churches, memorials and ceremonies including the blessing of the fleet all came to be included in the tourist round. There does not seem to have been a museum displaying shipwreck material in Queenscliffe until the twentieth century, although nineteenth-century exhibitions of wreck-related artefacts were known in other areas (e.g. Hosty 2007: 48).

Another form of shipwreck tourist was those persons engaged in a pilgrimage to a wreck site with special connections or personal resonance, or at least to its general vicinity and to associated monuments and memorials. This might include persons engaging in formal and informal commemoration practices (e.g. church services or secular gatherings at monuments) in recognition of past events. The late twentieth-century emergence of monuments, as described above, is indicative of the increasing popularity of these sorts of events in the modern era.

While not a single coordinated project of representation, the Queenscliffe community actively participated in the past and present commodification of their shipwreck heritage and the creation of a maritime cultural landscape which was palatable and visible to non-local visitors. Modern heritage trails are in some respect a continuation of this tradition.

Souvenirs

Our understanding of why people collected (and continue to collect) objects from or about shipwrecks and shipping mishaps is imperfect. Within maritime archaeology, this discussion has usually been subsumed into dialogues regarding the management of maritime heritage resources, including the prevention of looting, or the conservation of objects recovered from wrecks (e.g. Rodrigues and Richards 2012). It would be needlessly reductionist to simply consider these activities as "souvenir hunting", or purely as a form of salvage behaviour. Even in the past, the reasons for obtaining these objects are likely to have been complex, and it is not possible to disentangle here the multiple motivations past and present, or how these shifted over time. The possibilities are numerous (see Gregson et al. 2011).

There are of course some elements of overt economic value or continuing utility behind the collection of objects, and there are the many historical accounts (cited earlier) of persons external to Queenscliffe participating in the looting of flotsam and jetsam. As described earlier, there was the recreational or even competitive aspect of beachcombing and collecting objects for their imagined and romanticized connections to the past. For others, the collection of an object might represent a form of participation and connection to an event and its meanings (even if the original incident was in the distant past), becoming a means of validating claims to witness. These objects of potentially limited economic value could also play the role of the *memento mori*, reminders of the wreck and those aboard, or represent more abstract symbolic qualities associated with the incident.

As will be described below, objects were also a means of accessing real or imagined ancestral associations, or other claims for identity. They could act as a substitute for access to the site itself, akin to memorials and cenotaphs, in some ways materializing the inaccessible. As Ramsay (2009) states, souvenirs define and freeze a transitory experience and are part of the "enchantment" of the event, providing a personal *aide memoir*, or a talking point for visitors. This extends to the souvenirs acting as a representation of the experience of place and engagement with the cultural landscape, even the commodified tourist landscape described above. However, such collection of objects not only constitutes acts of commemoration, but also fetishization (Shanks 1992; Gregson et al. 2011). Similar motivations might be attributed to modern divers removing materials from wreck sites.

A slightly different form of wreck souvenir is those manufactured for tourists. There are many instances where wreck materials have been collected for sale to visitors or transformed into commemorative pieces or specific memorial forms.

In *Dunbar* example, material was immediately identified for its memento value or converted into other forms through processes such as timbers being carved into chairs, chests or boxes (Hosty 2007: 40). Mementos might also be objects whose substance did not derive from the vessel or cargo itself. Books and pamphlets have been mentioned above, although photography involving shipping mishaps can also be considered within this class. Examples of photographs of wrecks and strandings, sometimes produced as postcards, or taken of specific individuals with the vessel in the background, are seen throughout this volume. This clearly formed a genre in its own right and has many stylized elements. The representation of landscape, environment, the imperiled or derelict vessels visible within it, and the different maritime services, salvors, tourists, and others interacting within the scene, all played a role in the construction and perception of the maritime cultural landscape. A photograph could transport a vignette of this landscape to the other side of the world. While there is no evidence that Queenscliffe supported a specialist wreck photographer such as the Gibson family in Cornwall, as a tourist town it is likely photographers were in seasonal residence, or if a wreck occurred would be part of the rush of those hoping to profit. Barnard's (2004) example of framed photographs of the stranded vessel *Golden Gate Sun* being available for sale on the same day it went ashore demonstrates that photographic mementos were still a profitable business even in the 1980s.

Shipwrecks and Dark Tourism

An area which requires much greater consideration in our interpretation of tourist behaviour associated with shipping mishaps is the place of "dark tourism" (also "thanatourism"). It has been recognized that there is a long heritage of persons being drawn to the scene of sites associated with crisis, disaster and death (Stone and Sharpley 2008). However, more research is needed on the motivations of those coming to watch shipping-related events. That said, we must be careful not to project modern moralities, sensibilities, motivations and perceptions on to nineteenth-century (or earlier) events and responses.

There could be multiple drivers and motivations for people to race to a shipping mishap, some of which have been discussed above including altruism, the desire for novelty, spectacle, "authenticity" of experience, authority as witness, the challenging or heightening of their own sense of mortality, the confrontation of fears and many others (Stone and Sharpley 2008: 576; Knudsen 2011: 58; Cook and Tolia-Kelly 2010). Shipping mishaps with their sometimes-protracted period leading up to actual impact, and then an extended phase of rescue and recovery, potentially offered several types of experience to those seeking the thrill of witnessing such events.

Over time, shipping mishaps and especially wrecks might occupy a range of positions on the "dark tourism spectrum", starting with the darkest and most intense forms which include witnessing actual death. The frenzy of looting at the time of

impact may also factor into this darker end of the tourist spectrum. Following the crisis, there could be a transition through to memorialization, moral instruction, education or entertainment, in which past events were interpreted, performed and commodified, including off-site representations (Stone 2006: 151; Stone 2012: 1577). The absence of memorials and commemoration may also be indicative of efforts to forget, deny, or overwrite previous events. The place of these various forms of "dark" tourism in modern secular society, and the creation or non-creation of places in the landscape for reflection on life and death, should be considered by maritime archaeologists and managers, especially when it comes to shipwrecks where death occurred and where human remains may still be present (Gibbs 2005).

The Creation and Manipulation of Folklore

It is likely that in most instances, post-crisis tourists were not necessarily interested in the specific events, but in the general imagery of shipwreck. The guides who related stories did so with a mind towards keeping the attention of their audience, heralding the active transformation of fact into folklore which aligned with tourist expectations. This then opened opportunities for the construction of what was originally deliberately manufactured folklore to add value to the visitor experience. The case of Benito Bonito is interesting as it combines elements of relocation of an existing folklore into the Queenscliffe landscape, as well as the conflation with the area's genuine maritime heritage.

Benito Bonito was a known pirate who raided Spanish shipping on the west coast of the Americas in the second decade of the nineteenth century. Queenscliffe folklore suggests that after he seized the "Great Treasure of Lima" in 1820 (which is in fact incorrectly attributed to him), Bonito then sailed to Port Phillip (a distance of over 13,000 km or 8000 miles), to hide his share of the loot, worth the equivalent of $300 million (Anon 2013). Local lore states that on his way out of The Bay he was captured by a British Man-of-war and hanged for piracy, without revealing the location of the treasure. Although the first appearance of the Benito Bonito legend in connection with Queenscliffe is uncertain, it dates to at least the 1860s (Lawson 2004a). For the later part of the nineteenth century, it was perpetuated from by a local character known as Kerosene Jack who was a local Portuguese/Italian fisherman who claimed to have been the pirate's son or cabin boy (Anonymous 1938: 85; Dod 1931: 26). Hayden (n.d.: 16) maintained that the story may have been introduced from deserting Portuguese sailors, who transposed the folk hero into the Queenscliffe landscape initially as stories for their own children. The tale of the pirate's booty was progressively grounded within repeated reports of discoveries of ships relics and specie along the Queenscliff and Swan Island foreshores. These finds, which possibly originated as cached material from wreck looting, included a ships compass/box in 1911 (Hayden 1966: 15; Lawson 2004a), and coins dating from 1816–1846 (QS 25/11/1909).

Oral history suggests the Benito Bonito story was adopted and exploited by the town to bolster the local tourist trade, especially after open sea bathing became popular at the newly discovered surf beaches along the West Coast and tourism shifted away from Queenscliff (Lawson 2004a: 8). Some guesthouses were known to plant old coins in the area to keep the story alive (Naylor 2004), and a former tourism operator commented that "Benito has done no harm to Queenscliff's reputation" (Anderson 2003–2004). This was also evident in the historical record, where an advertisement in 1938 encouraged treasure seekers to visit the town:

> Come to sunny Queenscliff and hunt for treasure… Have a holiday and exercise at the same time and perhaps grab a million or two of gold to boot. Its yours for the digging. Don't forget your pick and shovel and Miners Right (cited in Hayden n.d.: 19).

The influx of treasure seekers proved a bonus for local businesses (Hayden n.d.: 23). There were also more serious attempts to locate the reputed hoard, with shafts up to 15 m deep and lined with iron or timber being dug into the Swan Bay Foreshore. These treasure hunting efforts became tourist attractions in their own right, with 7000 visitors to Queenscliffe recorded in one weekend in 1954 when a new syndicate started work (Lawson 2004b: 12). The treasure hunting generated archaeological signatures, and several of the larger excavations have only recently been refilled by local authorities (Lawson 2004b). Some of these sites remain visible as large depressions and continue to be tourist attractions in their own right. The Mayor of Queenscliff in 1938 summed up the indifference of the local community towards the actual legend: "The Queenscliff treasure is like every other treasure—nobody ever finds it!" (Anonymous 1938: 87).

The Benito Bonito phenomenon represents what Gazin-Schwartz and Holtorf (1999: 12) call "folklorism", in which second-hand folklore is introduced for a particular agenda, in this case to bolster tourism in the area. Similar folkloric traditions which use legends of buried treasure or mysterious artefacts have also been observed at Warrnambool in Western Victoria in relation to the Mahogany Ship wreck legend (Mahogany Ship Committee 1985; Loney 1985: 20; Potter 1987) and at Geelong where ancient keys were said to have been discovered under several layers of rock during limestone mining (Gill 1982, 1987; McKiggin 1987). The insertion of the stories into the cultural landscape, with the blurring of fact and fiction and the physical consequences on genuine archaeological sites, especially shipwrecks being looted for "treasure", is a scenario well known to maritime archaeologists.

Modern Relationships to Shipping Mishaps

For most of this volume, we have focused on the Queenscliffe community's responses to and relationships with shipping mishaps prior to WWII. By the midpoint of the nineteenth century, there were fewer shipwrecks and reduced interest in these events. Accounts of the wreck and salvage of *Time* in 1949 for instance saw a

fairly unsentimental and pragmatic traditional approach to the vessel and its resources (Williams 2006; Wane 2010). However, from the 1960s onwards there was a revived interest in Queenscliffe's maritime heritage, especially thanks to the works of maritime historian Jack Loney. Loney took a particular interest in shipwrecks along the Victorian coast and his volumes researching the circumstances of individual wrecks and some of the associated folklore (including the Benito Bonito tale) promoted interest and romanticism for the now-fading age of wind-driven vessels (Stone 2013).

Loney's research on vessels and wreck incidents also provided a guide for the growing recreational dive community. The advent of SCUBA combined with new forms of underwater detection such as sonar resulted in a rapid increase in the rediscovery of wrecks throughout the region. Underwater sites were suddenly accessible, with the perceived value of unsalvaged of structure, cargo and contents shifting with the emergence of this new interest in their historical and romantic significance. From the 1960s, shipwrecks became a focus for divers interested in collecting bottles, plates and other relics (e.g. Naylor n.d.), or purely wanting the visual experience of the wrecks as underwater destinations. Many wrecks in the Queenscliffe area were heavily looted prior to (and in some cases after) the passing of protective legislation. The classic example is *William Salthouse*, which when discovered in 1982 was almost destroyed in what was described by government authorities as a looting frenzy (Elliget and Breidahl 1991: 3). Improved diver training and the work of government bodies and avocational groups such as the Maritime Archaeological Association of Victoria have seen a significant reduction in what is locally referred to as "wreck bashing".

Diving tourism based around wreck sites is now a valuable economic resource for Queenscliffe. Divers can also access the official ships graveyard area located outside of The Heads, where more than 46 vessels including sailing ships, steam ships, barges, J-Class submarines, dredges, tugboats, a paddle steamer and a navy Attack Class patrol boat were dumped from 1913 to 1999 (Duncan 1994; Stevens 2009). For non-divers, there are now maritime memorials and shore-side shipwreck trails, while Queenscliffe's Maritime Centre and Historical Society Museum both draw heavily on past shipping tragedies as points of interest for visitors. Many local hotels (Ozone, Meitta's, View Grand, Seaview) have displays of shipwreck material and photographs, which are seen as part of the local identity of the area.

For local divers, the relationships with wreck sites and materials are more complex. Although the authors avoided focusing on local diver activities which might contravene current heritage legislation covering the collection of shipwreck materials, the social and historical contexts of some of these behaviours are of relevance. In light of this study, it is clear that wrecks have been continually exploited as a resource in Queenscliff for over 160 years. In particular, there has always been a level of contest regarding rights to material taken directly from wrecks or via beachcombing. Current legalities aside, this raises the question of whether, where local divers demonstrate lengthy ancestral ties to the Queenscliffe area, their continued collection of shipwreck material should be viewed as a

traditional practice rather than just souvenir hunting. Several of the local divers, especially those with active interests in maritime history and shipwrecks, expressed versions of this "ancestral" right, indicating that through collection of objects (now usually in a limited way) they were in some way consolidating their link to their maritime heritage. This perspective offers interesting new interpretations of community values for current heritage management of shipwreck sites and artefacts.

Conclusion

One of the main aims of this chapter has been to demonstrate the multifaceted nature of the Queenscliffe community's responses to shipping mishaps. Despite the fact that many Queenscliff residents were not directly involved in maritime services or activities, there was a demonstrated maritime identity that pervaded the community as a whole. The regular occurrence of shipwrecks spawned many behavioural traits that became embedded in customary practices which acted as a form of community identification. These include the strange mixture of altruism and opportunism that separated prevention and rescue efforts from the opportunities to profit from these events in various short- and long-term ways. Exploitative activities ranged from official salvage to illegal looting and caching of goods, as well as long-term seasonal exploitation of flotsam and jetsam traps. These behaviours in themselves generated adaptive material culture to exploit (and hide) these resources.

It is clear from the observations above that at least some of the practices associated with shipwrecks in the Queenscliff area may have eventuated as a result of transported practices and beliefs that arrived with immigrants. What we are therefore confronted with are not only extensions of maritime traditions from other places and cultures, but the Queenscliff area also in some respects becoming an extension of ancestral homelands that existed many thousands of miles away.

Responses to shipping mishaps also extended well beyond the Queenscliffe community, with these events drawing a range of external stakeholders and spectators. The motivations of these external participants and observers and their interactions with the physical and social landscape were similarly complex, and as for the Queenscliffe community, they also changed over time as crisis events progressed and transformed. The Queenscliffe community became adept in recognizing and taking advantage of these situations for economic and social reward. For the post-crisis phases, they also actively reinterpreted and commoditized their shipping mishap history and tradition, including manipulating and even inventing folklore, to create a cultural landscape for the consumption of visitors. In some instances, these fictional elements have become integrated into the local perceptions and understandings of the landscape. All of these factors are significant for maritime archaeologists and researchers and raises the question of whether similar phenomena are present elsewhere in the world. This will be explored in the following chapter.

Chapter 9
Conclusion

For many coastal communities, shipping mishaps were if not regular events, then not particularly unusual and in most instances not especially noteworthy. The majority of these incidents were low impact and largely ephemeral, with the vessel repaired, refloated or removed, sometimes quite rapidly. There might be no immediate economic or other benefits to the local community, potentially few or no physical remnants or visible changes in the landscape, limited or no documentary or record, and no obvious social consequences as a result of these individual events. Conversely, a catastrophic shipping mishap might involve massive physical damage to one or more vessels, dispersal of structure and cargo, high risk interventions by rescuers and salvors, injury and even loss of life. These events could also be the result of (or underscored by) dramatic weather, extreme political and social conditions such as war, or because of the persons or cargo aboard. The local community might have significant involvement at sea and on shore dealing with shipping mishaps and their aftermath, resulting in a host of practical, economic, social and symbolic consequences. The derelict could remain a significant and visible addition to the physical landscape, while also retaining short- and long-term social, economic and symbolic value for the community.

It was the cumulative effect of these low- and high-impact maritime incidents, the combination of the mundane and the spectacular, and their long and short consequences, which created the cultural landscape of shipping mishaps. How communities perceived and interacted with shipping mishaps was a product of their environmental and historical setting, the prevailing social, political, economic, technological and other conditions and their past relationships to shipping mishaps and their products.

In this final chapter, we briefly discuss some international comparative examples, revisit the notion of a cultural landscape of shipping mishaps and consider some of the principles that have guided our work.

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Responses to Shipping Mishaps in International Perspective

Our study of Queenscliffe offers an example of how one community created their cultural landscape relevant to shipping mishaps and how we as archaeologists have explored this. We do not suggest that the Queenscliffe case study is an exemplar or even that it offers the broadest spectrum of the possible physical and cultural manifestations of short- and long-term relationships and responses. Undoubtedly some readers have identified differences relative to their knowledge of cultural or physical/archaeological manifestations within their own study areas. A review of the many and varied manifestations of individual and community responses to shipping mishaps across time and space, or even a broader review of international examples drawn from the nineteenth-century Western European cultural milieu, is simply not possible within this volume. By establishing a benchmark and framework, we hope that the exploration of variation becomes possible, with the expectation that different peoples and cultures in different places, time periods and historical, political, social, technological and environmental circumstances will have constructed their own unique maritime cultural landscape(s). However, a few examples of the similarities between the responses to shipping mishaps seen in Queenscliffe and those of other maritime communities worldwide are worth repeating here.

Lifeboat Service

Although other models of lifesaving activities have been investigated elsewhere (see McKinnon 2010), as we have described, the development of the Queenscliffe Lifeboat Service drew heavily upon the UK model. Initially UK lifesaving was undertaken by companies of beachmen and fishermen who would put out to sea in fast yawls to save lives and rescue valuable cargo, as well as undertake later salvage. This work was later taken over by the locally run Volunteer Lifeboats and then by the Shipwrecks Institutes and Royal National Lifeboat Institution which inspired Australian colonial development (Malster 1974; Hedges 1989: 24–5). Consequently, in the early years, many of the elements of infrastructure and organization of the Lifeboat Services in the UK and Australia were similar—use of yawls as lifeboats, the integral relationship between lifesaving, the lifeboat crew and the Lighthouse Service, wreck bells to alert the lifeboat crew, use of distress and rocket flares for communications to the wreck and many of the other processes employed for rescues (Fig. 9.1).

The rush to the lifeboat shed upon the sounding of the wreck bell seen in Queenscliffe bears close similarities to kindred practices in Kent (Treanor 1904: 65, 143; Benham 1980: 134), where fishermen, Pilots and boatmen usually clambered to get a place on the lifeboat. This behaviour demonstrated that the Lifeboat Service similarly provided the much needed supplementary income. Given the dangerous nature of the work and meagre payment, other incentives must have been available, and Treanor (1904: 55–6) further suggested that this may have consisted of the possible salvage of the wrecks' cargo ("hovel") after survivors were rescued.

Fig. 9.1 Volunteers rush to get on the lifeboat crew in response to the Wreck Bell in Kent (*Image* Franklin 1904)

Wrecking

While the term "wrecking" and "wrecker" is known in several countries, depending upon location, it may refer to several different phenomena. Along the coasts of Florida and the Bahamas, it referred to private operators assisting vessels in peril or aiding those persons in vessels already wrecked (Viele 2001; McKinnon 2010). In some instances, it has been used to allude to the processes of salvage or ship breaking. The best known usage refers to the act of luring vessels ashore using false lights (e.g., Bathurst 2006), immortalized in popular literature through various fictionalized accounts ranging from du Maurier's (1936) "Jamaica Inn", to Proulx's (1993) "The Shipping News". A fictionalized version of how Eriskay Islanders in the Outer Hebrides removed 28,000 cases of whisky from the S.S. *Politician* when it stranded on their shores in 1941 was also transformed into the popular film "Whiskey Galore" (Hutchinson 1990).

In the eighteenth and nineteenth century, there were numerous reports world-wide of false lights being set in places where vessels might confuse these beacons with expected navigational facilities. For instance, Bradlee (1923: 12) detailed how a vessel cruising along the coast of Sandy Hook (New Jersey, USA) in 1820 saw a beam he took to be the main lighthouse and later spied two beacon lights, as expected, to lead vessels into the port. However, breakers were soon sighted ahead, and the vessel was forced to stand off the coast. Just before dawn the lights were

extinguished and men were seen on the beach at daybreak. The captain was convinced that these men were involved in wrecking, as the lights had been located 18 miles from the actual port and this was not the first instance of this activity which had also been reported being undertaken along the New Jersey coast. This case bears remarkable resemblances to the *Sussex* shipwreck near Queenscliffe, where unexplained fires ashore were confused for expected lead lights. Similar cases were also reported at Barnegat (also in New Jersey) in 1839, where the whole community would turn out to loot vessels that had been lured ashore with false lights, and the community was regionally known as the *Barnegat Pirates*. Wreckers were also reported at Block Island (Rhode Island) in the eighteenth century (Bradlee 1923: 183–4).

Deliberate wrecking was represented as a major problem in the UK, particularly in the first half of the nineteenth century. Bathurst (2000: 28) demonstrated that many small maritime communities around the British coastline relied heavily on shipwrecks to supplement their often meagre incomes. Certain areas of the British coast became known as notorious wreckers' haunts, including Cornwall, the Scilly Isles and the Hebrides where it was even claimed that the communities ignored and often murdered shipwreck survivors to protect their own identities and activities. These practices were still being recorded in the 1840s, and Cornish wreckers who were often tin miners or fishermen, were known to conceal their loot through burial close to the wreck site, or hidden in ponds or in the roofs and/or under flagstones in their houses (Larn and Carter 1973: 18–24, 148). Customs officials sometimes turned a blind eye or were bribed to ignore these practices (Bathurst 2000: 29).

When lighthouses were introduced, UK wreckers established substitute lights in the vicinity to confuse Pilots into running onto a dangerous shore (Bathurst 2000: 31). Cornish wreckers were reported as attempting to lure unwary ships onto rocks by lighting bonfires on dangerous coastlines, or by tying lanterns to horses' tails to imitate the movement of a ship. The highlanders and islanders of Scotland were rumoured to be enthusiastic wreckers. Robert Stevenson, one of the instigators of the British Lighthouse Service, remarked that so many wrecks had taken place on the Isle of Sandy that local fences were constructed of shipwreck timbers instead of stone—a situation also recounted in oral histories in western Victoria, Australia. Property rents were also said to be higher on the sides of the island that experienced the most shipwrecks. The high number of wrecks on one side of the island led to increased affluence among the northern population, whereas the southerners were poor. On another island he noted that after a ship laden with wine had wrecked there, the villagers now took claret with their morning porridge. When Thomas Smith and Robert Stevenson proposed the introduction of lighthouses along the British coast in the late eighteenth century, it was vigorously opposed by the wrecking communities, who saw their livelihood at stake (Bathurst 2000: 31–32).

Historical examples of individuals and communities praying for wrecks have been reported by numerous authors worldwide. Benham (1986: 92) stated a famous prayer existed in the northeast of the Britain: "Please God send me a ship ashore before morning". Similar behaviour had been historically observed in Scilly, Isle of Wight and St Helena (Larn 1993: 43; Francis and Tute 1981: 24; Damany 1889: 521–523;

Ellis 2003: Historical Notes). The local minister of the Isle of Sandy was known to have prayed for wrecks to take place there (Bathurst 2000: 31). Wrecks were still being viewed as divine providence in the late nineteenth century: "What would have been viewed as a disaster in the 1850s was viewed as a godsend in the 1870s" (Benham 1986: 1983).

Increased UK Customs and smuggling patrols during the early nineteenth century led previously opportunistic wreckers to mostly stay within the boundaries of the law, by first assisting with the wrecked vessel's crew, after which they were entitled to salvage the vessel and its cargo (Bathurst 2000: 30). This practice was comprehensively documented by Treanor (1904), a Mission to Seaman Chaplin at Deal and the Downs on the south east coast of England. His 1904 work outlines the reliance of small maritime communities in this area on salvage work (locally called "hovel") at the wreck trap known as the Goodwin Sands (sandbanks), as well as making accusations of their leading vessels into distress and their "rapacity" in dealings with crew and survivors (Treanor 1904: 41–2). Nor was wrecking isolated to English-speaking countries. Rönnby (1998) noted a strong tradition of wrecking captured in oral traditions at Södertörn in Sweden.

Wreckers and Professional Salvors

Wrecking in the form of salvage activities along the Dry Tortugas region of Florida was initially undertaken by the local Indigenous population, who took advantage of the first shipwreck incidents in the region. Later, the Bahamians combined turtle hunting with opportunistic salvage of wrecked vessels, and salvage rights claims were adjudicated in the West Indies Islands. There are some accounts from this area of "moon cussers" who lured vessels onto reefs with false lights. However, Souza (1998: 25–27) maintains that most of these activities from 1835 onwards were highly organized and often licensed wrecking (salvage) ventures, that took advantage of shipping tragedies to first save the passengers and then to exploit the vessel for economic gain. Wrecking was also undertaken in the Thunder Bay Region, Lake Huron, USA, where many regulated wrecking and salvage firms were based in the early twentieth century at the City of Alpena (US Dept. of Commerce et al. 1999: 138). However, the activities of these groups sometimes also led to misconceptions regarding their legality and morality (Viele 2001).

Opportunistic Looting and Beachcombing

Until 1852, when the official Receivers of Wreck were appointed under the Customs Consolidation Act (UK), wreckers and beachcombers could to some extent stake a claim of salvage as a legal right, as landowners could claim the "privilege of right" to anything washed up on their foreshore. Tenants loosely interpreted this

law to validate their looting. They also justified their activities as divine intervention, as the wreck was an act of God which had been sent to ease their (the community's) hardship (Bathurst 2000: 3–4). Bathurst (2000: 30) claimed that wrecking activities developed into part opportunism, part Marquis of Queensberry (boxing) rules and part amateur criminality. These coastal populations regarded the shipwreck cargos as a perk of nautical life and their inalienable right to plunder. In some communities, such as the Hebrides, all basic necessities had to be imported due to a lack of suitable resources on the islands and the islanders relied heavily on flotsam and wreckage for housing construction, heating and food cultivation/supplementation (Bathurst 2000: 29).

Goldsmith Carter (1945: 14–5) observed traditional practices associated with wreck salvage in Aldeburgh (UK) in the early twentieth century. Many local mariners used traditional weather signs such as cloud shape, colour, movement and the sound of the wind through the reeds to predict that it would be "an ideal day for a wreck" and forthwith gathered by the lookout tower to gaze expectantly out to sea. Furthermore, the local community knew that on days when the sea was eroding the foreshore, treasures in the form of coins, jewellery and amber would appear in the surf. Benham (1986) comments on the inevitability of shipwrecks along the English Coast, which were so common that local people grew blasé to their occurrences and anticipated their arrivals.

Thoreau (1865: 27–8) recorded that the coastal communities in the Cape Cod region (Massachusetts) also viewed wreck debris and other flotsam as Godsend, as God provided these resources which were not available for them on the land. Thoreau's reports are tinged with a degree of abhorrence, contrasting humanitarian and opportunistic attitudes where the community provided shelter for shipwrecks survivors on the beach, often in their own homes, but were also indifferent to the presence of victims' bodies on the beach:

> This wreck had not produced a visible vibration in the fabric of the community…those bodies were but other weeds the tide had cast up, but were of no use to him…why waste time on awe and pity…(Thoreau 1865: 4–5).

Thoreau also recorded informal etiquette systems during beachcombing, such as the use of stones or sticks to signal that flotsam piles had been collected and were claimed. This behaviour has parallels in England, where the collection of coal was also undertaken on the Goodwin Sands. Boatmen would sail out to the area known for its wrecked vessels and collect coal at low tide (Treanor 1904: 26), while Thoreau (1865) observed similar behaviour in Massachusetts. Furthermore, the use of specialized contemporary material culture to collect coal, other debris and shellfish from the water was also noted in other communities, who also used "rakes" to collect shoreline resources (Thoreau 1865; Evans 1957: 225). The common practice of throwing coal overboard to lighten a vessel first (as it was often considered of lower value than the vessel) also generated a situation where the jettisoned coal could be freely collected during beachcombing as it was not covered under salvage law restrictions (Benham 1980: 57, 67, 83, 98).

We also reiterate here that while close examination of historic accounts of beachcombing and looting are important for understanding behaviour, consideration of modern parallels such as the 2007 grounding of *Napoli* in Lyme Bay (UK) (Cook and Tolia-Kelly 2010) might also provide valuable insights into the psyche behind such behaviours, as well as the trajectories of objects.

Smuggling

Looting and smuggling was an integral part of many maritime communities around the world (Larn and Carter 1973). For instance, the Rhode Island economy was heavily reliant on smuggling during the eighteenth century when smuggled goods were openly offered for sale on the market. Despite the heavy British military presence in the region, tea, sugar and French goods were popular contraband, which were either hidden among cargo in chest or in hogsheads, or smuggled ashore and transported overland in wagons to the port of Newport. When naval vessels discouraged this practice, it was circumvented through the transfer of goods elsewhere further along the coast or directly into small boats at sea where goods were offloaded directly onto the beach. Fishermen were extensively involved in the contraband trade, and these activities were further encouraged by a lack of sufficient Customs Officers to patrol the area. Imported French goods were considered luxury status items among the elite, and Schmidt and Mrozowski (1988: 36–39) suggest that evidence of smuggling may be archaeologically visible in the cargoes of wrecked ships, or in rubbish dumps in the form of imported exotic alcohol and perfume bottles. The practice of burying smuggled or looted goods was reported in New Jersey in 1839. Goods were found eroding from coastal sand dunes close the township of Barnegat, which was a known wrecking community (Bradlee 1923: 182–183).

Many researchers have also described how smuggling was a major industry in many small ports of southern England (particularly around Cornwall, Devon and Kent) in attempts to evade government taxes and duties (Vivian 1969; Schmidt and Mrozowski 1988: 41; White 1997: 30; Bathurst 2006). Whole communities were implicated in the trade, including the clergy and women, while local fishermen were often involved in the retrieval of submerged contraband moored to the sea floor in barrels. Smugglers resorted to lighter, smaller craft and lug sails which enabled them to beach their boats in areas inaccessible to the larger craft and also sail closer to the wind (Schmidt and Mrozowski 1988:41; White 1997: 25–30, 36). These practices continued in the Cornwall area until at least the 1850s, by which time the Customs Service and their revenue cutters had significantly reduced the viability of smuggling (White 1997: 16). During the 1820s, smugglers even resorted to constructing false compartments inside vessels to hide undeclared cargoes (Treanor 1904: 41–2; Schmidt and Mrozowski 1988: 41). For both the UK and the USA, many researchers document an almost universal disdain for authorities within small maritime communities (Treanor 1904: 69; Goldsmith Carter 1945: 15; Westerdahl 2003b: 19).

It is obvious that the shipping (and subsequent shipping mishap) landscapes of Queenscliffe have been heavily influenced by the expansion of Western European (especially British) culture and its incorporation and hybridization within the new colonies. The transportation of cultural ideologies and practices from ancestral homelands by immigrants formed the basis of new cultural landscapes in the adopted country. This has further ramifications for the possibility of cultural landscape studies that stretch across international boundaries, offering new opportunities for studies of regional cultural landscape diversity and evolution that are akin to the Indigenous expansion of culture into the Pacific (Gladwin 1962; Lewis 1980; 1994; Irwin 1992; Gosden and Head 1994) and northern Europe (Westerdahl 2003a: 481). This observation highlights the potential enormity of cultural landscapes that might stretch across vast geographical areas but may not (initially) be readily apparent when investigating defined regions. The differentiation of local transported practices, technology, lore, custom and ideologies from their ancestral homelands (e.g., tourist landscapes) further reiterates the dynamic nature of localized landscape evolution.

The Ethno-Archaeological Approach

This study has made a case for the need to examine an extended range of underwater, terrestrial and intertidal sites not previously considered within maritime archaeological studies. It has been demonstrated that stranding and grounding incidents and their associated flotsam and jetsam traps often leave large tangible archaeological signatures. Maritime infrastructure sites associated with shipwreck mitigation strategies have also been shown to demonstrate large and/or complex archaeological signatures which, when considered in conjunction with ethnographic, historical and other data sources, offer plausible demonstrations of cultural practices and social behaviours. In particular, underwater infrastructure sites offer great utility in expanding the scope of landscapes research, but has only begun to be accessed worldwide.

Perhaps the greatest utility of using an ethno-archaeological approach towards studying the maritime cultural landscape has been to highlight the economic importance of shipping mishaps to local communities. This is particularly true in regard to aspects of looting and black market practices, which are seldom if ever documented in historical records. By understanding the practices associated with looting behaviour, which were predominantly revealed through oral histories and toponymy, it has been possible not only to understand the importance of these resources to the community, but also to predict the nature of new types of archaeological sites, which will undoubtedly be discovered at some stage in the future.

The approach advocated here offers the opportunity to extend maritime archaeological investigation beyond purely functional and/or particularistic considerations to aspects of behaviour and societal structuring associated with maritime

industries and communities. This avenue might further be extended to address the debate regarding cultural "maritimity" of a region as defined by Westerdahl (1995: 213; 2000: 13; 2002b: 65). It is clear from this study of the role that shipwrecks played in local communities that maritime activities were not just specialized occupations within a terrestrial environment (as suggested by Hunter 1994; Parker 1995). Instead, they underpinned the identity of an entire community as a maritime culture and/or centre, and was inclusive of many terrestrially based occupations. Although aspects of maritime culture have deliberately not been included in this volume, this methodology has enabled further examination of this notion through the provision of a new mechanism of investigation.

Shipping Mishaps and Maritime Cultural Landscapes

In Chap. 2, we listed some of the key elements in considering the nature of a maritimecultural landscape (and by this, we refer to the landscapes centred on use of the sea), foremost of these being the continuity between land and sea. The sea is imbued with as much cultural definition and meaning as the land, dependent on the viewpoint of the user. There is knowledge of marine and sub-marine environments, their physical nature and resources, resulting in bodies of secular and sacred understanding, belief and practice. Indeed, some mariners are more at home on the sea than on land, although they utilize both regions. The only distinction that may be observed in these situations is that due to their different environments, the sea and land are differentially accessed, but are utilized as a holistic landscape nether the less.

It is also impractical to distinguish between so-called natural and cultural areas within any landscape based on whether they are wet or dry, as whenever any area is subject to human appreciation, it automatically attains cultural value. The Queenscliff case study has demonstrated that although the sea is often interpreted as a natural environment, it contains not only physical resources including the materials of shipwrecks, stranding and mishap prevention, but also social resources associated with these events and processes. The sea can also provide a liminal space, with the events of shipping mishaps and especially catastrophic wreck often understandable as transformative episodes for those aboard and ashore. Participation in such events could potentially alter the nature of the persons, or how they were perceived socially and economically, or even result in an end to life. The sea and the remains of vessels could also be used as a burial ground to hold the remains of the departed, creating a sacred quality (Gibbs 2005).

One of the aims of this volume was to challenge the prevailing conception of shipping mishap sites as so-called relict landscapes or purely archaeological sites. We have shown that many retain ongoing significance within local (and sometimes more distant) communities, as sites of resource procurement and for the reinforcement the cultural identity through continuing knowledge, folklore, practice and tradition. Of note for maritime archaeological studies, it has been demonstrated that

shipwreck and shipping mishap sites, which have long been considered "time capsules" by heritage managers, have been and still are actively directly and indirectly accessed by local communities. Shipwrecks located close to communities were often accessed almost immediately from the time of their loss. These interactions both extracted from and added to the fabric of the site as well as potentially altering its structure, contributing to its archaeological signature (c.f. Muckelroy 1978; Gibbs 2006). In some cases, these interactions were minimal, especially where the wreck lay in deep or dangerous waters. In other instances the interactions were significant, resulting in substantial proportions of (or even all of) the cargo and structure of the vessel being removed.

As technologies changed and made interactions with previously inaccessible sites possible, or the economic, social or symbolic values of a vessel and its materials have shifted over time encouraging recovery, sites might be revisited over time by different groups and individuals, including systematic and opportunistic salvors. Although most maritime archaeological site formation studies concentrate on how extractive cultural and/or environmental filters affect the wreck site, rescue, salvage and looting operations also have the potential to add to and extract from the archaeological materials on these sites. Furthermore, associated shipwreck materials may occur far beyond the realm of the primary wreck site. It is only through the adoption of a maritime cultural landscapes approach that the connection between these seemingly disparate sites may become apparent.

Although in this study we have particularly identified those elements of the maritime cultural landscape most relevant to shipping mishaps, the reality is that these were interwoven with many other activities, practices, perceptions and perspectives, so that in effect there were multiple cultural landscapes (examined further in Duncan 2006). As for terrestrial components of maritime landscape(s), we need to explore multivalency, as different individuals and groups can hold varied but potentially overlapping perceptions of the marine world and its uses. For instance, the Queenscliffe townsfolk including the government officers who provided the formal maritime services did not necessarily explicitly perceive a singular "landscape" of shipping mishaps, but understood and responded to these events and places as a component of a range of other activities and imperatives. In many respects, identifying a distinct landscape of shipping mishaps is an artificial construct, although it serves our purposes in exploring how the different elements and data sets might be investigated and understood, and as a means of advancing maritime archaeological studies of such phenomenon. In some instances, these individual and group perceptions, uses and responses overlapped and had commonalities, while at other levels they were separate and distinct, or even conflicting. For instance, shipping mishaps were at once sources of tragedy and despair, while also creating opportunity and hope by providing resources for nearby communities. The resulting sites or places therefore held multiple meanings depending upon perspective.

The ways that individuals and groups used the water, and the transmission of knowledge including both formal and folkloric structures, proved a significant element of the Queenscliffe study. Information about places and events, including

shipping mishaps, was sometimes only available through particular subgroups, defined by family, gender, industrial, geographic, religious or other ties. It is clear that the ocean held a palimpsest of meanings, and that for many individuals and groups it is an integral component of a holistic landscape that includes both the terrestrial and marine environments (as proposed by Firth 1993: 1, 2; Darvill 1999: 104; Jasinski 1999: 17; Roe and Taki 1999: 415, 419). Shipping mishap sites (both above and below water) were sometimes utilized as tangible anchors that actively reinforced cultural identity and long-term connections to place. The values ascribed to these features have been shaped and reshaped over the years to strengthen the ideologies and cultural practices present in the town. This is particularly evident where shipwrecks are assigned cultural values as memorials (e.g., *HMAS Gooran-gai*), or those that act as prompts to retell communal history linked to tragedy, bravery, or folkloric acts of resistance against authority through looting.

It has been shown that shipping mishaps acted as a mechanism to facilitate ties within and beyond the community from the time of its foundation. Several local informants explicitly recognized that the Queenscliff community's identity was drawn from its maritime services and connections, and contrasted these bonds to other, less defined community groups. For instance,

> The farming community did not have a Jack Loney [a famous local identity who strongly promoted Victoria's shipwreck heritage] to publicize it. Jack made shipwrecks important to Victoria. The Queenscliff identity was shaped by shipwrecks and the military. (Hudson 2001)

Social status in Queenscliffe was based upon a range of factors, including membership of particular professions and service groups, religion, as well as ethnicity. However, in times of crisis, these categories might be subverted by cross-cutting ties. As we have shown, despite their usual place at the low end of the socio-economic ladder, while manning the lifeboats during time of shipping crises, members of the fishing community were suddenly elevated in status. Their unique knowledge of local waters and bravery in saving lives (often under extremely dangerous conditions) combined to produce a temporary shift in their social standing. Conversely, the military personnel so often lauded for their roles as the community protectors were sometimes chastised for their apparent failure to act during times of crises. Similarly, when Pilots who were normally respected within the community engaged in opportunistic salvage, especially of large sums of specie, they were often denigrated. In times of crisis, many of the normal boundaries regulating social interaction within Queenscliffe were transcended as disparate community members from all ends of the social spectrum worked together. It is therefore significant that shipping mishaps not only galvanized local communities, but also polarized specific groups dependent on what phase of the incident they were involved in and their subsequent behaviour.

The evolution of the maritime cultural landscape(s) associated with shipping mishaps has also been shown to be a function of a variety of economic, social, political and technological forces. Shifting perceptions of risk and responsibility as well as improved understandings of local hazards arose through proactive processes

of identification (such as bathymetric survey) as well as through continuing incidence of shipping mishaps (especially catastrophic wrecking). The capacity and will to purchase or adopt new technologies and processes (including the creation of government controlled maritime services and the development of ordered risk management strategies), backed by the ability to enforce compliance of the law, also came about through changing perceptions of the impact of mishaps. Popular and political pressure often formed the impetus for such changes, often as a reaction to community experience or perception of shipping mishaps. New risk mitigation mechanisms at existing and/or new locations, as well as proscriptive regulations including the definition of sailing routes, are visible in various material ways through the shifting distribution and nature of archaeological sites, including shipwrecks.

Underpinning this exploration of the Queenscliffe community's responses to shipping mishaps and the evolution of these cultural landscape(s) over time has been our attempt to align these cognitive and physical responses with the structures of response to risk and to crisis. Hazard reduction was clearly one of the major considerations that shaped that landscape and resulted in change over time. It has been shown that technological advancements and improvements in lighthouse and beacon development and placement, lifeboat and rocket technology, and hydrographic surveying standards, were often used as reactive risk mitigation strategies to reduce the potential for shipping mishaps. During catastrophic shipping incidents, the community responded in ways consistent with patterns seen in other disaster scenarios, contributing also to the long-term changes in landscape in various ways, including encouraging improvements to risk mitigation systems. The dissonance between the community (and outsiders) acting as saviours versus salvors (an aspect discussed further by Benham 1986: 97) might also be understood in terms of the psychology of crisis response, although much further investigation is needed. Shipping incidents therefore both shaped and were shaped by the extent of these developments. Furthermore, the changing political, administrative, authoritative and other social or community ideologies (and the reactions and resistance to them), economic market forces and attempts to reduce risks to profit and environmental determinants have all contributed to the reactive shipwreck landscape evolution.

A maritime cultural landscape(s) approach also has further implications for heritage site management, as the true multivalent nature of features/events can now be recognized. This new stance contrasts starkly to some past considerations of heritage sites, where the functionality and significance of the site was often only officially recognized from a singular perspective, with any disconformity between recognized values presenting more problems for site management than solutions. This approach has further connotations in relation to maritime archaeological sites, as it enables a wider appreciation of shipwrecks as places of continuing community value for economic, recreational and other practical/symbolic reasons, as opposed to their general previous consideration as non-systemic archaeological sites of historical significance. Despite legalities, latent community perceptions of rights of this access to shipwreck- and shipping mishap-related resources as forms of "traditional practice" (c.f. Knowles 1997) demands recognition. These observations

have the potential to expand shipwreck research into exciting new areas that focus on behavioural aspects of coastal life and address the previous criticisms made of this field.

Maritime Cultural Landscapes Versus Regional Site Studies

One of the drivers for undertaking this study was the continuing focus of maritime archaeology on the sites of shipwrecks. Although this has changed markedly over the last 10 years as a function of the emergence of cultural landscape studies, there has been minimal integration of terrestrial and maritime studies beyond the littoral interface. Given that there are already large databases of historic and archaeological sites and places (both shipwreck and terrestrial), the approach presented here is intended to suggest opportunities for researchers to expand their focus to consider the interconnectedness of maritime regional activities and perspectives that cross the land/sea divide.

As has been amply demonstrated in the previous chapters, the potential complexity of community reactions to shipping mishaps is immense and intricate. Many of the archaeological sites and historical and ethnographic observations made during the study ultimately had to be omitted from this current volume for the sake of brevity (although see Duncan 2006). The eloquent simplicity of a maritime cultural landscape approach is that it enables examination of the causes and effects of shipping mishaps to be analysed in conjunction with multiple other aspects and themes, including relationships many may not be initially obvious. Furthermore, by analysing both the spatial and temporal aspects, the long-term effects of repeated and often predictable shipping mishaps on nearby communities can be investigated.

One issue raised by this study is the extent of cultural landscapes. For instance, the Queenscliffe shipping mishap landscapes are not bounded to those who live in that locality, but are a suite of multiple landscapes that extend to Lorne, Ballarat, the Western District, Geelong, Melbourne, Gippsland, Bass Strait and far beyond, considering also where vessels and those aboard originated from and the impacts of shipwreck on people and places on the other side of the world. Perhaps the question is whether landscapes studies should investigate regions, or directly focus on people? This study initially began as an investigation of shipwrecks near a coastal township as part of a fairly traditional regional landscape study, but transformed into an investigation of how shipping mishaps affected people and what these events meant in short- and long-term perspectives (i.e. in creating a cultural landscape). The fundamental difference between the two approaches is crucial. A region is present in the geography of the world, whereas cultural landscapes are resident in peoples' minds. This represents the basic difference between physical landscape studies (rooted in the discipline of geography) and cultural landscapes which are embedded in the consciousness of its inhabitants (and are anthropological in nature).

Conclusion

The investigation of documentary, archaeological, ethnographic and oral historical (or folkloric) data has demonstrated that shipping mishaps were a pervasive element in many facets of Queenscliffe culture since its foundation. These events have continued to shape (and reshape) the cognitive and physical cultural landscapes of Port Phillip Bay. They have added new sites, features and archaeological deposits in the form of derelicts or jettisoned material. They have prompted changes to the environment by removing hazards and introducing navigation structures or services, as well as in less direct ways by influencing the physical development of the wider community.

Shipping mishaps had significant effects on the social and economic structure of the Queenscliffe community, not only through providing the vehicle for implementing a range of altruistic ideals and practices for the prevention or mitigation of disasters or for the rescue and treatment of victims, but also by introducing a diverse range of short and long-term economic opportunities. Shipwrecks, strandings and the various formal and informal responses to them further altered perceptions and actual use of the landscape, including symbolically through the identification of hazards and dangerous regions, and by associated toponymic marking of places and memorialization of events. In many instances, responses to shipping mishaps, especially catastrophic wrecks, could cross-cut social boundaries and unify normally disparate groups and individuals, helping to create a particular shared identity for the Queenscliffe community. This identity includes a set of informal and formal beliefs and practices associated with shipping mishaps, the treatment of these incidents and victims, and the materials that result from them. Some of these are almost certainly grounded in older folkways and traditional practices, transported to the regions by successive waves of immigrants. These were then adapted in response to local environmental and social circumstances, possibly including hybrid forms and variants resulting from the synthetic nature of the diverse communities found in colonial settings such as this.

The adoption of a cultural landscapes approach has facilitated the holistic investigation of a maritime community using many disparate approaches and at multiple geographical and social levels. It has led to the identification of many different types of activities, practices, belief systems and ideologies that have previously been unaddressed, unrecognized or invisible in other Australian maritime studies. It has also demonstrated that for every landscape feature and change, there is likely to be more than one interpretation or meaning, dependent on one's position within (and between) the various social groups of any township. This enables and encourages researchers to understand and explore the complexity of social and environmental landscapes, where relationships and interactions have tangible physical expressions that may not necessarily be confined to archaeological deposits alone (such as empty space and environmental change).

We hope that the observations offered in this volume not only promote applicability of this approach and methodology for future investigations of maritime

cultural landscapes, but might also provide encouragement for a reconsideration of the future scope and direction of maritime archaeology. In particular, we hope it encourages comparison and contrast, seeking to understand variability across time, space and cultures.

To close, we have endeavoured to show that in the mindset of the Queenscliffe community, shipping mishaps did not necessarily only indicate a dangerous coast, but also represented a coast of opportunity. Shipping mishaps do not represent only dead ships associated with an isolated event, but also in a fundamental way create new landscapes and places.

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