

Junior
Worldmark
Encyclopedia of
**Physical
Geography**

**Junior
Worldmark
Encyclopedia of
Physical
Geography**

VOLUME 2

**Congo, Democratic Republic of the
to India**

**Karen Ellicott and Susan B. Gall,
Editors**



JUNIOR WORLDMARK ENCYCLOPEDIA OF PHYSICAL GEOGRAPHY

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Countries of the World, by Continent

Africa

Algeria
Angola
Benin
Botswana
Burkina Faso
Burundi
Cameroon
Cape Verde
Chad
Comoros
Congo, Democratic Republic of the
Congo, Republic of
Côte d'Ivoire
Djibouti
Egypt
Equatorial Guinea
Eritrea
Ethiopia
Gabon
Gambia, The
Ghana
Guinea
Guinea-Bissau
Guyana
Kenya
Lesotho
Liberia
Libya
Madagascar
Malawi
Mali
Mauritania
Mauritius
Morocco
Mozambique
Namibia
Niger
Nigeria
Rwanda
São Tomé and Príncipe
Senegal
Seychelles
Sierra Leone
Somalia
South Africa
Sudan
Swaziland
Tanzania

Togo
Tunisia
Uganda
Zambia
Zimbabwe

Asia

Afghanistan
Armenia
Azerbaijan
Bahrain
Bangladesh
Bhutan
Brunei
Cambodia
China
Cyprus
East Timor
Georgia
India
Indonesia
Iran
Iraq
Israel
Japan
Jordan
Kazakhstan
Korea, North (Democratic People's Republic of)
Korea, South (Republic of)
Kuwait
Kyrgyzstan
Laos
Lebanon
Malaysia
Mongolia
Myanmar
Nepal
Oman
Pakistan
Philippines
Qatar
Russia
Saudi Arabia
Singapore
Sri Lanka
Syria
Taiwan
Tajikistan
Thailand

COUNTRIES OF THE WORLD, BY CONTINENT

Turkey
Turkmenistan
United Arab Emirates
Uzbekistan
Vietnam
Yemen

Australia

Australia

Europe

Albania
Andorra
Austria
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Italy
Latvia
Liechtenstein
Lithuania
Luxembourg
Macedonia
Malta
Moldova
Monaco
Netherlands
Norway
Poland
Portugal
Romania
Russia
San Marino
Serbia and Montenegro
Slovakia
Slovenia
Spain
Sweden
Switzerland
Ukraine
United Kingdom
Vatican City

North America

Antigua and Barbuda
Bahamas
Barbados
Belize
Canada
Costa Rica
Cuba
Dominica
Dominican Republic
Ecuador
El Salvador
Guatemala
Haiti
Honduras
Jamaica
Mexico
Nicaragua
Panama
Puerto Rico
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines
United States of America

Oceania

Note: The island nations lying in the Pacific Ocean are not part of any continent.

Fiji
Kiribati
Marshall Islands
Micronesia
Nauru
New Zealand
Palau
Papua New Guinea
Samoa
Solomon Islands
Tonga
Tuvalu
Vanuatu

South America

Argentina
Bolivia
Brazil
Chile
Colombia
Paraguay
Peru
Suriname
Trinidad and Tobago
Uruguay
Venezuela

Reader's Guide

Junior Worldmark Encyclopedia of Physical Geography presents a comprehensive survey of the physical geography of 192 countries of the world plus Taiwan, Antarctica, and Puerto Rico.

The entries are arranged alphabetically by country in five volumes. Following the format of other popular titles in the *Junior Worldmark* series, information in each entry is presented in a consistent format, allowing student researchers to find information and compare countries quickly and easily.

A topographic map—with notable mountain ranges and peaks, lakes, rivers, deserts, and coastal areas labeled—accompanies each entry. In addition, more than 200 photographs illustrate the varied landscapes found in the countries of the world. Adding further interest are the “Did You Know?” boxes appearing in the entries, noting interesting or unusual geographic features or facts or explaining regional geographic references.

Organization

Each volume begins with the contents listed for that volume, followed by a cumulative table of contents for all five volumes in the set. To help researchers who wish to identify a country within one of the world's continents, a finder table—Countries of the World by Continent—appears at the front of each volume. Words to Know, a glossary of terms related to geography, completes the front matter. Entries for individual countries follow. Although all numbered rubrics are included in every entry, entries vary in length depending primarily on the geographic complexity of the country's land area.

Each entry begins with a list of key facts about the physical characteristics of the country; measurements are provided in both metric and English units. Student researchers should be reminded that geography is an imprecise science, and measurements of geographical features may vary from source to source.

Key Facts

■ Official name

The countries of the world are referred to by a common name; the more formal official name is listed here.

■ Area

The country's area, usually including islands, is provided in square kilometers and square miles.

■ Highest point on mainland

The height, in meters and feet, is given for the highest point on the mainland portion of the country. For most countries, this is also the highest point anywhere in the country.

■ Highest point in territory

For some countries with islands and territories, the highest point not on the mainland is provided in meters and feet.

■ Lowest point on land

The elevation, in meters and feet, for the lowest point on the mainland portion of the country is provided.

READER'S GUIDE

■ Hemispheres

The country's hemispheres (Northern, Southern, Eastern, and Western) help the researcher locate the country on the globe.

■ Time zone

The time zone of the country's capital is provided, with the time related to Greenwich Mean Time (GMT). For some large countries, more than one time zone may be listed.

■ Longest distances

Measurements in kilometers and miles of the country's widest points from north to south and east to west are given. For some countries, longest distances may be measured on a slight diagonal (northwest to southeast, for example).

■ Land boundaries

The total distance making up the country's borders with other nations is provided in kilometers and miles, followed by the border distances with the individual neighboring countries.

■ Coastline

Coastline measurements, in kilometers and miles, are approximate. Coastline measurements are likely to vary from source to source.

■ Territorial sea limits

The territory extending into the ocean over which the country claims control or jurisdiction. Territorial sea limits are given in kilometers and nautical miles, and generally govern activities such as fishing and mineral rights.

The first four numbered rubrics offer a general overview of the country.

1 🌐 LOCATION AND SIZE

This section gives the reader an overview of where the country lies and provides its relation to the bodies of water around it. Also included is information about whether the country is divided into states, provinces, or other internal administrative units.

2 🌐 TERRITORIES AND DEPENDENCIES

Many countries exercise jurisdiction over territories—often islands—that are not part of the mainland. This section lists any such territories and dependencies.

3 🌐 CLIMATE

The general climate of the country is described, with a table providing seasonal temperature ranges included for many countries. General information about rainfall and snow patterns is also included here.

4 🌐 TOPOGRAPHIC REGIONS

An overview of the general topography (shape of the country's land surface) is provided, with key features (mountain ranges, plateaus, deserts, valleys, lakes, rivers) noted.

The next eight numbered rubrics—5 through 12—describe specific geographic features. All entries include all eight headings. Since all countries do not include every geographic feature, individual entries note the absence of specific features.

5 🌐 OCEANS AND SEAS

The oceans and seas bounding the country are listed. Subheadings describe specific features of the country and its coastal areas. Subheads are used in entries as appropriate and may include:

READER'S GUIDE

Seacoast and Undersea Features

Includes discussion of nearby undersea features of note, such as deep ocean trenches or coral reefs.

Sea Inlets and Straits

Includes major bays, gulfs, sounds, channels, straits, and other sea inlets that characterize the coastal areas.

Islands and Archipelagos

Major islands and island chains are described here.

Other Coastal Features

Includes notable peninsulas, isthmuses, and describes the type and quality of the coastal areas.

6 INLAND LAKES

Major and significant lakes are included. When a lake straddles a border between two countries, it is covered in both entries. Major man-made reservoirs are also included in this section in some entries.

7 RIVERS AND WATERFALLS

Describes important rivers, giving length and general characteristics. Also includes major waterfalls.

8 DESERTS

Arid and semi-arid flatland regions are described.

9 FLAT AND ROLLING TERRAIN

Areas that range from flat and treeless to rounded terrain are described.

10 MOUNTAINS AND VOLCANOES

Mountain peaks, including volcanoes, are described here, typically in the context of a mountain range.

11 CANYONS AND CAVES

Notable canyons and cave systems are described.

12 PLATEAUS AND MONOLITHS

Regions of high elevation but with relatively flat terrain and monoliths (huge stone outcroppings) are described here.

The final two numbered rubrics describe notable man-made features, and provide resources for further study. Supplementing the Further Reading suggestions provided in each entry is the Selected Sources for Further Study that appears in the back of each volume.

13 MAN-MADE FEATURES

Notable man-made features—such as dams, canals, major bridges, tunnels, and other structures—that affect a country's geography are described.

14 FURTHER READING

This section lists selected books and Web sites that provide more information on the country's geography.

Additional Features

Additional reference materials appear at the back of each volume. Researchers looking for comparative information on some of the world's key geographic features can refer to a series of Appendixes. These provide the following rankings: continents by area;

READER'S GUIDE

countries by area; countries by population; oceans and seas by area; oceans by depth; islands by area; deserts by area; mountain peaks by height; volcanoes by height; rivers by length; waterfalls by height; lakes by area; and lakes by depth. The seven wonders of the ancient world and seven wonders of the natural world are described in the final two appendixes. Lastly, a listing of selected references for the further study of physical geography completes the backmatter. Volume 5 contains a cumulative general index to all five volumes. Topographic world maps appear on each volume's endsheets.

Photographs

The photographs in *Junior Worldmark Encyclopedia of Physical Geography* were assembled

with assistance from ARAMCO; Raoul Russo, UNESCO imaging; Marcia L. Schiff, AP/Wide World Photos; Maura Malone, EPD Photos; and Mimi Dornack, National Geographic Imaging.

Comments and Suggestions

We welcome your comments and suggestions for features to be included in future editions. Please write: Editors, *Junior Worldmark Encyclopedia of Physical Geography*, U•X•L, 27500 Drake Road, Farmington Hills, Michigan 48331-3535; call toll-free: 1-800-877-4253; fax to (248) 699-8097; or send e-mail via <http://www.gale.com>.

Words to Know

A

aboriginal ④ Something that is the first or earliest known of its type in a country or region, such as an aboriginal forest.

aborigines ④ The first known inhabitants of a country and their descendants.

acid rain ④ Rain (or snow) that has become slightly acidic by mixing with industrial air pollution.

alluvial plain ④ Flatlands containing deposits of alluvium.

alluvium ④ Clay, silt, sand, or gravel deposited by running water, such as a stream or river.

Antarctic Circle ④ (also called South **Frigid Zone**) The parallel of latitude approximately 66°33' south and the region that lies between this latitude and the south pole; the region surrounding Antarctica.

aquatic ④ Of or relating to the water, particularly the animals and plants that live there.

aqueduct ④ A pipe or channel, usually man-made, that carries water from a remote source. Also, a bridge-like structure that carries water over obstacles.

aquifer ④ An underground layer of porous rock, sand, or gravel that holds water.

arable land ④ Land that is naturally suitable for cultivation by plowing and is used for growing crops.

archipelago ④ A group of islands or a body of water containing many islands.

Arctic ④ Relating to the northernmost part of the Earth that lies within and around the Arctic Circle. Also, **arctic**: anything that is frigidly and invariably cold.

Arctic Circle ④ (also called the North **Frigid Zone**) The parallel of latitude approximately 66°33' north and the region that lies between this latitude and the north pole.

arid ④ Extremely dry, particularly applied to regions of low rainfall where there is little natural vegetation and agriculture is difficult.

artesian well ④ A type of well where underground pressure forces water to overflow up to the surface.

atmosphere ④ The air surrounding the Earth's surface.

atoll ④ An island consisting of a strip or ring of coral surrounding a central lagoon.

avalanche ④ A swift sliding of snow or ice down a mountain.

B

badlands ④ Eroded and barren land.

Balkan Peninsula ④ The southernmost peninsula of Europe, which is surrounded by the Adriatic, Ionian, Aegean, and Black seas

Balkan States ④ (also called The Balkans) Those countries that lie on or near the Balkan Peninsula; includes Albania, Bulgaria, continental Greece, southeast Romania, European Turkey, Serbia and Montenegro, Slovenia, Croatia, Bosnia and Herzegovina, and Macedonia.

Baltic States ④ The countries of Estonia, Latvia, and Lithuania. These independent countries were once provinces of Russia and all border on the Baltic Sea.

barren land ④ Unproductive land that is partly or entirely treeless.

barrier island ④ An island parallel to the shore that was formed by wave and tidal action and protects the shore from rough ocean waves.

barrier reef ④ A coral reef that lies parallel to the coast, often forming a lagoon along the shore.

basalt ④ Black or nearly black dense rock, usually formed by the solidification of magma or from some other high-temperature geological event.

basin ④ A depression on land or on the ocean floor. Usually relatively broad and gently sloped, as compared to a trench, canyon, or crater.

bay ④ A wide inlet of a sea or a lake.

bayou ④ A stagnant or slow-moving body of water.

beach ④ An area of sediment deposited along the shoreline of a large body of water through the action of waves and the process of erosion.

bedrock ④ Solid rock lying under loose earth.

WORDS TO KNOW

bight ☉ A bend in a coastline that forms an open bay.

bluff ☉ Elevated area with a broad, steep cliff face.

bog ☉ Wet, soft, and spongy ground where the soil is composed mainly of decayed or decaying vegetable matter.

bora ☉ A very cold wind blowing from the north in the Adriatic Sea region.

broadleaf forest ☉ A forest composed mainly of broadleaf (deciduous) trees, as opposed to a coniferous forest.

butte ☉ An elevated, flat-topped area, similar to but smaller than a plateau or mesa.

C

caldera ☉ A crater formed by the eruption of a volcano.

canal ☉ An artificial waterway constructed to connect two bodies of water or for irrigation of farmland.

canyon ☉ A deep gorge cut by a river, usually found in arid regions and often surrounded by plateaus.

cape ☉ A part of the coast that protrudes into a body of water.

Caribbean ☉ The region that includes the Caribbean Sea, its islands, and the Central or South American coastal areas of the sea.

catchment ☉ Area that collects water.

cave ☉ Hollow man-made or natural passages in the Earth with an opening to the surface.

cay (or key) ☉ A small, low-lying island or reef formed by coral or sand.

Caucasus ☉ Region between the Black and Caspian seas that forms the traditional boundary between Europe and Asia; includes the countries of Georgia, Azerbaijan, and Armenia, as well as parts of southwestern Russia.

Central America ☉ A region of southern North America that extends from the southern border of Mexico to the northern border of Colombia; includes the countries of Belize, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, and Panama

channel ☉ A narrow body of water that connects two larger areas of water; an area where water flows through a narrow restricted path.

cliff ☉ A high, vertical face of rock.

climate ☉ Weather conditions pertaining to a specific area.

cloud forest ☉ A tropical forest that is covered in clouds throughout most of the year, usually located on mountain peaks.

coast ☉ Typically, the land that borders an ocean or sea.

coastal ☉ Relating to the area along the coast.

coastal plain ☉ A fairly level area of land along the coast of a land mass.

coniferous forest ☉ A forest consisting mainly of evergreen trees such as pine, fir, and cypress trees.

conifers ☉ Trees and plants that have needle-like, or scale-like, leaves and also produce cones; evergreens.

contiguous ☉ Sharing an edge or boundary or connected without any breaks, as in *the 48 contiguous states*.

continent ☉ One of the seven major land masses of Earth.

continental climate ☉ A climate typical of the interior of a continent. Particulars can vary widely depending on the region, but in general, areas with a continental climate have greater variations in daily and seasonal temperatures than areas with a maritime climate.

continental divide ☉ An extensive elevated region of land that separates the drainage basins of a continent so that the rivers on either side of the divide flow in opposite directions.

continental shelf ☉ A shallow submarine plain extending from the coast of a continent into the sea and varying in width; typically the shelf ends in a steep slope to the ocean floor.

coral reef ☉ A ridge in warm water areas of the ocean made up of the limestone and calcium deposits of coral animals.

cordillera ☉ A continuous ridge, range, or chain of mountains; part of the principal mountain system of a continent or country.

crater ☉ A bowl-shaped depression on the surface of the Earth, generally with relatively deep, steep, sides. The most common type of crater is a caldera, formed by volcanic eruption. Other craters are created by explosions or by impact, such as from a meteoroid.

cyclone ☉ A violent rotating wind storm, particularly one that originates in the southwestern Pacific or the Indian Ocean. Cyclones rotate counterclockwise in the northern hemisphere and clockwise in the southern hemisphere.

WORDS TO KNOW

D

dam ☉ A structure built across a river that restricts its flow, causing a reservoir to form behind it. Dams are often used to generate hydropower.

deciduous ☉ Relates to trees or shrubs that shed their leaves on a regular basis, as opposed to those that retain them (coniferous).

deforestation ☉ The removal or clearing of a forest, usually to enable the land to be used for another purpose, such as agriculture or settlements.

delta ☉ Triangular-shaped deposits of soil formed at the mouths of large rivers. They are formed out of the silt carried by the river and have the effect of forcing the river to split into distributary channels, sometimes over a very wide area.

depression ☉ Any place where the Earth's surface is lower than the surrounding terrain.

desert ☉ Any dry land area with little precipitation and sparse vegetation; often a sandy region but also includes areas of permanent cold that are generally lacking plant life.

desertification ☉ The process where land that supports vegetation gradually becomes desert as a result of climatic changes, land mismanagement, or both.

dike ☉ An artificial riverbank built up to control the flow of water.

discontiguous ☉ Not connected to or sharing a boundary with.

distributary ☉ A stream that branches off from a river and never rejoins it, flowing independently into another body of water.

doldrums ☉ An area near the equator characterized by variable winds and periods of calm.

dormant volcano ☉ A volcano that has not exhibited any signs of activity for an extended period of time.

dune ☉ A mound or ridge of loose, wind-blown sand.

E

Earth ☉ Fifth-largest planet in the solar system; its orbit is third from the sun, its circumference is 40,064 kilometers (24,900 miles) at the equator and 40,000 kilometers (24,860 miles) when measured around the poles. The diameter at the equator is 12,753 kilometers (7,926 miles) and, from pole to pole, 12,711 kilometers (7,900 miles).

earthquake ☉ Shaking or other movement of the earth that is caused by tectonic shifts or volcanic activity.

East Asia ☉ A subregion of Asia that includes the countries of China, Mongolia, Korea, and the islands of Taiwan and Japan.

easterlies ☉ Winds or air currents blowing more or less consistently from east to west.

Eastern Europe ☉ A geopolitical term that usually refers to those countries in the east of Europe that were once allied with the Soviet Union under the Warsaw Pact (1955-1991). Today, the independent countries of the region include: Albania, Bulgaria, Czech Republic, Slovakia, Hungary, Croatia, Slovenia, Bosnia and Herzegovina, Poland, Romania, Serbia and Montenegro, and Macedonia.

Eastern Hemisphere ☉ The half of the Earth's surface that extends east of the Prime Meridian to the 180th meridian.

eddy ☉ An air or water current that follows a course different from that of the main flow and usually has a swirling circular motion.

El Niño ☉ The warming of the ocean off the west coast of South America that causes a change in climate elsewhere in the world, especially in North America. El Niño conditions have occurred about every four to twelve years.

enclave ☉ A country or portion of a country that lies entirely within the boundaries of one other country. Also, a culturally distinct community within a country.

endangered species ☉ A plant or animal species that is at risk of becoming extinct.

endemic ☉ Anything that is native to, unique to, or characteristic of a specific place or region.

equator ☉ An imaginary line running around the middle of the Earth halfway between the North and South Poles. Identified as 0° latitude, it divides the Northern and Southern Hemispheres.

erosion ☉ Changes in the shape of the Earth's surface as a result of damage from wind, water, or ice.

escarpment ☉ (also called scarp land) A steep slope that separates areas of different elevations.

estuary ☉ The region where a river and a large lake or sea meet so that their waters gradually blend into each other.

Eurasia ☉ The land mass that contains the continents of Europe and Asia.

WORDS TO KNOW

exclave ④ Part of a country that is separated from the larger, main portion of the country by foreign territory.

F

Far East ④ Traditionally, those countries that are a part of East Asia and the easternmost portion of Siberia. Often, the term includes the countries of Southeast Asia as well.

fault ④ (also called a fault line) A fracture in the Earth's crust where the rock formation splits, allowing the opposing sides to shift. Most commonly found along the boundaries between tectonic plates, the shifting sometimes causes earthquakes.

fen ④ Wet, soft, and spongy ground where the soil is composed mainly of decayed or decaying vegetable matter and is fed by surrounding soils and groundwater. Fens are similar to bogs but have higher nutrient levels.

fjord ④ A relatively narrow arm of the sea that indents deeply into the land, with generally steep slopes or cliffs on each side.

flood ④ The flow of excessive quantities of water over land that is generally above water.

flood plain ④ An area of low-lying land bordering a stream of water where floods, and the resulting deposits of alluvium, occur frequently.

Frigid Zone ④ Either of the extreme north and south latitude zones of the Earth. The North Frigid Zone lies between the North Pole and the Arctic Circle. The South Frigid Zone lies between the South Pole and the Antarctic Circle. The climate of these regions is characterized by extreme cold throughout the year.

G

game reserve ④ An area of land reserved for wild animals that are hunted for sport or for food.

geopolitical ④ Refers to the relationship between geographic, political (or governmental), and cultural aspects of a nation or region.

geothermal energy ④ Energy derived from the heat that constantly and naturally radiates out from the center of the Earth. Also used to describe the radiation itself.

geyser ④ A hot spring that periodically erupts through an opening in the surface of the Earth, spewing boiling water and steam.

glacier ④ A large body of ice that moves along the Earth's surface.

gorge ④ A deep, narrow passage with steep, rocky walls.

grassland ④ An area where the vegetation is mostly grasses and other grass-like plants, often providing a transition between forests and deserts.

Greenwich Mean Time ④ The time at Greenwich, England, in the United Kingdom. This time is used as a basis for calculating time throughout most of the world. It is also called universal time, and is abbreviated GMT.

groundwater ④ Water located below the earth's surface, providing a source for wells and springs.

gulf ④ A large inlet of a sea or ocean that is partially enclosed by land, such as by capes or peninsulas.

Gulf Stream ④ Warm ocean current flowing from roughly the Gulf of Mexico northeast along the coast of North America, then east toward Europe.

H

harbor ④ A protected inlet along the shore of a sea or lake that is deep enough for ships to anchor.

hardpan ④ A layer of hardened clay soil, usually underlying a thin layer of topsoil.

hardwoods ④ Deciduous trees, such as cherry, oak, maple, and mahogany, that produce very hard, durable, and valuable lumber.

harmattan ④ An intensely dry, dusty wind felt along the coast of Africa between Cape Verde and Cape Lopez. It prevails at intervals during the months of December, January, and February.

headland ④ Slightly elevated land lying along or jutting into a body of water.

headstream ④ Stream that forms the source of a river.

headwater ④ Source of a stream or river.

heath ④ Uncultivated land with low shrubs.

hemisphere ④ Any half of the globe. The Northern and Southern Hemispheres are divided by the equator while the Eastern and Western Hemispheres are divided by the Prime Meridian and 180° longitude.

hill ④ A rounded area of elevation rising more or less prominently above the surrounding, flatter landscape. Hills are generally no more than 300 meters (1,000 feet) high.

WORDS TO KNOW

Humboldt Current ☉ A cold ocean current that runs north from Antarctica along the west coast of South America, primarily from June to November.

hurricane ☉ A tropical storm originating in the Atlantic or Pacific Oceans, generally with winds over 74 miles per hour.

hydropower ☉ (also called hydroelectric power) Electricity generated by the flow of water through the turbines of river dams.

I

iceberg ☉ A massive block of floating ice that has broken off of a glacier or an ice shelf through a process known as calving.

ice caps ☉ Ice sheets covering less than 50,000 square kilometers (19,000 square miles). They form primarily in polar and sub-polar regions, generally occupying high and relatively flat regions.

ice shelves ☉ Sheets of ice that extend from the edge of a continent over the surface of the ocean, with ocean water flowing beneath them. They typically range from approximately 200–1000 meters (500–3,500 feet) thick. The Arctic Ocean is partly covered by ice shelves and the continent of Antarctica is almost completely surrounded by them.

indigenous ☉ A native species; vegetation that originates from or occurs naturally within a particular region.

Indochina ☉ A subregion that includes the peninsular countries of southeast Asia that lie between India and China, including: Vietnam, Laos, Cambodia, Thailand, Myanmar (Burma), and the mainland territory of Malaysia. The term indicates that the culture in these countries has been influenced by both Indian and Chinese traditions.

inlet ☉ Any water filled indentation along a coast or shore, such as a bay or gulf; a narrow passage through which water from an ocean or other large body of water passes, usually into a bay or lagoon.

International Date Line ☉ An arbitrary, imaginary line at about 180° longitude that designates where one day begins and another ends.

island ☉ A land mass entirely surrounded by water.

isthmus ☉ A narrow strip of land that connects two larger bodies of land such as two continents, a continent and a peninsula, or two parts of

an island. An isthmus is bordered by water on two sides.

K

karst ☉ An area of limestone characterized by caverns and rock formations that are caused by erosion and underground streams.

key. See *cay*.

L

Labrador Current ☉ A North Atlantic current that flows southward from polar waters along the east coast of Canada.

lagoon ☉ A shallow body of water, often connected with or barely separated from a nearby ocean or sea by coral reefs or sandbars.

lake ☉ A large inland body of standing water.

landlocked country ☉ A country that does not have direct access to an ocean; a country that is completely surrounded by other countries.

landslide ☉ A flow of muddy soil or loose rock that is usually triggered by heavy rainfall in areas where the terrain is steep.

Latin America ☉ A geopolitical term that relates to the countries that are south of the United States in the Western Hemisphere, particularly countries where the Latin-based languages (or Romance languages) of Spanish, Portuguese, and French are spoken.

latitude ☉ (also called parallel) An imaginary line running around the Earth parallel to the equator. The equator is at 0° latitude and divides the Earth into two sets of lines of latitude, north and south. Each set covers 90°.

lava ☉ Molten rock (magma) that has been poured out on the Earth's surface, usually through a volcano.

leeward ☉ The direction identical to that of the prevailing wind.

littoral ☉ A coastal region or shore; or, the area between the high water and low water marks of a shore or coastal region.

loam ☉ Light soil consisting of clay, silt, and sand.

loess ☉ A windblown accumulation of fine yellow clay or silt.

longitude ☉ (also called meridian) An imaginary line that extends along the surface of the Earth directly from one pole to another. The Earth is divided into 360 degrees of longitude, with 0° being designated as the Prime Meridian.

WORDS TO KNOW

M

Maghreb ☉ Region in northwest Africa made up of Algeria, Morocco, and Tunisia.

magma ☉ Molten rock beneath the Earth's surface that has been melted by the heat of the Earth's interior. When magma breaches the Earth's surface it is known as lava.

mangrove ☉ A tree that abounds on tropical shores in both hemispheres. It is characterized by its numerous roots that arch out from its trunk and descend from its branches. Mangroves form thick, dense growths along the tidal mud, covering areas that are hundreds of miles long.

marine life ☉ The life that exists in or is formed by the seas and oceans.

maritime climate ☉ The climate and weather conditions typical of areas bordering large bodies of water. Generally, areas close to water have more even temperatures than areas with a continental climate.

marsh ☉ An area of soggy land, usually covered wholly or in part by shallow water and containing aquatic vegetation.

massif ☉ The central part of a mountain or the dominant part of a range of mountains.

mean temperature ☉ The air temperature unit measured by adding the maximum and minimum daily temperatures together and dividing the sum by two; an average temperature.

Mediterranean ☉ The region surrounding the Mediterranean Sea.

Mediterranean climate ☉ A wet-winter, dry-summer climate with a moderate annual temperature range, as is typically experienced by countries along the Mediterranean Sea.

meridian. *See* **longitude.**

mesa ☉ An isolated, elevated, flat-topped area of land, typically larger than a butte but smaller than a plateau.

Mesopotamia ☉ The name means, "between rivers," and refers to the territory between and around the Tigris and Euphrates rivers (currently a part of Iraq). This area has been nicknamed "The Cradle of Civilization" because it was home to the ancient empires of Babylon, Sumer, and Assyria, among others. The Tigris and Euphrates are also two of the four rivers mentioned in the Biblical story of Eden.

Middle East ☉ A geopolitical term that designates those countries of southwest Asia and northeast Africa that stretch from the Mediterranean Sea to the borders of Pakistan and Afghanistan, including the Arabian Peninsula. This area was considered to be the midpoint between Europe and East Asia, usually called the Far East. The term is sometimes used to include all the countries of that general region that are primarily Islamic.

mistral ☉ In southern France, a cold, dry, northerly wind.

moist tropical climate ☉ A weather pattern typical to the tropics, known for year-round high temperatures and large amounts of rainfall.

monolith ☉ A large, natural rock formation, usually one that is isolated from other areas of high elevations; a large, stone block, column, or figure.

monsoon ☉ Seasonal change in the wind direction of Southeastern Asia, leading to wet and dry seasons. A monsoon develops when there is a significant difference in air temperatures over the ocean and the land.

moor ☉ A poorly drained open area containing peat and heath.

moraine ☉ A deposit of rocky earth deposited by a glacier.

mountain ☉ A lofty elevation of land, generally higher than 300 meters (1,000 feet), but varying greatly depending on the surrounding terrain, with little surface area at its peak; commonly formed in a series of ridges or in a single ridge known as a mountain range.

N

nature preserve ☉ An area (often a park) where one or more specific species of plants and/or animals are protected from harm, injury, or destruction.

Northern Hemisphere ☉ The northern half of the Earth's surface, as measured from the equator to the North Pole.

O

oasis ☉ Originally, a fertile spot in the Libyan Desert where there is a natural spring or well and vegetation; now refers to any fertile tract in the midst of a wasteland.

ocean ☉ The entire body of saltwater that covers almost three-fourths of the Earth's surface; any of the five principal divisions of the ocean.

WORDS TO KNOW

Oceania ☉ Oceania is a term that refers to the islands in the region that covers the central and south Pacific and its adjacent seas; sometimes includes Australia, New Zealand, and the Malay Archipelago (an large group of islands off the southeast coast of Asia).

P

pampas ☉ Grass-covered plain of South America.

panhandle ☉ A long narrow strip of land projecting like the handle of a frying pan.

parallel. *See* **latitude.**

peneplain ☉ A flat land surface that has been subjected to severe erosion.

peninsula ☉ A body of land surrounded by water on three sides.

permafrost ☉ A frozen layer of soil that never thaws.

petroglyph ☉ Ancient carvings or line drawings created on the surface of rocks by prehistoric peoples; often found in caves.

plain ☉ An expansive area free of major elevations and depressions.

plateau ☉ A relatively flat area of an elevated area of land.

plate tectonics ☉ A set of theories about the Earth's structure used by many geologists to explain why land masses and oceans are arranged as they are and why seismic activity occurs. According to plate tectonics the Earth's surface, including the bottom of the oceans, rests on a number of large tectonic plates. These plates are slowly moving over the interior layers of the Earth. Where they grind against each other, earthquakes and other seismic activity occurs, and the shape of the land gradually changes.

polar circle ☉ (also called the polar region) A circular region around the North and South Poles that separates the frigid polar zones from the temperate zones. The Earth has two polar circles, the Arctic Circle in the north and the Antarctic Circle in the south.

polar climate ☉ A humid, severely cold climate controlled by arctic-like air masses, with no warm or summer season.

polder ☉ A low land area reclaimed from a body of water and protected by dikes or embankments.

pole (geographic pole) ☉ The extreme northern and southern points of the Earth's axis, where the axis intersects the spherical surface. The

geographic North Pole is located at 90°N latitude/0° longitude. The geographic South Pole is located at 90°S latitude/0° longitude.

pole (magnetic pole) ☉ Either of two points on the Earth's surface, close to the geographic North Pole and South Pole, where the magnetic field is most intense. The North Magnetic Pole is located at 78°N latitude/104°W longitude in the Queen Elizabeth Islands of northern Canada. The South Magnetic Pole is located at 66°S latitude/139°E longitude on the Adélie Coast of Antarctica.

pond ☉ A small body of still, shallow water.

prairie ☉ An area of level grassland that occurs in temperate climate zones.

Prime Meridian ☉ The meridian designated as 0° longitude that runs through Greenwich, England, site of the Royal Observatory. All other longitudes are measured from this point.

R

rainforest ☉ A dense forest of tall trees with a high, leafy canopy where the annual rainfall is at least 254 centimeters (100 inches) per year.

rain shadow ☉ An area that receives very little precipitation due to natural barriers, such as mountains, which keep rain clouds from covering the region.

Ramsar ☉ The Ramsar Convention on Wetlands of International Importance is an international organization concerned with the preservation and protection of major wetland environments throughout the world.

ravine ☉ A steep, narrow valley or gorge, usually containing the channel for a stream.

reef ☉ String of rocks or coral formations, usually on a sandy bottom, that are barely submerged.

reforestation ☉ Systematically replacing forest trees that were lost due to fire or logging.

reservoir ☉ A lake that was formed artificially by a dam.

Ring of Fire ☉ The region of seismic activity roughly outlined by a string of volcanoes that encircles the Pacific Ocean.

river ☉ A substantial stream of water following a clear channel as it flows over the land.

riverine ☉ Related to a river or the banks of a river.

WORDS TO KNOW

S

- Sahel** ☉ Sahel is an Arabic word meaning “shore.” It refers to the 5,000 kilometer (3,125 mile) stretch of savanna that is the shore or edge of the Sahara desert. The Sahel spreads west to east from Mauritania and Senegal to Somalia.
- salinization** ☉ An accumulation of soluble salts in soil. This condition is common in irrigated areas with desert climates, where water evaporates quickly in poorly drained soil due to high temperatures. Severe salinization renders soil poisonous to most plants.
- salt pan** ☉ (also salt flat) An area of land in a sunny region that is periodically submerged in shallow water, usually due to tides or seasonal floods. The sun causes the shallow water to evaporate and leave the salt it contained behind on the ground.
- sand bar** ☉ A deposit of sedimentary material that lies in the shallow water of a river, lake, or sea.
- savanna** ☉ (also spelled savannah) A treeless or near treeless plain of a tropical or subtropical region dominated by drought-resistant grasses.
- Scandinavia** ☉ The region of northwestern Europe that lies on the peninsula bordered by the Atlantic Ocean, the Baltic Sea, and the Gulf of Bothnia. Even though Norway and Sweden are the only two countries that lie directly on this peninsula, the countries of Denmark, Iceland and Finland are usually considered to be Scandinavian countries in a cultural context.
- sea** ☉ A body of salt water that is connected to (and therefore a part of) the ocean; sometimes, a name given to a large lake.
- sea level** ☉ The level of the ocean’s surface, specifically the average between the levels at high tide and low tide. Sea level is often designated as 0 meters (0 feet) and is used as the baseline for measuring elevations and depressions on land and on the ocean floor.
- seasonal** ☉ Dependant on the season. The flow of rivers and volume of lakes often varies greatly between seasons, as can vegetation.
- seasons** ☉ Regular variations in weather patterns that occur at the same times every year.
- sedimentary rock** ☉ Rock, such as sandstone, shale, and limestone, formed from the hardening of material deposits.
- seismic activity** ☉ Relating to or connected with an earthquake or earthquakes in general.
- semiarid** ☉ A climate where water and rainfall is relatively scarce but not so rare as to prohibit the growth of modest vegetation. Semiarid areas are often found around arid deserts and semiarid land is sometimes called a desert itself.
- shoal** ☉ A shallow area in a stream, lake, or sea, especially a sand bank that lies above water at low tide or during dry periods.
- shore** ☉ Typically, the land that borders a lake or river; may also be used to designate the land bordering an ocean or sea.
- sierra** ☉ A rugged, jagged, irregular chain of hills or mountain.
- silt** ☉ Fine, gravel-like, inorganic material, usually sand and coarse clay particles, that is carried by the flow of a river and deposited along its banks. Silt is generally very fertile soil.
- skerry** ☉ A rocky island.
- slough** ☉ A marshy pond that occurs in a river inlet.
- softwoods** ☉ Coniferous trees with a wood density that is relatively softer than the wood of those trees referred to as hardwoods.
- sound** ☉ A wide expanse of water, usually separating a mainland from islands or connecting two large bodies of water; often lies parallel to the coastline.
- South Asia** ☉ A subregion of Asia that includes the countries of Afghanistan, Pakistan, India, Bangladesh, and Nepal.
- Southeast Asia** ☉ A subregion of Asia that lies between India on the west, China to the north, and the Pacific Ocean to the east. The region includes the Indochina Peninsula of the South China Sea, the Malay Peninsula, and the Indonesian and Philippine Archipelagos. The countries of Southeast Asia are: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.
- Southern Hemisphere** ☉ The southern half of the Earth’s surface between the equator and the South Pole.
- Southwest Asia** ☉ A subregion of Asia that includes Turkey and extends southward through the Arabian Peninsula. Iran can also be included in the region.
- spring** ☉ Water flowing from the ground through a natural opening.
- stalactites** ☉ Deposits of calcium carbonate formed in a cavern or cave that hang down from the ceiling like icicles.

WORDS TO KNOW

stalagmites ④ Deposits of calcium carbonate formed in a cavern or cave that rise up from the floor like cones or columns.

steppe ④ A flat, mostly treeless, semiarid grassland, marked by extreme seasonal and daily temperature variations. Although sometimes used to describe other areas, the term applies primarily to the plains of southeastern Europe and Central Asia.

strait ④ Narrow body of water connecting two larger bodies of water.

stream ④ Any flowing water that moves generally downhill from elevated areas towards sea level.

subarctic climate ④ A high latitude climate. The continental subarctic climate has very cold winters; short, cool summers; light precipitation; and moist air. The marine subarctic climate is a coastal and island climate with polar air masses causing high levels of precipitation and extreme cold.

subcontinent ④ A land mass of great size, but smaller than any of the continents; a large subdivision of a continent.

subtropical climate ④ A middle latitude climate dominated by humid, warm temperatures and heavy rainfall in summer, with cool winters and frequent cyclonic storms.

T

taiga ④ An area of open forest made up of coniferous trees.

tectonic ④ Relating to the structure of the Earth's crust.

tectonic plate ④ According to the theory of plate tectonics, the outer layer of the Earth consists of a series of large plates of rock called tectonic plates. The largest plates have entire oceans or continents on their surface.

Temperate Zone ④ The parts of the Earth lying between the Tropics and the polar circles. The North Temperate Zone is the area between the Tropic of Cancer and the Arctic Circle. The South Temperate Zone is the area between the Tropic of Capricorn and the Antarctic Circle. Temperate zones are marked by the greatest seasonal variations in temperature; however, temperatures and rainfall tend to stay within a moderate range, without extremes.

terraces ④ Successive areas of flat lands.

terrain ④ General characteristics of the Earth's surface in a region, including its characteristic vegetation.

tidal bore ④ A distinctive type of wave that travels up a shallow river or estuary on the incoming tide. It is a dramatic phenomenon that occurs in few places in the world; the incoming tidal waters flow against the river's current.

tidal wave. *See* **tsunami.**

tide ④ The rise and fall of the surface of a body of water caused by the gravitational attraction of the sun and moon.

timber line ④ The point of high elevation on a mountain above which the climate is too severe to support trees.

topography ④ The surface features of a region; also, the study of such features.

tornado ④ A violent, whirling wind storm that forms a funnel-shaped cloud and moves in a path over the surface of the Earth.

Torrid Zone ④ The part of the Earth's surface that lies between the Tropic lines, so named for the warm, humid, character of its climate.

trade winds ④ Winds that consistently blow from the northeast and southeast toward the equator.

trench ④ A steep-sided depression in the ocean floor where the water is very deep.

tributary ④ Any stream that flows into another larger stream.

tropical monsoon climate ④ One of the tropical rainy climates; it is sufficiently warm and rainy to produce tropical rainforest vegetation, but also has a winter dry season.

Tropic of Cancer ④ A latitudinal line located 23°27' north of the equator, the highest point on the globe at which the sun can shine directly overhead.

Tropic of Capricorn ④ A latitudinal line located 23°27' south of the equator, the lowest point on the globe at which the sun can shine directly overhead.

tsunami ④ A powerful, massive, and destructive ocean wave caused by an undersea earthquake or volcanic eruption.

tundra ④ A nearly level, treeless area whose climate and vegetation are characteristically arctic due to its position near one of the poles; the subsoil is permanently frozen.

typhoon ④ Violent hurricane occurring in the region of the South China Sea, usually in the period from July through October.

WORDS TO KNOW

U

UNESCO ☉ The United Nations Educational, Scientific, and Cultural Organization. An international organization promoting peace and security around the world through education, science, culture, and communication.

V

valley ☉ An elongated depression through which a stream of water usually flows, typically an area that lies between mountains, hills, and/or other uplands.

vegetation ☉ Plants, including trees, shrubs, grasses, and other plants.

volcano ☉ A hole or opening through which molten rock and superheated steam erupt from the interior of the Earth. Also, a mountain created by the accumulation of these ejected materials.

W

wadi ☉ Dry stream bed, usually in a desert region in southwest Asia or north Africa.

waterfall ☉ A steep, natural descent of water flowing over a cliff or precipice to a lower level.

watershed ☉ An area of shared water drainage, where all the rainfall drains into a common river or lake system.

waves ☉ The alternate rise and fall of ridges of water, generally produced by the action between the wind and the surface of a body of water.

weather ☉ Atmospheric conditions at a given place and time.

Western Europe ☉ A geopolitical term that usually refers to those countries of Europe that are allies of the United States and Canada under the North Atlantic Treaty Organization (NATO, established 1949). The original European countries in NATO were Belgium, France, Great Britain, Italy, Luxembourg, the Netherlands, and Portugal. Today, Western European countries also include Germany, Spain, Ireland, and Austria. Though Denmark is geographically part of Europe, it is culturally considered as part of Scandinavia.

Western Hemisphere ☉ The half of the Earth's surface that lies west of the Prime Meridian to 180° longitude.

West Indies ☉ The islands lying between North America and South America made up of the Greater Antilles (Cuba, Haiti, Dominican Republic, Jamaica, and Puerto Rico), the Lesser Antilles (Virgin Islands, Trinidad and Tobago, Barbados), and the Bahamas.

wildlife sanctuary ☉ An area of land set aside for the protection and preservation of animals and plants.

windward ☉ Facing into the prevailing wind, or lying closest to the direction from which the wind is blowing.

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**Physical
Geography**

Congo (DROC)

- **Official name:** Democratic Republic of the Congo
- **Area:** 2,345,410 square kilometers (905,562 square miles)
- **Highest point on mainland:** Margherita Peak (5,110 meters/16,765 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Eastern, Northern, and Southern
- **Time zones:** In Kinshasa, 1 P.M. = noon GMT; in Lubumbashi, 2 P.M. = noon GMT
- **Longest distances:** 2,276 kilometers (1,414 miles) from south-southeast to north-northwest; 2,236 kilometers (1,389 miles) from east-northeast to west-southwest
- **Land boundaries:** 10,744 kilometers (6,672 miles) total boundary length; Angola 2,511 kilometers (1,559 miles); Burundi 233 kilometers (145 miles); Central African Republic 1,577 kilometers (979 miles); Republic of the Congo 2,410 kilometers (1,497 miles); Rwanda 217 kilometers (135 miles); Sudan 624 kilometers (390 miles); Tanzania 473 kilometers (295 miles); Uganda 765 kilometers (459 miles); Zambia 1,930 kilometers (1,199 miles)
- **Coastline:** 37 kilometers (23 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

The Democratic Republic of the Congo (DROC, formerly known as Zaire) is located along the equator in Central Africa, north of Angola and Zambia. It shares borders with nine countries. With a total area of about 2,345,410 square kilometers (905,562 square miles), it is the third-largest country in Africa and is slightly less than one-fourth the size of the United States. The DROC is divided into ten provinces.

2 🌐 TERRITORIES AND DEPENDENCIES

DROC has no outside territories or dependencies.

3 🌐 CLIMATE

The climate in the DROC is basically tropical, with temperatures that vary widely depending on elevation and latitude. In the equator region, it is hot and very humid and the temperature does not go below 20°C (68°F). It is cooler and less humid in the southern highlands and cooler and wetter in the eastern highlands and mountains. The average temperature in the central region is 25°C (77°F), while on the coastline the temperature is generally around 26°C (79°F).

There are two rainy seasons and two dry seasons in each year. North of the equator, the rainy seasons are from April to June and September to October, and the dry seasons are

CONGO (DROC)



from November to March and July to August. South of the equator, the cycle is reversed. Annual rainfall is about 130-200 centimeters (51-79 inches).

4 TOPOGRAPHIC REGIONS

Nearly the entire country is within a region known as the Congo River Basin, which is

further divided into four major geographic regions within the DROC. The core region is the Central Congo Basin, a depression often referred to as the cuvette. The northern uplands and southern uplands are high plains on either side of the cuvette, and along the eastern border there are high mountains associated with the Great Rift Valley (or East African Rift).

CONGO (DROC)



EPD/Robert J. Groelsema

The Ruwenzori Mountains are the highest mountains in the Democratic Republic of the Congo.

5 OCEANS AND SEAS

Seacoast and Undersea Features

The DROC claims a very narrow border of coastline (37 kilometers/23 miles) along the Atlantic Ocean, north of the Congo River.

Sea Inlets and Straits

DROC has no major sea inlets or straits.

Islands and Archipelagos

There are no coastal islands, but countless alluvial islands are found throughout the river systems and interspersed along the Congo River between Kisangani and Mbandaka. Idjwi Island is located on Lake Kivu.

Coastal Features

There are no significant geographic features on DROC's narrow coastline.

6 INLAND LAKES

The DROC is home to several of the Great Lakes of Africa, which fill basins in the western branch of the Great Rift Valley along the eastern border of the country. The northernmost of these Great Lakes is Lake Albert, which has more fish than any other lake in Africa. To the south lies Lake Edward, which drains its waters into Lake Albert through the Semliki River. These two lakes belong to the Nile Basin.

Farther south, Lake Kivu, the highest of the Great Lakes, is situated at an altitude of 1,470 meters (4,851 feet) and is connected to Lake Tanganyika by the Ruzizi River. Lake Tanganyika is the largest lake in the DROC. It covers an area that is 650 kilometers (408 miles) long and 80 kilometers (50 miles) wide and is the second-deepest lake in the world. It drains

CONGO (DROC)

its waters into the Congo River through the Lukuga River. The southernmost lake of the Great Lakes chain (except for Lake Malawi, which is outside of the DROC) is Lake Mweru. Lake Mweru straddles the border between DROC and Zambia and is drained by the Luvua River, a tributary of the Lualaba and Congo Rivers.

Other DROC lakes include Tumba and Mai-Ndombe in the western part of the country. Their shores are generally swampy. Another swampy depression surrounds Lake Upemba on the southeastern plateau of the same name. Malebo Pool is a lake formed by the widening of the Congo River. It is located in the Lower Congo River region, and the capitals of both the DROC and the Republic of Congo are located on its shores.

7 🌐 RIVERS AND WATERFALLS

The Congo River is the longest river in the DROC, the second-longest river in Africa, and the sixth-longest river in the world, with a total length of about 4,344 kilometers (2,700 miles). The Congo River begins with its main tributary, the Lualaba River, close to the Zambian border. It then flows north and is navigable between Bukama to Kongolo. Along this stretch it receives many tributaries. The most important of these are the Luvua and Luapula Rivers, which drain waters from Lakes Bangwelo (in Zambia) and Mweru, and the Lukuga River, which drains waters from Lakes Tanganyika and Kivu.

Past Kongolo there are waterfalls which block river traffic. North of this, the river is again navigable between Kasongo and Kibombo, has another waterfall, and is once again navigable between Kindu and Ubundu. Beyond that point, navigation is stopped by the Boyoma (Stanley) Falls, located directly upstream of Kisangani. After Kisangani, the river is considered to be the Congo River proper,

and is known as the Upper Congo (Haut-Congo). It also changes direction, gradually curving west and then southwest.

The Congo River and its tributaries have historically provided vital transportation routes for commercial trade. The waterway is also an important source of hydroelectric power.

8 🌐 DESERTS

There are no desert regions in the DROC.

9 🌐 FLAT AND ROLLING TERRAIN

Only about 7 percent of the land in DROC is considered to be permanent pasture.

The largest region of the DROC is the Central Congo Basin, a depression often referred to as the *cuvette* (which means “saucer” or “shallow bowl”). It has an area of roughly 800,000 square kilometers (312,000 square miles) and covers about a third of the country’s territory. The DROC’s portion of the equatorial rainforest is located in this region. A substantial proportion of the forest within the *cuvette* is swamp, and still more of it consists of a mixture of marshy and firm land grasslands.

The Great Rift Valley is a lengthy depression that stretches from north to south across most of eastern Africa and into Asia. It is the result of volcanic and tectonic activity along the East African Rift. In the DROC, Lakes Albert, Edward, Kivu, and Tanganyika occupy most of the bottom of this valley. On either side of the valley are mountain ranges.

10 🌐 MOUNTAINS AND VOLCANOES

There are many mountain ranges comprising the chain that borders the Great Rift Valley in the DROC. In the north are the Blue Mountains around Lake Albert. They reach heights of up to 2,000 meters (6,600 feet) and separate the Congo and Nile River basins.

CONGO (DROC)

The Ruwenzori Mountains between Lakes Albert and Edward are the highest mountain range in the country and include Albert Peak (5,100 meters/16,830 feet) and Margherita Peak (5,110 meters/16,765 feet). Margherita, the highest point in the DROC, is perpetually covered by snow despite being located practically on the equator.

To the south are the Ngoma Mountains, which extend to the Lukuga River. Their highest point is at Sambrini Peak (2,250 meters/7,425 feet). The Mitumba Mountains, with heights of up to 2,200 meters (7,260 feet), border Lake Tanganyika in the extreme southeast.

On the far side of the country, near the Atlantic shore, are the Mayumbe Mountains, part of the Crystal Mountain range. These are old mountains, strongly attacked by erosion, that now resemble a hilly plateau.

The Virunga Mountains, between Lake Kivu and Lake Edward, consist of a series of volcanoes, including the active volcanoes of Karisimbi, Nyamulagira, and Nyiragongo. Nyiragongo is about 3,465 meters (11,365 feet) high and has erupted about thirty-five times since 1882, making it one of Africa's most active volcanoes. Its most recent eruption began January 17, 2002, with a lava flow that filled the streets of the city of Goma with pumice several feet thick. Other volcanoes such as Mikeno, Visoke, and Sabinio are now dormant.

11 CANYONS AND CAVES

There are no other significant canyons or caves in the DROC.

12 PLATEAUS AND MONOLITHS

Most of the DROC could be considered to be a low plateau, dropping in elevation only as it nears the Atlantic Ocean, and rising to mountains in the east. The southeastern part of the country was once all mountainous, but the effect of erosion has leveled much of these mountains.

DID YOU KNOW?

On January 17, 2002, lava from Nyiragongo flowed on the eastern and southern flanks of the volcano at a rate of 1.2 to 1.8 kilometers/hour (0.7 to 1 mile/hour) toward Goma. As lava several feet thick flowed down city streets, four hundred thousand people were evacuated for three days and fourteen villages were damaged by the lava flows.

The result is Upemba, a hilly plateau with an altitude greater than 1,500 meters (4,950 feet).

13 MAN-MADE FEATURES

The Congo River supplies massive amounts of water that is harnessed by dams, such as the Inga and Mobayi-Bongo Dams, to be converted to hydroelectric power. Dams help generate nearly all of the electricity in the Democratic Republic of the Congo.

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Congo (ROC)

- **Official name:** Republic of the Congo (ROC)
- **Area:** 342,000 square kilometers (132,047 square miles)
- **Highest point on mainland:** Mount Berongou (903 meters/2,963 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Eastern, Northern, and Southern
- **Time zone:** 1 P.M. = noon GMT
- **Longest distances:** 1,287 kilometers (800 miles) from north-northeast to south-southwest; 402 kilometers (250 miles) from east-southeast to west-northwest
- **Land boundaries:** 5,504 kilometers (3,420 miles) total boundary length; Cameroon 523 kilometers (325 miles); Central African Republic 467 kilometers (290 miles); Democratic Republic of the Congo 2,410 kilometers (1,498 miles); Angola 201 kilometers (125 miles); Gabon 1,903 kilometers (1,182 miles)
- **Coastline:** 169 kilometers (105 miles)
- **Territorial sea limits:** 363 kilometers (200 nautical miles)

1 🌐 LOCATION AND SIZE

The Republic of the Congo (ROC) is located along the equator in West Africa, between Angola and Gabon and bordering the South Atlantic Ocean. It also shares borders with Cameroon and Central African Republic to the north and the Democratic Republic of the Congo (DROC) to the east. With an area of 342,000 square kilometers (132,047 square miles), ROC is slightly smaller than the state of Montana. The country is divided into nine regions and one commune.

2 🌐 TERRITORIES AND DEPENDENCIES

ROC has no outside territories or dependencies.

3 🌐 CLIMATE

ROC has a tropical climate characterized by constantly high temperatures and humidity. At Brazzaville in the south, the average daily maximum temperature is 30°C (86°F) and the average minimum temperature is 20°C (68°F). At Souanke, in the far north, the extremes are 29°C (84°F) and 18°C (64°F).

There are two wet and two dry seasons. In the south there is a rainy season from October to December, a short dry season in January, another rainy season from March to June, and a long dry season from June to October. In the north, the seasons are reversed. Annual rainfall varies from 105 centimeters (41 inches) at Pointe-Noir in the southwest,

CONGO (ROC)



to 185 centimeters (73 inches) at Impfondo in the northeast. The equator region receives rain throughout the year.

4 TOPOGRAPHIC REGIONS

The country may be divided into four topographical regions. The coastal plain stretches northeast until it reaches the forested Mayombe Escarpment. The escarpment borders a vast plateau region to the north and east, sometimes called the Central Highlands. Still farther northeast lies an expansive lowland area that includes a good part of the Congo Basin.

5 OCEANS AND SEAS

Seacoast and Undersea Features

ROC has a coastline of 169 kilometers (105 miles) along the Atlantic Ocean.

Sea Inlets and Straits

ROC's coastline has no major harbors or ports.

Islands and Archipelagos

There are no coastal islands, though many alluvial islands are found throughout the river systems, especially the Congo and Ubangi Rivers and their tributaries.

Coastal Features

The coastal region is a vast, dry plain that is virtually treeless except in scattered areas. It stretches for about 160 kilometers (100 miles) along the south Atlantic coast and reaches inland approximately 64 kilometers (40 miles). The Antarctic (Benguela) Current, flowing from the south, enhances the formation of sand spits along the coastal plain. In addition to mangrove-fringed lagoons, lakes and rivers dot this region, with accompanying marshland and heavy vegetation in low-lying areas.

6 INLAND LAKES

The Stanley Pool (Malebo Pool) is a lake formed by the widening of the Congo River. It lies between the borders of the ROC and the Democratic Republic of the Congo and covers an area that is about 35 kilometers (22 miles) long and 23 kilometers (14 miles) wide. The capital cities of both the ROC and the DROC are located on the shores of Stanley Pool.

7 RIVERS AND WATERFALLS

The Congo River is the longest river in the ROC, the second-longest river in Africa, and the sixth-longest river in the world, with a total length of about 4,344 kilometers (2,700 miles). It covers a stretch of 800 kilometers

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EPD/R. Ruggiero

Tiger fish caught in the Sangha River near the ROC border with Cameroon.

(496 miles) along the eastern border with the Democratic Republic of the Congo (DROC). It is formed by the waters of the Upper Congo (Lualaba River) and its tributary, the Luava River, both of which begin at the southeast border of the DROC.

The Congo River and its tributaries historically have provided vital transportation routes for commercial trade. The Congo River is also an important source for hydroelectric power.

The ROC rivers of Likoula, Sangha, and Ubangi (Oubangui) are all tributaries of the Congo River. Located in the northern part of the country, these are also the major rivers that make up the Congo Basin lowland region,

which covers an area of about 155,400 square kilometers (60,000 square miles). It consists of flat, swampy valleys and low divides descending east and southeast from the western hills to the Congo River. Seasonal flooding occurs throughout the regions, with some areas existing as permanent wetlands.

The Niari and Kouilou Rivers in the southern coastal plain also create wetlands in that region.

8 🌐 **DESERTS**

There are no desert regions in the ROC.

9 🌐 **FLAT AND ROLLING TERRAIN**

Only about 29 percent of the land in the ROC is considered to be permanent pasture.

The Niari Valley, north of the Niari River, was originally covered with tall grasses and savannah, but has been extensively cleared for agriculture and industry.

Inland from the seacoast and from the lower reaches of the Crystal Mountains (on the Gabon border), the land rises somewhat abruptly to a series of eroded hills and sharp ridges known as the Mayombe Escarpment. Ridge peaks reach elevations of about 487 to 610 meters (1,600 to 2,000 feet). Deep gorges have been cut in these ridges by the swift Kouilou River and its tributaries.

10 🌐 **MOUNTAINS AND VOLCANOES**

Mount Berongou, ROC's highest point, is located in the upper reaches of the Crystal Mountains on the border with Gabon. It rises to about 903 meters (2,963 feet).

11 🌐 **CANYONS AND CAVES**

ROC has no major canyons or caves.

12 🌐 **PLATEAUS AND MONOLITHS**

The Central Highlands encompass the area generally known as the Batéké Plateau and

CONGO (ROC)



EPD/Robert J. Groelsema

The Congo River, formerly known as the Zaire River, is the second-longest river in Africa.

extend for approximately 129,500 square kilometers (50,000 square miles) over the south-central portion of the country. This region is characterized predominantly by rounded, low hills of less than 305 meters (1,000 feet) elevation and by scattered rolling plains. In the northern part of this sector, however, toward the lower Gabon border, the hills are steeper, and crests rise as high as 823 meters (2,700 feet) above sea level. Deep valleys separate individual plateaus; these ravines carry the eastward-flowing tributaries of the Congo River. Savannah and grasslands cover much of the central plateau plains.

13 🌐 **MAN-MADE FEATURES**

Hydroelectricity, harnessed through dams built on the ROC's rivers, are a primary source of power for the nation. Two of the most significant hydroelectric dams are built on the Bouenza and Djoué Rivers.

14 🌐 **FURTHER READING**

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Costa Rica

- **Official name:** Republic of Costa Rica
- **Area:** 51,100 square kilometers (19,730 square miles)
- **Highest point on mainland:** Cerro Chirripó (3,810 meters/2,500 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** 6 A.M. = noon GMT
- **Longest distances:** 464 kilometers (288 miles) from north to south and 274 kilometers (170 miles) from east to west
- **Land boundaries:** 639 kilometers (399 miles) total boundary length; Nicaragua 309 kilometers (193 miles); Panama 330 kilometers (206 miles)
- **Coastline:** Total: 1290 kilometers (805 miles); Caribbean Sea 212 kilometers (132 miles); Pacific Ocean 1,016 kilometers (633 miles); Cocos Island (Isla de Coco) 62 kilometers (40 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Costa Rica is located in Central America, which is between the North and South American continents. Nicaragua lies to the north, the Caribbean Sea to the east, Panama to the southeast, and the Pacific Ocean to the southwest and west. With an area of about 51,100 square kilometers (19,730 square miles), it is the second-smallest Central American country, slightly smaller than the state of West Virginia. Costa Rica is divided into seven provinces.

2 🌐 TERRITORIES AND DEPENDENCIES

Cocos Island is a dependency of Costa Rica. It is located approximately 480 kilometers (300 miles) off the Pacific coast.

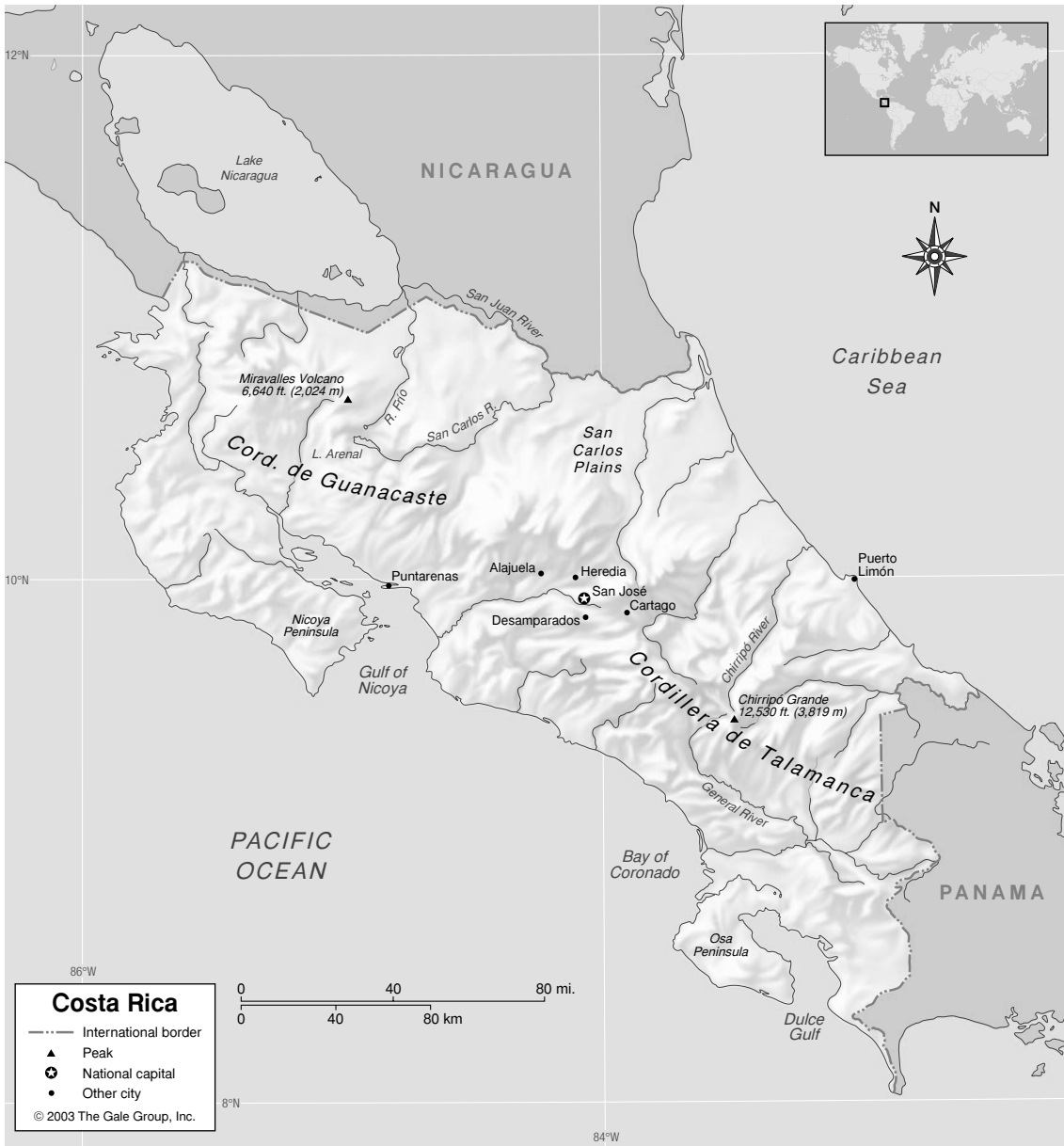
3 🌐 CLIMATE

Most of Costa Rica has two seasons: the wet season from May to November (winter months) and the dry season from December to April (summer months). Although the country lies completely within the tropics,

elevation plays a role in the variations of its climate. Temperature is also determined by proximity to the coasts. The area known as the *tierra caliente* (hot country) in the coastal and northern plains, experiences daytime temperatures between 29 and 32°C (85 to 90°F). The *tierra templada* (temperate country), including the central valleys and plains, has average daytime temperatures from 24 to 27°C (75 to 80°F). The *tierra fría* (cold country) composes the land above 1,524 meters (5,000 feet) and has daytime temperatures from 24 to 27°C (75 to 80°F), but nighttime temperatures of 10 to 13°C (50 to 55°F).

The tierra caliente is characterized by heavy rains; the tierra templada receives regular rains from April through November; and the tierra fría is less rainy but more windy than the temperate regions. The average rainfall for Costa Rica is more than 250 centimeters (100 inches). Natural disasters that befall the country include occasional earthquakes, hurricanes along Atlantic coast, frequent flooding of

COSTA RICA



lowlands at the beginning of the rainy season, landslides, and volcanic eruptions.

4 🌐 TOPOGRAPHIC REGIONS

The landscape of Costa Rica varies from seasonally snow-capped mountains to seasonal marshlands to lush rain forests. The central highlands extend from northwest to southeast.

The Atlantic and Pacific coastal lowlands are low, swampy, and heavily forested.

5 🌐 OCEANS AND SEAS

Seacoast and Undersea Features

Costa Rica is bordered on the east by the Pacific Ocean and on the west by the Caribbean

COSTA RICA

Sea. The country sits at the boundary where the Cocos Plate in the Pacific—a piece of Earth's crust about 510 kilometers (316 miles) wide—meets the tectonic plate underlying the Caribbean Sea. The Cocos Plate moves east at a rate of about 10 centimeters (4 inches) per year, causing occasional earthquakes in the country.

Sea Inlets and Straits

Though there are a number of small inlets along the shore of the Pacific Ocean, the two major ones are the Nicoya Gulf (Golfo de Nicoya) in the north and the Dulce Gulf (Golfo Dulce) in the south.

Islands and Archipelagos

Cocos Island is an uninhabited dependency of Costa Rica. This volcanic island, located about 480 kilometers (300 miles) southwest of Costa Rica in the Pacific Ocean, is covered with tropical rainforests.

There are a number of small sedimentary islands within the Nicoya Gulf, several of which are protected as wildlife refuges for roosting and nesting birds. Caño Island, located near the mouth of the Nicoya Gulf, is a 300-hectare (740-acre) wildlife refuge island that is covered with tropical rainforest and surrounded by coral platforms.

Coastal Features

Along the coasts, mainly where the rivers empty into the ocean, there are extensive mangrove forests and swamps. The rest of the coastline offers numerous beaches. The Caribbean coast of Costa Rica is flat and open, with gray or black sand beaches, while the Pacific coast is irregular with hilly or mountainous peninsulas, coastal lowlands, bays, and deep gulfs.

6 INLAND LAKES

With a surface area of about 85 square kilometers (33 square miles), the man-made Lake Arenal is the largest lake in Costa Rica. It is located in the northern part of the country near the Arenal volcano in the Arenal National Park.

Lake Cachí is another man-made lake located at the eastern end of the Reventazón River (Río Reventazón).

Lake Hule, south of San Miguel, is a natural lake set in a dormant volcanic crater. Lake Caño Negro is a seasonal lake (appearing during the wet season) near Costa Rica's northern border that is fed by the fresh waters of the Frío River (Río Frío).

7 RIVERS AND WATERFALLS

The longest river in Costa Rica is the San Juan. It flows from Lake Nicaragua in Nicaragua along the border with Costa Rica to the Caribbean Sea, covering a total length of about 220 kilometers (140 miles). Tributaries to the San Juan rise in the volcanic highlands of Costa Rica. Although the San Juan River lies within Nicaraguan territory, Costa Rica has, by treaty, full rights of navigation.

The San Carlos and Chirripó Rivers, located near the border with Nicaragua, commonly flood during the wet season, turning the surrounding landscape into swampy marshlands.

8 DESERTS

There are no desert regions in Costa Rica.

9 FLAT AND ROLLING TERRAIN

The northern lowlands are broad and flat and, in some areas, they are cut off from the highlands by a virtually impassible hardwood forest. The region is made up of two separate llanuras (low-lying plains), the Llanura de los Guatusos in the west and the San Carlos Plains (Llanura de San Carlos) farther east. The

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EPD/Saxifraga/Jan van der Straaten

The Irazu volcano (3,432 meters/11,260 feet) is the highest active volcano in Costa Rica. It lies at the center of Irazu Volcano National Park, established in 1955.

llanuras make up one-fifth of Costa Rica's land area, and extend along the entire length of the San Juan River.

The Caribbean lowlands are covered with tropical evergreen rainforest. The Pacific lowland forests are typically dry, particularly in the northwest.

The most important area of Costa Rica is the Meseta Central. It contains two upland basins separated by low volcanic hills and is home to half of the population. Located in the temperate country, it lies between the Cordillera Central to the north and low mountains and hills to the south. The land surface of the Meseta is generally level or rolling, which is acceptable for agriculture.

The General Valley, drained by the General River, lies between the Cordillera de Talaman-

ca to the north and the coastal mountains of the southwest. Almost as large as the Meseta Central, the General Valley is a relatively isolated structural depression that ranges in elevation from 183 to 1,066 meters (600 to 3,500 feet). River flood plains, terraces, rolling hills, and savannas dominate the landscape.

10 🌐 **MOUNTAINS AND VOLCANOES**

Extending north and south throughout the center of Costa Rica are several distinct mountain ranges called "cordilleras." The Cordillera de Guanacaste, Cordillera Central, Cordillera de Tilarán, and Cordillera de Talamanca are all part of the Andean-Sierra Madre chain that runs along the western shore of the Americas.

The Cordillera de Guanacaste is volcanic in origin and stretches for 112 kilometers (70 miles) from the western border with Nicaragua to the Cordillera Central. The highest

COSTA RICA

peak in the Guanacaste chain is the Miravalles volcano at 2,024 meters (6,640 feet).

To the southeast, the Cordillera de Tilarán is home to the Arenal volcano, one of the world's most active volcanoes. To the east lies Cordillera Central, which contains four volcanoes and the Meseta Central (which is also home to the capital city). Cordillera de Talamanca rises in the south, housing the country's highest point, Cerro Chirripó.

Lying at the heart of one of the most active volcanic regions on Earth, Costa Rica is home to seven active volcanoes, and sixty dormant or extinct ones. The active volcanoes of Irazú, Poás, Barba, and Turrialba rise near the capital city of San José. The remaining active to semi-active volcanoes are: Arenal, Miravalles, and Rincon de la Vieja.

11 🌐 CANYONS AND CAVES

The Caves of Venado are located south of Arenal Lake and Volcano. These seven-million-year-old caves were formed as water currents penetrated through the surrounding limestone rocks. About 2.5 kilometers (1.5 miles) in length, the caves contain at least four different species of bats and numerous types of spiders, many of which are endemic to the area.

About forty caves are located within the Barra Honda National Park in northern Costa Rica. The largest is Santa Ana Cave at 240 meters (787 feet) deep. The most popular among tourists are La Terciopelo, La Trampa, and La Santa Ana. These caverns house a large number of stalagmites, stalactites, pillars, cave earsls, helicities, and other rock formations. The Barra Honda National Park was created specifically to protect these natural wonders.

12 🌐 PLATEAUS AND MONOLITHS

There are no plateau regions in Costa Rica.

DID YOU KNOW?

Cloud forests—lush forests at high elevations where the heavy mist and clouds almost always hang in the air—occur on Costa Rica's mountaintops. Monte Verde Biological Cloud Forest Preserve covers twenty-six thousand acres of forest, and houses two thousand plant species, four hundred bird species, and one hundred different animal species.

13 🌐 MAN-MADE FEATURES

The man-made Lake Arenal was formed by construction of the Sangregado dam, located at the southeast end of the lake. The hydroelectric power created by this dam accounts for about 33 percent of Costa Rica's total electrical capacity.

Lake Cachí Dam, located at the eastern end of the Reventazón River, supplies hydroelectric power to San José, the capital city.

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Côte d'Ivoire

- **Official name:** Republic of Côte d'Ivoire (formerly known as Ivory Coast)
- **Area:** 322,460 square kilometers (124,502 square miles)
- **Highest point on mainland:** Mount Nimba (1,752 meters/5,748 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Southern and Eastern
- **Time zone:** Noon = noon GMT
- **Longest distances:** 808 kilometers (502 miles) from southeast to northwest, 780 kilometers (485 miles) from northeast to southwest
- **Land boundaries:** 3,110 kilometers (1,932 miles) total boundary length; Burkina Faso 584 kilometers (363 miles); Ghana 668 kilometers (415 miles); Guinea 610 kilometers (379 miles); Liberia 716 kilometers (445 miles); and Mali 532 kilometers (330 miles)
- **Coastline:** 515 kilometers (322 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Côte d'Ivoire is located in West Africa between Ghana and Liberia, with a southern border on the Gulf of Guinea of the Atlantic Ocean. With a total area of about 322,460 square kilometers (124,502 square miles), it is slightly larger than the state of New Mexico. The country is divided into fifty departments.

2 🌐 TERRITORIES AND DEPENDENCIES

Côte d'Ivoire has no outside territories or dependencies.

3 🌐 CLIMATE

Côte d'Ivoire has a warm, humid climate that transitions from equatorial to tropical. Temperatures average between 25°C (75°F) and 32°C (90°F), with extremes of 10°C (50°F) to 40°C (104°F) depending on the time of year and the area of the country.

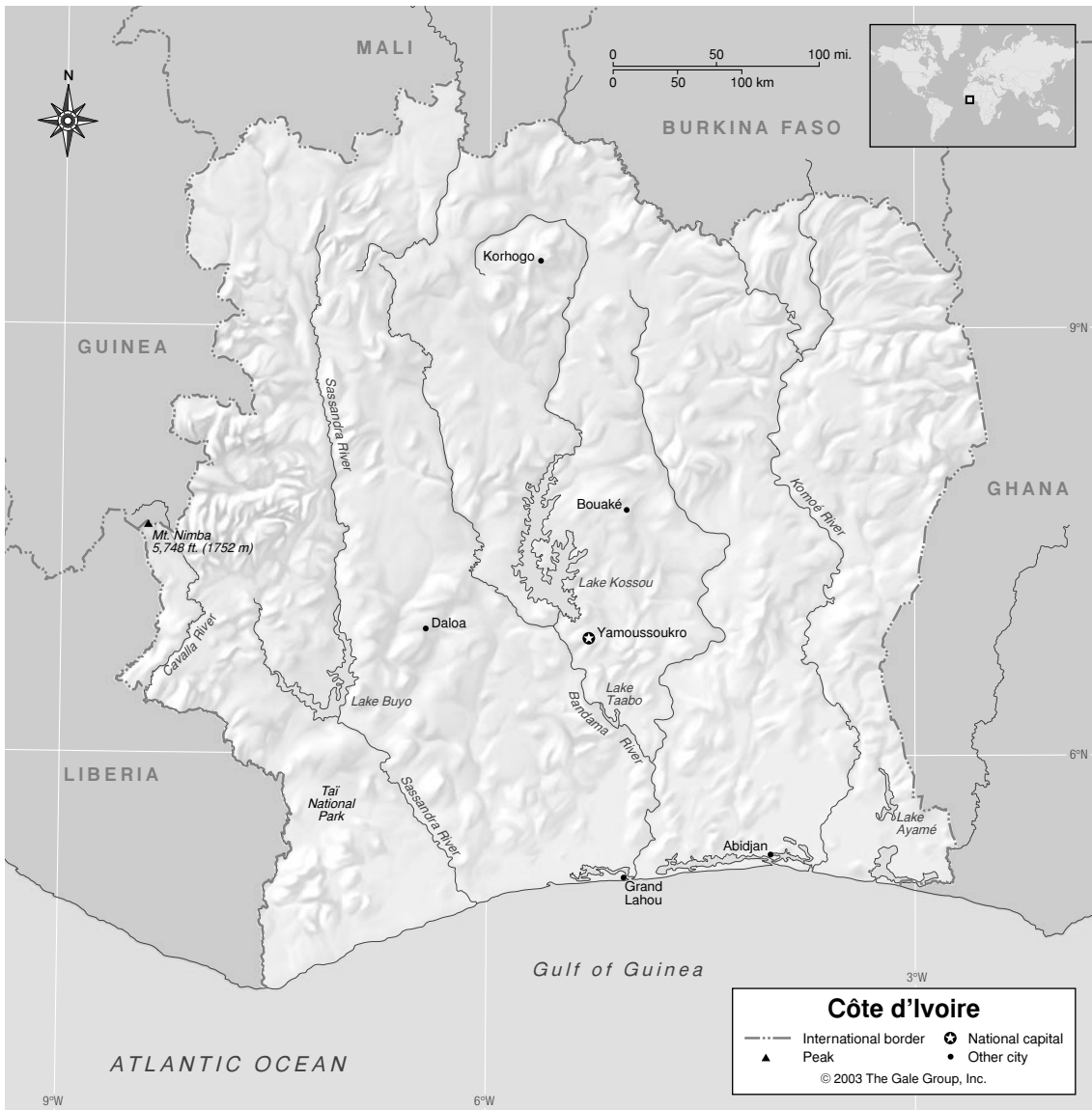
In the north, heavy rains occur between June and October, averaging 110 centime-

ters (43 inches) annually. Along the equatorial coast and the southwest, some rain falls in most months, but precipitation is heaviest between May and September, with average rainfall of 110 to 200 centimeters (43 to 87 inches) annually. The major dry season lasts from December to April.

4 🌐 TOPOGRAPHIC REGIONS

The Guinea Highlands, in the northern half of the country (from Man to Odienné), have peaks greater than 1,000 meters (3,280 feet) high. The country's remaining terrain, however, is made up of a vast plateau that tilts gently toward the Atlantic Ocean. The land is generally divided into three main regions based on the difference in natural vegetation. The Lagoon Region runs parallel to the coastline, the Dense Forest Region crosses the middle of the country, and the Savannah Woodland Region lies to the north.

CÔTE D'IVOIRE



5 OCEANS AND SEAS

Seacoast and Undersea Features

Côte d'Ivoire borders the Gulf of Guinea (a part of the Atlantic Ocean) in the southern portion of the country.

Sea Inlets and Straits

A series of lagoons lie along the coastline, interspersed by sandbars, mudbanks, and small wooded islands. Most of these lagoons are narrow, salty, and shallow; they run parallel to the coastline, linked to one another by small watercourses or canals.

CÔTE D'IVOIRE



EPD/Joe Filscher

The landscape of Côte d'Ivoire features palm and baobab trees.

Coastal Features

The area along the coast, from the Ghana border to the mouth of the Sassandra River, is known as the Lagoon Region. Directly at the coast, smooth, steep beaches are pounded by heavy surf, particularly in July and November. Behind the beaches, the sandy soil supports a luxuriant growth of coconut palm and salt-resistant coastal shrubs.

6 🌐 INLAND LAKES

The four largest lakes are Kossou Lake in the central part of the nation, Taabo Lake to the south of Kossou Lake, Buyo Lake in the southwest, and Ayamé Lake in the southeast near the border with Ghana.

Lake Kossou is the largest of these, covering an area of about 1,600 square kilome-

ters (618 square miles). All four of them are man-made lakes.

7 🌐 RIVERS AND WATERFALLS

Côte d'Ivoire has four main rivers that run roughly parallel from the north to the south. They are the Cavally (on the border with Liberia), Sassandra, Bandama, and Komoé; the longest of these is the Bandama, which runs about 800 kilometers (500 miles). The waterways are navigable for only short distances from the coast. Rocky ledges and numerous rapids prevent passage even of small canoes. Seasonal flooding has caused obstacles in east-to-west travel across the country; building and maintaining bridges and roads over the main rivers would be very expensive.

8 🌐 DESERTS

There are no desert regions in Côte d'Ivoire.

9 FLAT AND ROLLING TERRAIN

The Savannah Woodland Region in the north consists of open, grassy woodland scattered with a few trees and shrubs. Moving south, larger areas of trees are found, particularly along the rivers, as one enters the area known as the Dense Forest Region. This region stretches across the center of the country from Liberia to Ghana and, west of Fresco, continues south to the ocean.

10 MOUNTAINS AND VOLCANOES

The only mountain masses in the country are along the western border and in the northwest, where some of the higher peaks exceed 914 meters (3,000 feet) in elevation. Mount Nimba is the country's highest peak (1,752 meters/5,748 feet). It is located in the western corner, where the country borders both Liberia and Guinea.

11 CANYONS AND CAVES

There are no significant caves or canyons in Côte d'Ivoire.

12 PLATEAUS AND MONOLITHS

Viewed as a whole, almost all of the country is little more than a wide plateau, sloping gradually southward to the sea.

13 MAN-MADE FEATURES

Large dams were built in the 1960s and 1970s in an effort to control the flow of the major rivers and offer a better system of irrigation for the surrounding areas. The major dams are: Buyo Dam on the Sassandra River, Kossou and Taabo Dams on the Bandama, and Ayamé Dam on the small Bia River in the southeast corner of the country. All of these dams have created namesake reservoirs or lakes.

DID YOU KNOW?

Two parks in Côte d'Ivoire—Comoé National Park and Taï National Park—have been designated World Heritage Sites by the United Nations agency called UNESCO. Comoé (Komoé) is located in the far eastern part of the country surrounding the Komoé River. This parkland, covering one of the largest protected areas in West Africa, support a diverse population of plant life. Taï.

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Croatia

- **Official name:** Republic of Croatia
- **Area:** 56,542 square kilometers (21,831 square miles)
- **Highest point on mainland:** Mt. Dinara (1,830 meters/6,004 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Eastern
- **Time zone:** 7 P.M. = noon GMT
- **Longest distances:** 499 kilometers (310 miles) from north to south; 463 kilometers (288 miles) from east to west
- **Land boundaries:** 2,028 kilometers (1,260 miles) total boundary length; Bosnia and Herzegovina 932 kilometers (579 miles); Hungary 329 kilometers (204 miles); Slovenia 501 kilometers (311 miles); Yugoslavia 266 kilometers (165 miles)
- **Coastline:** 5,835 kilometers (3,626 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Croatia is located in southeastern Europe between Slovenia and Bosnia and Herzegovina, bordering the Adriatic Sea. The country also shares boundaries with Hungary and Yugoslavia. With an area of about 56,542 square kilometers (21,831 square miles), the country is slightly smaller than the state of West Virginia. Croatia is divided administratively into twenty counties and one city.

2 🌐 TERRITORIES AND DEPENDENCIES

Croatia has no outside territories or dependencies.

3 🌐 CLIMATE

The climate in Croatia is predominantly temperate. In Zagreb, the average daily high temperature in July is 27°C (80°F), while in January it falls to 2°C (35°F). The overall average annual temperature in Zagreb is 11.6°C (52.9°F). The Adriatic coast has a more moderate, Mediterranean climate. The average annual temperatures for the cities of Split and Dubrovnik are 16.6°C (61.9°F) and 17.1°C

(62.8°F), respectively. The prevailing northeast winds include the maestral (mistral), which mitigates the heat in the summer, and the cold, dry bora.

Zagreb's annual precipitation is 924 centimeters (36 inches). The winter averages 49 days with a snow cover of greater than 1 centimeter (0.4 inch). The narrow Adriatic coastal belt has very dry summers. Neither Split nor Dubrovnik typically experiences snow accumulation in the winter; and each city averages more than one hundred sunny days per year. Split averages 94 centimeters (37 inches) of precipitation annually. Dubrovnik has an annual precipitation of about 102 centimeters (40 inches).

4 🌐 TOPOGRAPHIC REGIONS

Croatia sprawls along the eastern side of the Adriatic Sea, on the western side of the Balkan Peninsula. Its long coastal region stretches from the Istria Peninsula in the north to the Gulf of Kotor (Boka Kotorska) in the south,

CROATIA



becoming increasingly narrow. For a short distance, a branch of neighboring nation Bosnia and Herzegovina interrupts the Croatian coast. In the north, between Bosnia and Herzegovina and Slovenia, Croatia extends inland as far as the Danube River.

Croatia has three main geographic types: the Pannonian and Peri-Pannonian Plains of eastern and northwestern Croatia, the hilly and mountainous central area, and the Adriatic coastal area that extends down to Dalmatia in the south.

Tectonic fault lines are widespread in north central Croatia and also run through the Dinaric Alps down to Dalmatia. These structural seams in the earth's crust periodically shift, causing earth tremors and occasional destructive earthquakes.

5 OCEANS AND SEAS

Seacoast and Undersea Features

Croatia borders the Adriatic Sea, an arm of the Mediterranean Sea located between Italy and the Balkan Peninsula. Off Croatia's coast in the north near Slovenia, the Adriatic Sea is very shallow, only reaching a depth of 23 meters (75 feet) in the Gulf of Venice. The waters off southern Croatia, however, reach to depths of more than 1,200 meters (3,900 feet).

Sea Inlets and Straits

Kvarner Bay is located in the north by the Istria Peninsula. The Gulf of Kotor marks the far southern coast.

Islands and Archipelagos

Croatia has a total of 1,185 islands, only 66 of which are inhabited. Croatia's coastal islands are mountainous, since they are extensions of the Dinaric Alps. The largest islands are Krk (406 square kilometers/157 square miles), Cres (406 square kilometers/157 square miles), Brač (395 square kilometers/153 square miles), Pag (300 square kilometers/116 square miles), and Korčula (285 square kilometers/110 square miles).

Coastal Features

Rocks, rather than sandy beaches, cover most of Croatia's coast. The coal mines, on the Istria Peninsula in the north, are one of Croatia's main energy resources. The southern half of Croatia's coastline is called Dalmatia, the ancient Roman name for this region.

6 INLAND LAKES

Croatia's largest lake is Vrana, near Biograd, which has a surface area of only 30 square kilometers (11.6 square miles). The Plitvička Lakes are a string of sixteen lakes located within the national park of the same name.

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7 🌐 RIVERS AND WATERFALLS

In the coastal region, many short rivers and streams run quickly down the steep mountains into the Adriatic Sea. Among the largest of these are the Krka and the Rasa. The Neretva River enters from Bosnia and Herzegovina in south Dalmatia and flows through the country for just a short distance.

In the interior east, rivers are wider and calmer. Blocked from the Adriatic by the Dinaric Alps, they flow east towards the Danube River and, ultimately, into the Black Sea. The largest of these rivers form Croatia's borders in this region. The Drava and Mura Rivers make up almost all of the northwest border with Hungary. The Sava River, after flowing across the country from Slovenia, forms the southern border with Bosnia and Herzegovina. The Kupa and Una are tributaries of the Sava. The country's longest river is the Danube River in the east, at 2,850 kilometers (1,771 miles) long. The Danube is the second-longest river in Europe and flows between Croatia and Yugoslavia. Both the Sava and the Drava are tributaries of the Danube.

Croatia's most notable waterfall is the series of cascades between the Plitvička Lakes. The tallest has a vertical drop of 72 meters (275 feet). Croatia's interior area also has fourteen thermal springs, including seven mineral springs.

8 🌐 DESERTS

There are no desert regions in Croatia.

9 🌐 FLAT AND ROLLING TERRAIN

Occupying the east and northeast region is the Pannonian Plain, a lowland that is the most fertile farmland in the country. The plain was once occupied by an ancient sea, which was gradually filled by silt until it formed a nutrient-rich basin, marked by low hills and broad flood plains. The



EPD/Saxifraga/Janus Verkerk

Croatia's Plitvička Lakes National Park in the Dinaric Alps near the border with Bosnia and Herzegovina.

plains of Slavonia extend through the eastern arm of Croatia near Yugoslavia.

10 🌐 MOUNTAINS AND VOLCANOES

Much of Croatia lies at an altitude of over 500 meters (1,640 feet). The Dinaric Alps, near the border with Bosnia and Herzegovina, contain Croatia's highest peak: Mt. Dinara (1,830 meters/6,004 feet). These mountains run across the central region of the country, forming the boundary between the coastal area and the eastern plains and extending southeastward along the border with Bosnia and Herzegovina.

CROATIA

Subsidiary ranges of the Dinaric Alps in Croatia include the Velika Kapela, Plješevica, and Velebit Mountains, with the high peaks of Kame Plješevica (1657 meters/5,437 feet), Velika Kapela (1,533 meters/5,030 feet), and Risnjak (1,528 meters/5,013 feet). In eastern Croatia are the Psunj Mountains, Papuk Mountains, and Zagorje Hills.

The limestone ranges of the Dinaric Alps are frequently referred to as karst or karstland, and are distinctive because water seeping through the soluble limestone has formed underground drainage channels. This leaves the mountains dry and rocky, with their surface pockmarked by depressions and caves.

11 CANYONS AND CAVES

Archaeologists have unearthed cave bear and Neanderthal fossils from Veternica Cave in northern Croatia. This karst cave has a large chamber about seventy meters from the entrance that is often used as a concert site. Located just north of Zagreb, the cave also is sometimes called the Zagreb Underground.

12 PLATEAUS AND MONOLITHS

There are no major plateau regions in Croatia.

13 MAN-MADE FEATURES

There are no major man-made structures affecting the geography of Croatia.

DID YOU KNOW?

Plitvička Lakes National Park is a UNESCO Natural World Heritage Site. The forests of the park serve as home to a number of bears, wolves, and rare species of birds. The park also contains beautiful lakes, waterfalls, and caves, which were formed by water flowing through and around the natural limestone hills.

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Cuba

- **Official name:** Republic of Cuba
- **Area:** 110,860 square kilometers (42,803 square miles)
- **Highest point on mainland:** Pico Turquino (2,005 meters/6,578 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** 7 A.M. = noon GMT
- **Longest distances:** 89 kilometers (55 miles) from north to south; 1,223 kilometers (760 miles) from east to west
- **Land boundaries:** None
- **Coastline:** 3,735 kilometers (2,017 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

The long, narrow island of Cuba has a shape that has been compared to a cigar caught between the fingers of Florida and the Yucatán Peninsula. It is flanked by Jamaica on the south, Hispaniola on the southeast, and the Bahamas on the northeast. Slightly smaller than the state of Pennsylvania, Cuba extends some 1,200 kilometers (746 miles) from Cape Maisí on the east to Cape San Antonio on the west, about the distance from New York to Chicago. The largest of the West Indian islands, its territory almost equals that of all the other islands combined. In addition to the main island, the Cuban archipelago includes the Isla de la Juventud (Isle of Pines) near the south coast in the Gulf of Batabanó plus over one thousand coastal cays and islets.

2 🌐 TERRITORIES AND DEPENDENCIES

Cuba has no territories or dependencies.

3 🌐 CLIMATE

Cuba has a pleasant subtropical climate strongly influenced by gentle northeast trade winds, which shift slightly to the east

in the summer. The island's long, tapered shape allows the moderating sea breezes to cool all regions, and there are no pronounced seasonal variations in temperature. July and August are the warmest months, and February is the coolest. The wet summer season is between May and October, and the drier winter season runs from November through April. Annual rainfall averages over 180 centimeters (70 inches) in the mountains, 90 to 140 centimeters (35 to 55 inches) in the lowlands, and 65 centimeters (26 inches) at Guantanamo Bay. On average, rain falls on Cuba 85 to 100 days per year with three-quarters of it falling during the wet season. The humidity varies between 75 percent and 95 percent year-round. The eastern coast is subject to hurricanes from August to October, and the country averages about one hurricane every year. Droughts are also common.

SEASON	MONTHS	AVERAGE TEMPERATURE
Summer	May to September	27°C (81°F)
Winter	November to March	22°C (72°F)

CUBA



4 🌐 TOPOGRAPHIC REGIONS

Well over half of the terrain consists of flat or rolling plains with a great deal of rich soil well suited to the cultivation of sugarcane, the dominant crop. There are rugged hills and mountains in the southeast, and the most extensive mountainous zone of Cuba lies near its eastern extremity. Smaller mountain zones with lower elevations occur near the midsection and in the far west.

5 🌐 OCEANS AND SEAS

Cuba is cradled between the Caribbean Sea to its south, the North Atlantic Ocean to its northeast, and the Gulf of Mexico to its northwest.

Seacoast and Undersea Features

Cuba is surrounded by coral reefs.

Sea Inlets and Straits

Cuba is separated from Florida to the north by the Straits of Florida, and from Hispaniola

to the southeast by the narrow Windward Passage. Off the central northern coast, the sea-lane of the Old Bahama Channel at some points is only ten miles wide as it passes between the Cuban shelf and the shallows of the Great Bahama Bank. The Gulf of Batabanó borders the northwestern end of Cuba's Caribbean coast.

Islands and Archipelagos

The 220-square-kilometer (570-square-mile) Isla de la Juventud is the westernmost island in a chain of smaller islands, the Archipiélago de los Canarreos, which extends 110 kilometers (68 miles) across the Gulf of Batabanó. The extreme northwestern coast of Cuba is flanked by the Archipiélago de los Colorados. Offshore to the north of Sagua la Grande lie the islands of the Archipiélago de Sabana. East of those islands, stretching around the coast from Morón to Neuyitas, is the Archipiélago de Camagüey, the largest of the archipelagos that surround

CUBA



EPD/Saxifraga/Wiel Poelmans

El Yunque, just north of Guantánamo in eastern Cuba.

Cuba. Overall, about 4,200 coral cays and islets surround Cuba, most of them low-lying and uninhabited.

Coastal Features

Except for near its western tip, a wealth of excellent harbors indent Cuba's shoreline. The coastline includes more than 289 natural beaches. In the north, the beaches tend to be longer and whiter with rolling surf and undertow, while the southern beaches are darker, feature sea urchins, and are rockier or more swampy. While rugged beaches comprise most of the northern coast, swamps still occur there, as well as on the Isla de la Juventud.

Cuba's coastline is indented by some of the world's finest natural harbors. There are about two hundred in all, and many are shaped like pouches or bottlenecks, with narrow entrances that broaden into spacious deepwater an-

chorages. Ports on the north coast with these kinds of harbors include Mariel, Havana, and Nueyitas. South coast bottleneck ports include Guantánamo, Santiago de Cuba, and Crenfuegos. The principal open bay ports, Cárdenas and Matanzas, are located on the north coast.

6 🌐 INLAND LAKES

There are no large lakes in Cuba, but many coastal swamplands extend throughout the country. Zapata Swamp, the largest on the island, covers more than 4,403 square kilometers (1,700 square miles) on the Zapata Peninsula.

7 🌐 RIVERS AND WATERFALLS

About two hundred rivers run northward or southward from an interior watershed and are predominantly short and rapid. They provide good drainage but are not generally suitable for navigation.

8 🌐 DESERTS

There are no deserts on Cuba.

9 🌐 FLAT AND ROLLING TERRAIN

Almost two-thirds of the Cuban landscape consists of flatlands and rolling plains. Cattle graze on these fertile flatlands, and sugarcane, coffee, and tobacco are grown there. Three-fourths of the national territory consists of grasslands, hills, and the lower and gentler mountain slopes.

10 🌐 MOUNTAINS AND VOLCANOES

The Oriental, Central, and Occidental Mountains cover 25 percent of the country. The loftiest mountain system is the Sierra Maestra; it is the steepest of the Cuban ranges, and its peaks include the country's highest summit: Pico Turquino, at 2,005 meters (6,578 feet). The southeastern tip of the island is mostly mountainous and includes such ranges as the Sierra de Nipe, the Sierra de Nicaro, the Sierra del Cristal, and the Cuchillas de Toa. The Escambray Mountains are the principal mountains of central Cuba. They are located in the southern part of that region, and are separated by the Agabama River into two ranges: the Sierra de Trinidad in the west and the Sierra de Sancti Spíritus in the east. The principal ranges of the western highlands are the Sierra del Rosario and the Sierra de los Organos.

11 🌐 CANYONS AND CAVES

The limestone formations known as karst are most characteristic of the western highlands, where they form numerous sinkholes and underground caverns.

12 🌐 PLATEAUS AND MONOLITHS

Situated in Cuba's western highlands, known collectively as the Cordillera de Guaniguanico, are limestone formations weathered into strange shapes. Ranks of tall, erosion-resistant

DID YOU KNOW?

Desembarco del Granma National Park, a park in southwest Cuba near Cabo Cruz, features dramatic cliffs lining the shore of the Atlantic Ocean, as well as limestone terraces uplifted by geological forces.

limestone columns resembling organ pipes gave the Sierra de los Organos its name.

13 🌐 MAN-MADE FEATURES

Cuba's infrastructure includes such impressive engineering feats as: the Havana Sewer Tunnel (1912); the Carretera Central (Central Road) (1931), a 1,139-kilometer (708-mile) thoroughfare that spans the island from west to east; the Bay Tunnel (1958), which expanded access to eastern Havana by allowing travel under Havana Bay; and the Viaducto de La Farola (La Farola Viaduct) (1965) connecting Guantánamo and Baracoa.

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Cyprus

- **Official name:** Republic of Cyprus
- **Area:** 9,250 square kilometers (3,571 square miles)
- **Highest point on mainland:** Mount Olympus (1,951 meters/6,401 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Eastern
- **Time zone:** 2 P.M. = noon GMT
- **Longest distances:** 227 kilometers (141 miles) from east-northeast to west-southwest; 97 kilometers (60 miles) from south-southeast to north-northwest
- **Land boundaries:** None
- **Coastline:** 648 kilometers (403 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

The largest Mediterranean island after Sicily and Sardinia, Cyprus is located in the extreme northeastern corner of the Mediterranean Sea. It is 71 kilometers (44 miles) south of Turkey, 105 kilometers (65 miles) west of Syria, and 370 kilometers (230 miles) north of Egypt. Its average width is between 56 kilometers and 72 kilometers (35 miles and 45 miles). The long, narrow Karpas peninsula in the east, combined with the broader shape of the rest of the island, has led people to compare the island's shape to that of a skillet or frying pan.

2 🌐 TERRITORIES AND DEPENDENCIES

Cyprus claims no territories or dependencies.

3 🌐 CLIMATE

The climate is Mediterranean, with sharply defined seasons. There are hot, dry summers between June and September; rainy winters from November to March; and short, changeable spring and autumn seasons in between. Annual rainfall averages around 50 centimeters (20 inches). Precipitation is highest in the area of Nicosia and lowest on Mount Olympus in the Troodos Mountains.

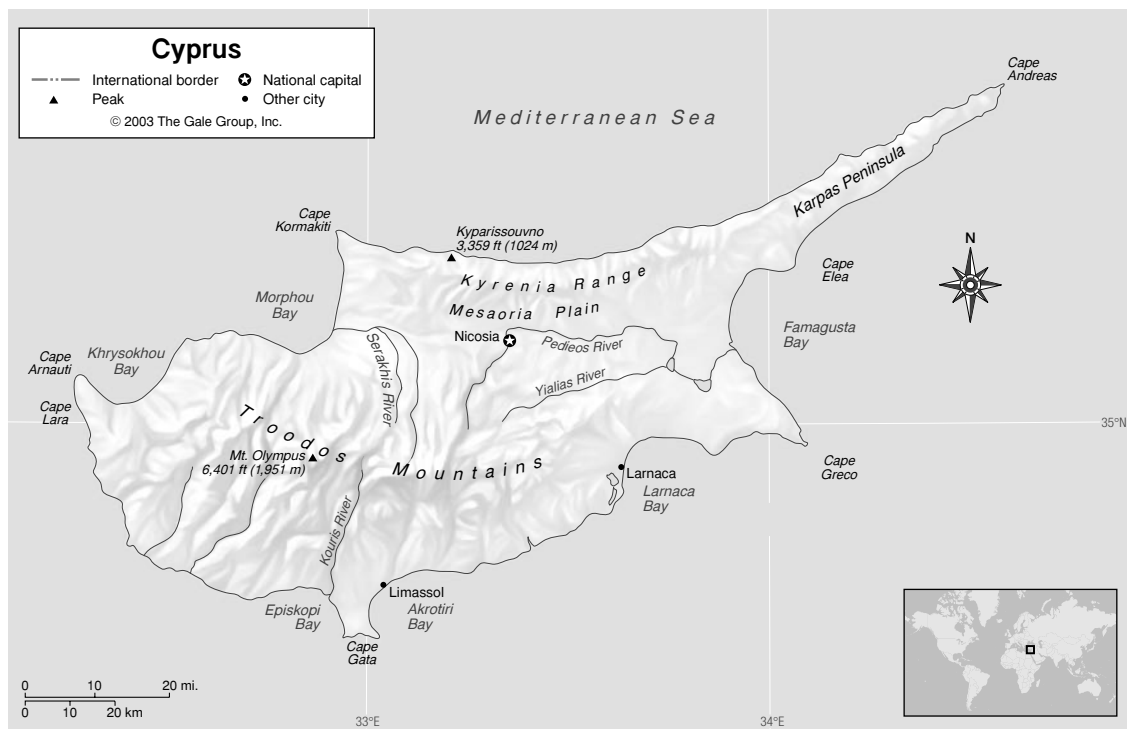
SEASON	MONTHS	AVERAGE TEMPERATURE: °CELSIUS (°FAHRENHEIT)
Summer	June to September	21°C (70°F) to 37°C (98°F)
Winter	November to March	5°C (41°F) to 15°C (59°F)

4 🌐 TOPOGRAPHIC REGIONS

Two mountain ranges and the central plain between them, called the Mesaoria, dominate the topography of Cyprus. The Troodos Mountains cover most of the southern and western parts of the country, accounting for roughly half its total area—including the southwestern Nicosia District, all of the Paphos and Limasol districts except their coastal plains, and the western Larnaca District. The narrow Kyrenia Range, extending along the northern coastline, occupies a far smaller area, with lower elevations.

Since 1974, Cyprus has been divided into autonomous northern and southern sectors, separated by what is known as the Green Line. The Turkish sector north of the line, whose self-proclaimed government is recognized only by Turkey, comprises 37 percent of the

CYPRUS



island. The Greek sector, whose government is recognized internationally, takes up 59 percent. The remainder belongs to a buffer zone controlled by the United Nations.

5 OCEANS AND SEAS

Cyprus is located at the far northeastern corner of the Mediterranean Sea.

Seacoast and Undersea Features

Cyprus has no notable coastal or undersea features.

Sea Inlets and Straits

Cyprus has a number of bays, including Famagusta Bay and Larnaca Bay in the east, the Akrotiri and Episkopi bays to the south, and the Khrysokhou and Morphou bays to the northwest.

Islands and Archipelagos

At the northeasternmost tip of Cyprus are the small islands of Cape Andreas known as the Klidhes.

Coastal Features

Cyprus's coastline is rocky and heavily indented, with a number of bays and capes. Capes include Apostolos Andreas to the northeast, Elea and Greco to the east (enclosing Famagusta Bay), Gata to the south, Lara to the west, and Arnauti and Kormakiti to the northwest. The coast is fringed with sandy beaches.

6 INLAND LAKES

Cyprus has few permanent lakes. Two large saltwater lagoons near Larnaca and Limassol on the southern coast dry up every summer and are filled by the winter rains.

CYPRUS



EPD Photos

Cyprus's Petra tou Romiou is the legendary birthplace of Aphrodite, goddess of love and beauty.

7 🌐 **RIVERS AND WATERFALLS**

A network of rivers flows in all directions down the Troodos Mountains. Even the largest of these, the Pedieos, is a winter river that becomes a dry course in the summer. So do Cyprus's other major rivers, including the Kouris, the Serakhis, and the Yialias, which, like the Pedieos, flows eastward to Famagusta Bay.

8 🌐 **DESERTS**

There are no desert areas on Cyprus.

9 🌐 **FLAT AND ROLLING TERRAIN**

The name of the Mesaoria Plain, which means "Between the Mountains," describes its location between the island's northern and southern mountain ranges. It stretches from Morphou Bay in the west to Famagusta Bay in

the east. This flat, low expanse is the country's agricultural heartland and home to the capital city of Nicosia. Coastal lowlands, varying in width, surround the island.

10 🌐 **MOUNTAINS AND VOLCANOES**

The jagged slopes of the narrow Kyrenia Range stretch along the country's northern border for some 161 kilometers (100 miles), giving way to foothills as they extend into the Karpas Peninsula in the east. This mountain range is also known as the Pentadaktylos range, because its most famous peak has a five-fingered shape. Its highest peaks, including St. Hilarion and Buffavento, are barely half as high as Mount Olympus, the country's highest point, located in the Troodos mountains to the south. The rugged Troodos mountain range is the single

most conspicuous feature of Cyprus's landscape. Secondary ranges and spurs veer off at many angles. Mount Olympus is centrally located in the heart of these mountains, which extend across the southwestern portion of Cyprus from the Akamas Peninsula at the island's northwestern tip. To the southwest, the mountains descend in a series of stepped foothills to the coastal plain.

11 CANYONS AND CAVES

There are no notable caves or canyons in Cyprus.

12 PLATEAUS AND MONOLITHS

There are no notable plateaus in Cyprus.

13 MAN-MADE FEATURES

There are no man-made features affecting the geography of Cyprus.

14 FURTHER READING

Books

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DID YOU KNOW?

Cyprus has been an independent nation only since 1960 when it gained its independence from the British Crown. It is the youngest state in the Mediterranean region.

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Czech Republic

- **Official name:** The Czech Republic
- **Area:** 78,866 square kilometers (30,450 square miles)
- **Highest point on mainland:** Mount Snezka (1,602 meters/5,256 feet)
- **Lowest point on land:** Elbe River (115 meters/377 feet)
- **Hemispheres:** Northern and Eastern
- **Time zone:** 2:00 P.M.= noon GMT
- **Longest distances:** 494 kilometers (307 miles) from east to west; 269 kilometers (167 miles) from north to south
- **Land boundaries:** 1,881 kilometers (1,169 miles) total boundary length; Austria 362 kilometers (225 miles); Germany 646 kilometers (401 miles); Poland 658 kilometers (409 miles); Slovakia 215 kilometers (134 miles)
- **Coastline:** None
- **Territorial sea limits:** None

1 🌐 LOCATION AND SIZE

Located in the heart of Central Europe, the landlocked Czech Republic is one of two nations that were formed after the breakup of Czechoslovakia in 1993. With an area of 78,866 square kilometers (30,450 square miles), it is slightly smaller than the state of South Carolina.

2 🌐 TERRITORIES AND DEPENDENCIES

The Czech Republic has no territories or dependencies.

3 🌐 CLIMATE

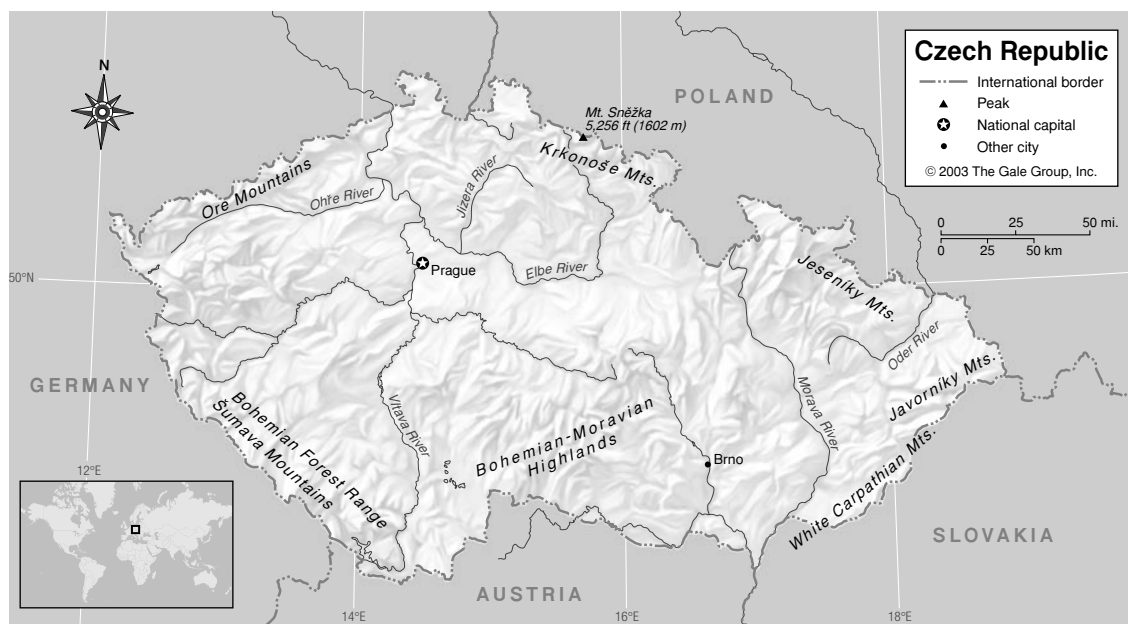
The Czech Republic has a mostly continental climate, although in Bohemia it is moderated somewhat by proximity to the Baltic Sea, with less variation in temperature throughout the day. Nevertheless, the country as a whole is known for its changeable weather. Winters are cold, with average January temperatures between -4°C and -2°C (25°F and 28°F). Both the Moravian lowlands and the Bohemian

highlands can experience bitter cold, with temperatures below -18°C (0°F). Summers are hot and wet, with frequent storms and average temperatures between 13°C to 23°C (55°F and 73°F). Summer temperatures above 30°C (86°F) are common in Moravia. Rainfall is heaviest in the spring and summer, with the greatest rainfall occurring in July. Average annual rainfall ranges from 50 to 76 centimeters (20 to 30 inches) in low-lying areas to over 127 centimeters (50 inches) in the Krkonoše Mountains. Fog is common in the lowlands.

4 🌐 TOPOGRAPHIC REGIONS

The Czech Republic consists of two major regions—Bohemia to the west and Moravia to the east. In addition, its northwestern corner is part of Silesia, a region that lies mostly in southwestern Poland. Bohemia, the larger of the two main regions, consists of highlands bordered by low mountains, while Moravia, although also surrounded by mountains, is composed of lowlands.

CZECH REPUBLIC



5 🌐 OCEANS AND SEAS

The Czech Republic is landlocked.

6 🌐 INLAND LAKES

In the southern part of Bohemia, near České Budějovice, is a region of artificial lakes and fish ponds. The Czech Republic also has many mineral springs.

7 🌐 RIVERS AND WATERFALLS

The Czech Republic's many rivers belong to three major systems. In the northwest, the Labe (or Elbe) River flows northward into Germany, ultimately draining into the North Sea. Among its tributaries are the Jizera, the Ohře, and the Vltava (or Moldau), which is the country's longest river. In the northeast, the Odra (or Oder) River flows north to Poland, draining into the Baltic Sea. The Morava River, the principal river of Moravia, flows southward through the eastern part of the country.

8 🌐 DESERTS

There are no deserts in the Czech Republic.

9 🌐 FLAT AND ROLLING TERRAIN

The central and southern Moravian lowlands are part of the Danube River Basin and are similar to the lowlands they join in southern Slovakia.

10 🌐 MOUNTAINS AND VOLCANOES

Mountain ranges ring much of the country and also separate its two major regions. Part of the border with Poland, to the north, is formed by the Krkonoše (or Great) Mountains, which also form the northern border of Bohemia. The country's highest peak, Mount Snezka, is found in these mountains. Farther east, the Jeseníky Mountains separate the Czech portion of Silesia from Moravia to the south. The Javorníky Mountains mark the eastern border of both Moravia and the Czech Republic itself; those and the nearby White Carpathian (Bílé Karpaty) Mountains both border Slovakia. In the center of the country, the Bohemian-Moravian Highlands separate Bohemia from Moravia, and the Šumava Mountains mark the borders with Austria and Germany. The north-

CZECH REPUBLIC



AP Photo/CTK, Radek Petrasek

Heavy snow in November 2002 made a highway from Prague, Czech Republic, impassable.

eastern border with Germany is formed by the Ore Mountains (Erzgebirge).

11 🌐 CANYONS AND CAVES

One of the Czech Republic's most famous topographical features is the Moravian Karst, a highland area in southern Moravia where the erosion of limestone hills over time has created a dramatic landscape of caves and canyons.

12 🌐 PLATEAUS AND MONOLITHS

The mountain ranges of Bohemia encircle a plateau that is 500 meters (1,640 feet) above sea level and shaped roughly like an oval.

13 🌐 MAN-MADE FEATURES

Most lakes in the Czech Republic are man-made. The largest artificial lake is Lake Rozmberk, which covers some 500 hectares (1,235 acres). The Lipno Dam is located near the

southernmost part of the country, just north of the border with Austria.

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Denmark

- **Official name:** Kingdom of Denmark
- **Area:** 43,094 square kilometers (16,638 square miles, not including the Faroe Islands and Greenland)
- **Highest point on mainland:** Yding Forest Hill (Yding Skovhøj) (173 meters/568 feet)
- **Highest point in territory:** Slaettaratindur (Faroe Islands) (882 meters/2,894 feet)
- **Lowest point on land:** Lammefjord (7 meters/23 feet below sea level)
- **Hemispheres:** Northern and Eastern
- **Time zone:** 1 P.M. = noon GMT
- **Longest distances:** 402 kilometers (250 miles) from north to south, 354 kilometers (220 miles) from east to west
- **Land boundaries:** Germany 68 kilometers (42 miles)
- **Coastline:** Main territory 7,314 kilometers (4,545 miles); Faroe Islands 1,117 kilometers (614 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

The small nation of Denmark occupies most of the Jutland (Jylland) peninsula and a number of large islands that separate the North Sea from the Baltic Sea. It shares a land border with Germany to the south. With a total area of about 43,094 square kilometers (16,638 square miles, not including the Faroe Islands and Greenland), the country is slightly less than twice the size of the state of Massachusetts. Denmark is divided into fourteen counties and two kommunes.

2 🌐 TERRITORIES AND DEPENDENCIES

Denmark has administrative control over the Faroe Islands, located in the North Atlantic Ocean northwest of Great Britain. Greenland, located off the coast of North America in the Arctic Ocean, is also a part of Denmark; however, Greenland also has a limited home-rule government.

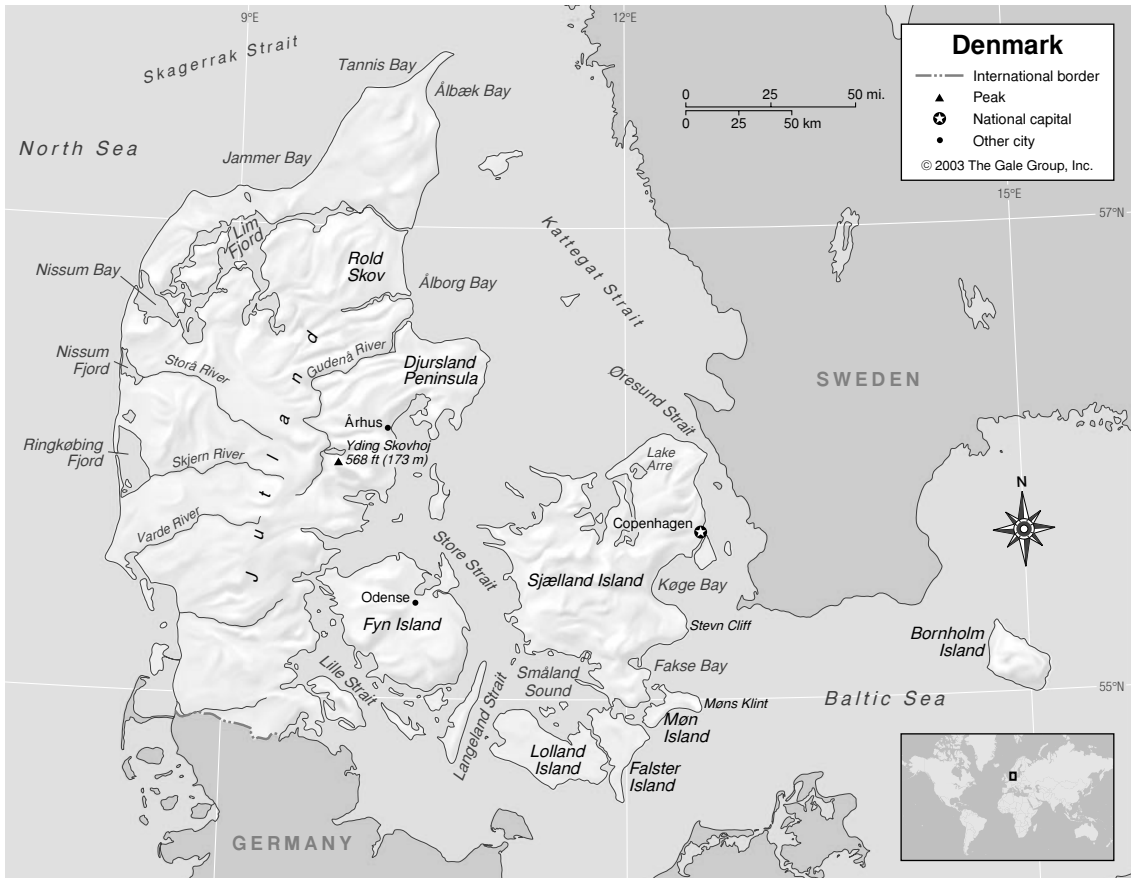
3 🌐 CLIMATE

The climate in Denmark is temperate. Days are typically humid and overcast; winters are mild and windy, and summers are cool. The mean temperatures are 0°C (32°F) in February, the coldest month, and 17°C (63°F) in July, the warmest month. Rainfall comes fairly evenly throughout the year, with the annual average amounting to approximately 61 centimeters (24 inches).

4 🌐 TOPOGRAPHIC REGIONS

Denmark is primarily a low-lying country covered with glacial moraine deposits. The moraines consist of a mixture of clay, sand, gravel, and boulders, carried by glaciers from the mountains of Scandinavia and raised from the bed of the Baltic Sea, with an admixture of limestone and other rocks. These large deposits have formed gently rolling hills interspersed with lakes. Between the hills are extensive level plains, which were created when the meltwater washing away from the glaciers deposited sand

DENMARK



and gravel outside the ice limit. The country's densest settlements are found on these heathland plains.

The boundary line between the sandy West Jutland and the loam plains of East and North Denmark is the most important geographical division of the country. West of the line is a region of scattered farms. To the east, there are several villages with high population density. Valleys furrow the moraine landscape.

The coastlines of eastern Jutland and many of the nearby islands are heavily indented with fjords, bays, and other inlets, forming numerous natural harbors. Narrow straits separate most of the islands.

5 OCEANS AND SEAS

Seacoast and Undersea Features

Denmark is almost completely surrounded by water. The main bodies of water are the North Sea to the west of Denmark and the Baltic Sea to the east, both of which are inlets of the Atlantic Ocean.

Sea Inlets and Straits

There are a number of inlets that separate the main Jutland Peninsula area of Denmark from its surrounding islands and countries. The Skagerrak Strait separates Denmark from Norway in the northwest. The Kattegat Strait lies between Denmark and Sweden to the east. The narrow Lille Strait separates the island of

DENMARK



EPD/Saxifraga/Ronald Buskens

These limestone rocks line Denmark's Baltic Sea coast.

Fyn from the mainland. The Store and Langeland Straits lie between Fyn and the easternmost islands. The Øresund separates Sjælland from Sweden, and the smaller islands of Falster, Lolland, and Møn lie to the south across the Småland Sound.

Along the west coast of the peninsula there are two great fjords, Ringkøbing and Nissum. Further north is Nissum Bay. The northern coast is more regular, with the broad Jammer and Tannis Bays. In the east are Ålbæk and Ålborg Bays. These are punctuated by a number of fjords, most notably Lim Fjord, which stretches all the way across Jutland from Ålborg Bay to Nissum Bay in the west.

The southern coast of Ålborg Bay juts east to form the Djursland Peninsula, south of which is Arhus Bay and many smaller fjords. On Sjælland, the capital of Copenhagen is situated on Køge Bay, with Stevn Cliff and Fakse Bay further to the south.

Islands and Archipelagos

There are 406 islands in Denmark (of which only 97 are inhabited), accounting for over one-third of its land area. The largest islands are Sjælland (7,015 square kilometers/2,709 square miles); Fyn (2,984 square kilometers/1,152 square miles), Lolland (1,234 square kilometers/480 square miles), Bornholm (588 square kilometers/227 square miles), and Falster (514 square kilometers/198 square miles). All of these islands except for Bornholm lie between Jutland and Sweden. Bornholm, Denmark's easternmost island, is southeast of Sweden in the Baltic Sea. It is a nature reserve that is accessible only by boat. There are no cars, modern buildings, or domesticated animals (such as cats or dogs) on the island.

The Faroe Islands are an archipelago of seventeen inhabited islands and one uninhabited island in the Atlantic Ocean, northwest of Britain. Among the larger islands are Stromp (374 square kilometers/174 square miles), Osterø (266 square kilometers/110 square miles), Vago (178 square kilometers/69 square miles), Syderø (153 square kilometers/59 square miles), and Sando (114 square kilometers/44 square miles). The Faroe landscape is rugged, characterized by a stratified series of basalt sheets with intervening thinner layers of solidified volcanic ash (tufa). Glacial action has carved the valleys into trough-shaped hollows and formed steep peaks. The highest point is on Osterø, called Slaettaratindur (882 meters/2,894 feet).

The world's largest island, Greenland, is located off the coast of North America in

DENMARK

the Arctic Ocean. Although considered a part of Denmark, Greenland also has limited home rule.

Coastal Features

The coastlines of the Jutland Peninsula and the nearby islands are highly indented.

White chalk cliffs are found along the coastline of the small island of Møn, lying south of Sjælland. The cliffs rise from the beach about 128 meters (422 feet) in an area known as Møn Cliff (Møns Klint).

6 🌐 INLAND LAKES

Dozens of lakes dot the middle interior region of the Jutland, known as the Lakeland region. The largest lake in the country is Arre (40.6 square kilometers/15.7 square miles). It lies between Helsingør and Hillerød on Sjælland Island.

7 🌐 RIVERS AND WATERFALLS

The Gudenå River is the longest river, at about 160 kilometers (100 miles) long. It flows from the interior of Jutland north to the Kattegat Strait. Other smaller rivers include the Storå, the Skjern, and the Varde, all of which flow from the interior Jutland into the North Sea. Many of the country's rivers have been artificially rerouted.

8 🌐 DESERTS

There are no desert areas in Denmark.

9 🌐 FLAT AND ROLLING TERRAIN

Over 10 percent of the low-lying areas of Denmark are covered with trees, but almost none of this is primary (natural) forest. The woodlands contain mostly beech and oak trees, with other species including elm, hazel, maple, pine, birch, aspen, linden, and chestnut. Denmark's largest contiguous area of woodland is Rold Forest (Rold Skov), a public forest (77 square kilometers/30



EPD/Saxifraga/Janus Verkerk

Landscape of the Faroe Islands of Denmark.

square miles) that contains Denmark's only national park, Rebild Bakker. Located near the city of Ålborg, it is the last section of natural forest that once covered the eastern part of Jutland.

While there are many hills and ridges, the highest point, Yding Forest Hill (Yding Skovhøj) in eastern Jutland, only exceeds sea level by 173 meters (568 feet).

10 🌐 MOUNTAINS AND VOLCANOES

There are no significant mountain ranges within Denmark.

11 🌐 CANYONS AND CAVES

There are no significant natural caves in Denmark; however, there are a few sites of underground chalk and limestone mines.

DENMARK

12 🌐 PLATEAUS AND MONOLITHS

With mostly low-lying lands, there are no real plateau regions within Denmark.

13 🌐 MAN-MADE FEATURES

A number of dikes and harbors have been constructed along sections of the coast of Denmark to protect the low-lying coastline regions from the flooding effects of the seawater.

Daugbjerg Kalgruber, located in western Denmark near Struer, is a carved chalk mine that extends underground for a length of about 35 kilometers (21 miles). The chalk once was used to produce lime, a major ingredient in concrete. Today, the mine is known to be a hibernating place for bats.

The Great Belt Fixed Link is a combination of bridges and tunnels that serve as a year-round transportation route between Denmark's two largest islands, Sjælland (on which Copenhagen is located) and Fyn. The twelve-year construction project (from 1986 to 1998) was the largest engineering project in the history of Denmark. The Link includes three components. First, the East Bridge is a 6.8-kilometer-long (4.2-mile-long) suspension bridge that crosses the strait between Sjælland and the small island of Sprøgo. Second, an 8-kilometer (5-mile) underwater

tunnel connects Sjælland and Sprøgo as a railroad passage. And third, from Sprøgo to Fyn, a combined rail and road bridge runs for 6.6 kilometers (4.1 miles). The twin pylons of the East Bridge stand at 254 meters (833 feet) above sea level and are the highest structural points on Denmark.

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Djibouti

- **Official name:** Republic of Djibouti
- **Area:** 22,000 square kilometers (8,494 square miles)
- **Highest point on mainland:** Moussa Ali (2,028 meters/6,654 feet)
- **Lowest point on land:** Lac Assal (155 meters/509 feet below sea level)
- **Hemispheres:** Northern and Eastern
- **Time zone:** 3 P.M. = noon GMT
- **Longest distances:** 213 kilometers (132 miles) from northeast to southwest; 155 kilometers (96 miles) from southeast to northwest
- **Land boundaries:** 508 kilometers (316 miles) total boundary length; Eritrea 113 kilometers (70 miles); Somalia 58 kilometers (36 miles); Ethiopia 337 kilometers (209 miles)
- **Coastline:** 314 kilometers (195 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Located on the coast of the Horn of Africa, Djibouti is one of the continent's smallest countries. With an area of 22,000 square kilometers (8,494 square miles), it is about the same size as El Salvador, and only about one-sixth as large as England. Because of its location at the southern entryway to the Red Sea, however, the country has a strategic importance that is out of proportion to its small size.

2 🌐 TERRITORIES AND DEPENDENCIES

Djibouti claims no territories or dependencies.

3 🌐 CLIMATE

The climate is dry and torrid (very hot). The hot, dry hamsin wind increases the already-blistering summer temperatures, which can rise as high as 45°C (113°F). Rainfall is infrequent, averaging less than 13 centimeters (5 inches) annually.

SEASON	MONTHS	AVERAGE HIGH TEMPERATURE: °CELSIUS (°FAHRENHEIT)
Summer	May to September	37°C (99°F)
Winter	October to April	31°C (87°F)

4 🌐 TOPOGRAPHIC REGIONS

Djibouti can be divided into three major geographic regions: a coastal plain, mountains behind the plain, and a plateau behind the mountains.

5 🌐 OCEANS AND SEAS

Djibouti lies just south of the entryway to the Red Sea.

Seacoast and Undersea Features

Djibouti's coast is fringed by picturesque coral reefs.

DJIBOUTI



6 🌐 INLAND LAKES

The desert terrain of Djibouti is broken in places by salt lakes. The largest of these is Lac Assal; at 155 meters (509 feet) below sea level, it is the lowest point in Africa and the second-lowest elevation in the world. It is also the world's saltiest body of water, with a concentration surpassing even that of the Dead Sea. Its water reaches temperatures of up to 57°C (135°F) in the summer.

7 🌐 RIVERS AND WATERFALLS

There are no permanent inland watercourses and very little groundwater of any kind.

8 🌐 DESERTS

About 90 percent of Djibouti's terrain is flat, barren desert land made up of volcanic rock. Vegetation, which is minimal, includes scrub and palm trees.

9 🌐 FLAT AND ROLLING TERRAIN

Most of Djibouti's fertile, irrigated coastal plain lies at elevations below 200 meters (650 feet).

10 🌐 MOUNTAINS AND VOLCANOES

Rugged mountain peaks of volcanic origin in the northern part of the country reach average heights of 1,000 meters (3,300 feet). These include Moussa Ali, the country's highest summit, in the northeastern corner of the country, and the Mabla Mountains north of the Gulf of Tadjoura.

Sea Inlets and Straits

Djibouti's eastern shore forms most of the west bank of the Strait of Mandab (Bab al Mandab), which connects the Gulf of Aden to the south and the Red Sea to the north. The coastline is deeply indented south of Cape Bir to form the Gulf of Tadjoura, which is 45 kilometers (28 miles) wide at its entrance and penetrates 58 kilometers (36 miles) inland, bisecting the eastern part of the country.

Islands and Archipelagos

There are no islands associated with Djibouti.

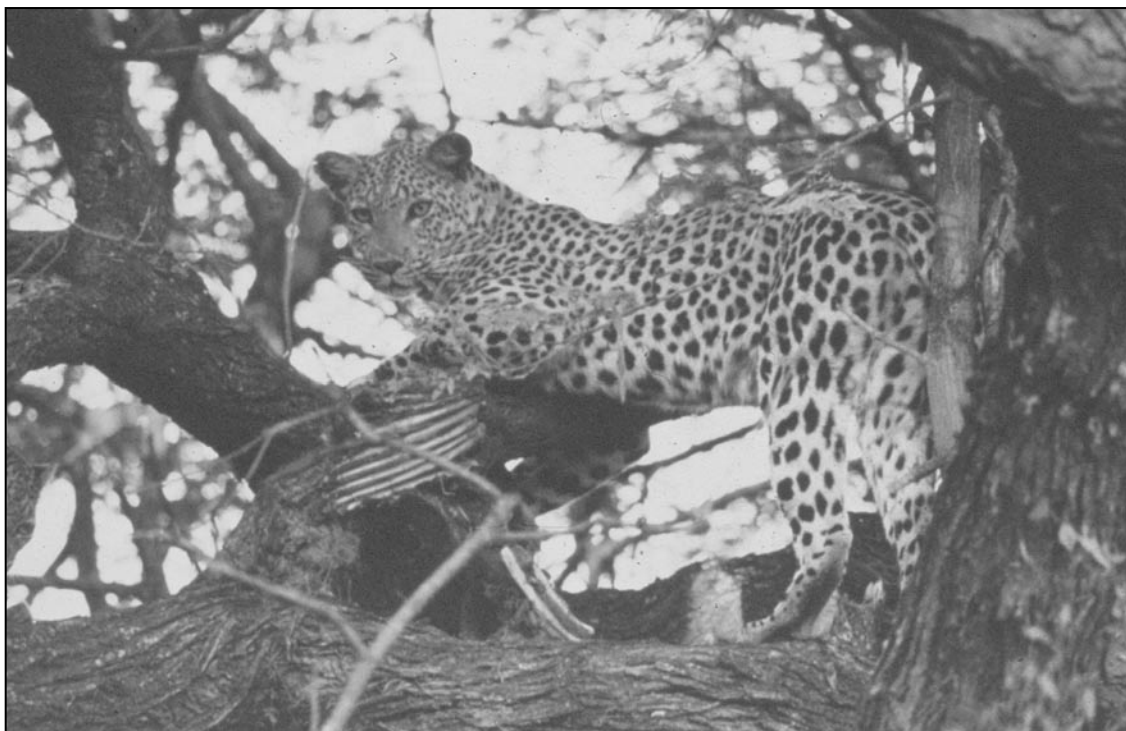
Coastal Features

An important deepwater port at the capital city of Djibouti receives ships sailing from the Indian Ocean and the Red Sea. Much of the coastline consists of white, sandy beaches.

DID YOU KNOW?

The intense summertime heat in Djibouti once led travelers to call it "the Hell of Africa" and inspired the Somali proverb: "Before crossing this country, even the jackal writes his will."

DJIBOUTI



EPD/Cynthia Bassett

The cheetah was once common in Djibouti. The few that remain are found in the region near Moussa Ali, the highest mountain peak.

11 CANYONS AND CAVES

There are no significant caves or canyons in Djibouti.

12 PLATEAUS AND MONOLITHS

Djibouti's plateau regions rise from 300 to 1,500 meters (1,000 to 5,000 feet).

13 MAN-MADE FEATURES

There are no man-made features affecting the geography of Djibouti.

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Dominica

- **Official name:** Commonwealth of Dominica
- **Area:** 754 square kilometers (291 square miles)
- **Highest point on mainland:** Morne Diablotins (1,447 meters/4,748 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** 8 A.M. = noon GMT
- **Longest distances:** 26 kilometers (16 miles) from east to west; 47 kilometers (29 miles) from north to south
- **Land boundaries:** None
- **Coastline:** 148 kilometers (92 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Dominica, an island in the eastern Caribbean Sea, lies at the midpoint of the Lesser Antilles, between the French possessions of Guadeloupe to the north and Martinique to the south. It is often, but not always, considered one of the Windward Islands. With an area of 754 square kilometers (291 square miles), Dominica is slightly more than twice as large as the state of New Hampshire. The lush vegetation and abundant wildlife of the country's rain forests have led Dominica to proclaim itself "The Nature Island of the Caribbean."

2 🌐 TERRITORIES AND DEPENDENCIES

Dominica claims no territories or dependencies.

3 🌐 CLIMATE

Tempered by sea breezes, Dominica's tropical climate is generally mild and pleasant. Summer temperatures average 28°C (82°F) and may rise as high as 32°C (90°F). Winter temperatures average 25°C (77°F). Dominica has a dry season in the spring and a rainy season in summer, with rainfall especially heavy during the hurricane season in late summer. Average annual rainfall ranges from about

191 centimeters (75 inches) near the coast to over 508 centimeters (200 inches) in the mountains.

SEASON	MONTHS	AVERAGE TEMPERATURE: °CELSIUS (°FAHRENHEIT)
Summer	April to September	28°C to 32°C (82°F to 90°F).
Winter	October to March	25°C (77°F)

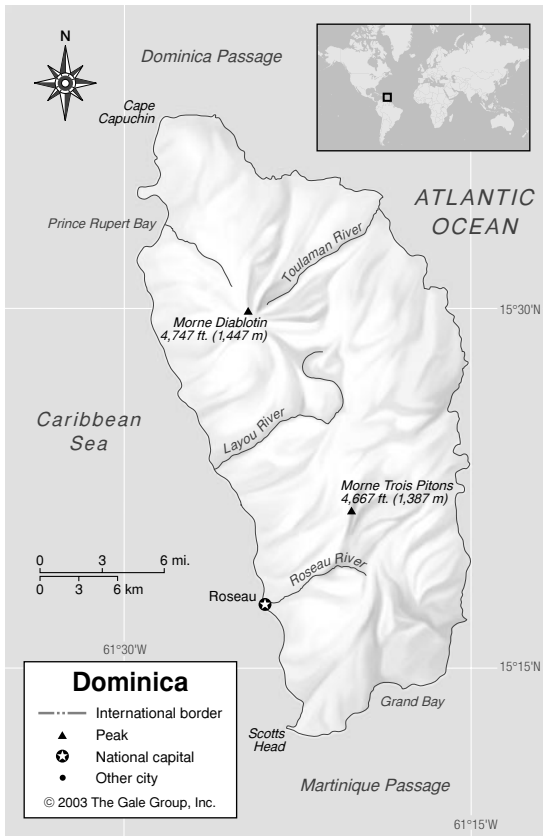
4 🌐 TOPOGRAPHIC REGIONS

The rugged, mountainous terrain that covers much of the interior is the island's outstanding physical feature. The Layou River plain at the center of the island bisects the two mountainous regions in the north and south.

5 🌐 OCEANS AND SEAS

Dominica is located between the Caribbean Sea and the North Atlantic Ocean, at the midpoint of the Leeward Islands. Whales and dolphins swim in the waters surrounding Dominica, with humpback whales migrating to the area during the winter months.

DOMINICA



Seacoast and Undersea Features

The mountainous terrain of Dominica extends under the sea. The waters surrounding the island are filled with coral reefs that support a diversity of marine life.

Sea Inlets and Straits

Guadeloupe lies to the north of Dominica, across the Dominica Passage; Martinique is south, across the Martinique Passage.

Islands and Archipelagos

Dominica is made up of one island in the eastern Caribbean Sea.

Coastal Features

A thin coastal strip lies between the sea and the mountains. The coast, which is heavily indented on the eastern side of the island, is fringed with coral reefs. Black, gray, and white volcanic sand is found on the beaches. Cape Capuchin marks the northern end of the island, with Prince Rupert Bay not far south. Scotts Head and Grand Bay are at the southern end of the island.

6 🌐 INLAND LAKES

Dominica has a number of thermally active lakes, of which the best known is Boiling Lake, in the southeastern part of the island.

7 🌐 RIVERS AND WATERFALLS

There are many streams and rivers, but none are navigable. The main rivers are Indian, Espagnol, Layou, Roseau, and Queens running west to the Caribbean Sea, and Hodges, Tweed, Clyde, Maclaralin, Grand Bay, Rosalie, and Wanerie running east to the Atlantic.

8 🌐 DESERTS

There are no desert areas on Dominica.

9 🌐 FLAT AND ROLLING TERRAIN

There are no areas of flat or rolling terrain on Dominica.

10 🌐 MOUNTAINS AND VOLCANOES

Deep ridges, ravines, and valleys are etched in the densely wooded mountains. The island's highest peak, Morne Diablotins, is located in the mountains to the north. Its second-highest, Morne Trois Pitons—which, at 1,387 meters (4,550 feet), is nearly as high as Diablotins—is situated in the south. Other high peaks include Morne au Diable, Morne Brule, Morne Couronne, Morne Anglais, and Morne Plat Pays.

DOMINICA



UNESCO/J.W.Thorsell

Morne Trois Pitons is the second-highest peak in Dominica.

11 CANYONS AND CAVES

Scuba enthusiasts explore several underwater caves while diving in the waters surrounding Dominica.

12 PLATEAUS AND MONOLITHS

There are no plateaus on Dominica.

DID YOU KNOW?

Morne Trois Pitons National Park features the scenic Trafalgar Falls (70 meters /200 feet), made up of two waterfalls that flow together into a deep green pool.

13 MAN-MADE FEATURES

There are no man-made features affecting the geography of Dominica.

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Dominican Republic

- **Official name:** Dominican Republic
- **Area:** 48,730 square kilometers (18,810 square miles)
- **Highest point on mainland:** Pico Duarte (3,175 meters/10,417 feet)
- **Lowest point on land:** Lake Enriquillo (46 meters/151 feet below sea level)
- **Hemispheres:** Northern and Western
- **Time zone:** 8 A.M. = noon GMT
- **Longest distances:** 386 kilometers (240 miles) from east to west; 261 kilometers (162 miles) from north to south
- **Land boundaries:** Haiti 275 kilometers (177 miles)
- **Coastline:** 1,288 kilometers (800 miles)
- **Territorial sea limits:** 11 kilometers (6 nautical miles)

1 🌐 LOCATION AND SIZE

The Dominican Republic is a Caribbean country that covers the eastern two-thirds of the island of Hispaniola. The Atlantic Ocean forms its northern border and the Caribbean Sea its southern coast. Haiti is along the western border of the country. With a total area of about 48,730 square kilometers (18,810 square miles), the Dominican Republic is slightly more than twice the size of New Hampshire. The nation is divided into twenty-nine provinces.

2 🌐 TERRITORIES AND DEPENDENCIES

Dominican Republic has no territories or dependencies.

3 🌐 CLIMATE

The Dominican Republic has a semitropical climate tempered by the prevailing easterly winds. Temperatures range from 18° to 29°C (64° to 84°F) in the winter and from 23° to 35°C (73° to 95°F) in the summer. Temperatures

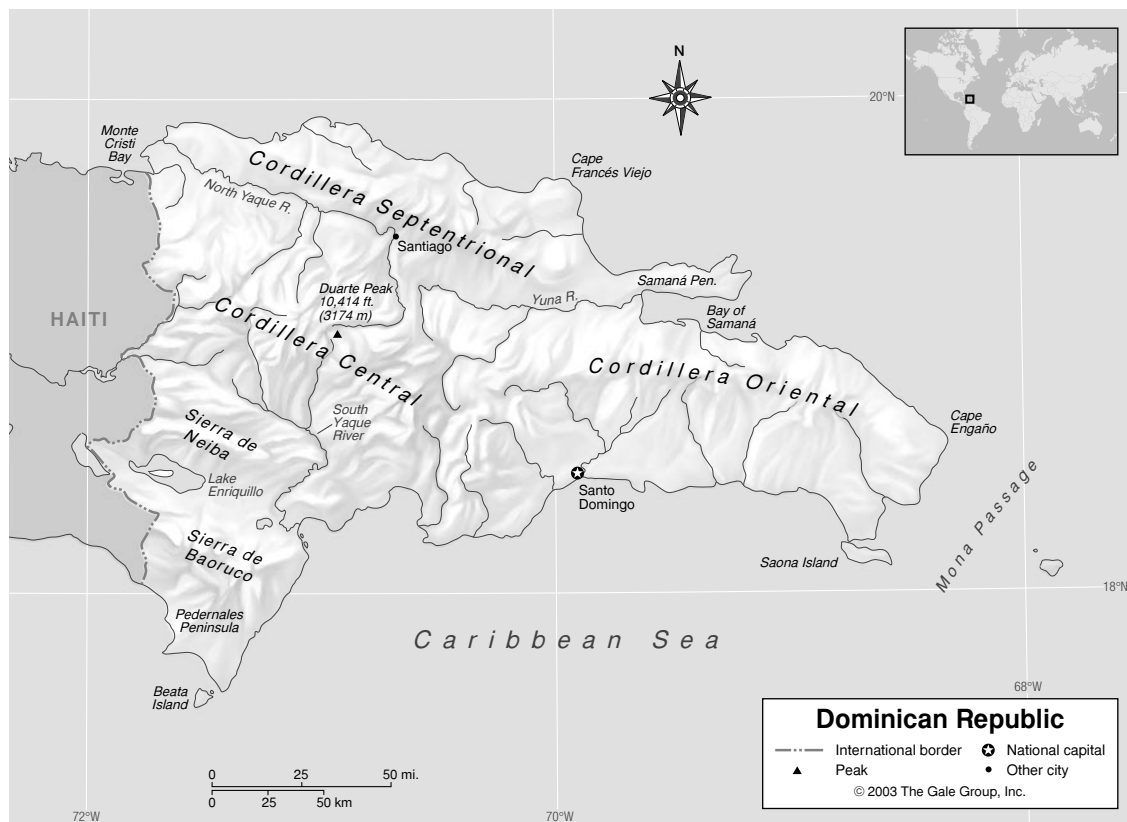
are highest along the coast and much cooler in the mountains.

Annual precipitation averages about 152.5 centimeters (60 inches), but varies considerably by region, from 43 centimeters (17 inches) in the arid west to 135 centimeters (53 inches) in the east. The mountainous areas in the north have an average rainfall of about 208 centimeters (82 inches). The wet season is from June to November, with the dry season from December to May. Tropical hurricanes occur every few years and can cause great damage.

4 🌐 TOPOGRAPHIC REGIONS

The Dominican Republic has a rugged and mountainous terrain with fertile valleys in the central and eastern areas. The Cordillera Central mountain range runs from east to west throughout the center of the country. The expansive valleys that lie to the north and south of this range have rich soils. The Dominican

DOMINICAN REPUBLIC



Republic is home to both the highest point and the lowest-elevation lake in the West Indies.

5 OCEANS AND SEAS

Seacoast and Undersea Features

The Dominican Republic borders both the Atlantic Ocean and the Caribbean Sea. On the Atlantic coast, there is an offshore rocky ledge. This platform is highly developed in the shallow waters of the Bay of Samaná (Bahía de Samaná) and stretches westward along the northern coasts of the Dominican Republic and Haiti. The platform extends seaward from a width of a few hundred meters to more than 48 kilometers (30 miles) and a maximum depth of 61 meters (200 feet). In some spots, the shelf rises to form tiny islands and jagged coral reefs that lie close to the surface. These

reefs represent hazards to navigation in waters east of Monte Cristi.

Sea Inlets and Straits

The Mona Passage is a 130-kilometer-wide (80-mile-wide) strait that separates the Dominican Republic from Puerto Rico. It connects the Atlantic Ocean with the Caribbean Sea.

Islands and Archipelagos

Of the numerous islands scattered off the Dominican Republic's coastline, only three are permanently inhabited. The largest, Saona Island (Isla Saona), covers an area of about 144 square kilometers (60 square miles) and is located at the southeastern tip of Hispaniola. Beata Island (Isla Beata, 52 square kilometers/

DOMINICAN REPUBLIC



EPD/Saxifraga/Adriaan Dijkse

The Samaná Peninsula of the Dominican Republic has low-lying beaches.

20 square miles) lies off the Pedernales Peninsula in the extreme west.

Coastal Features

Sandy beaches and rocky escarpments (steep slopes that separate areas of different elevations) mark the northern coast. The Bay of Monte Cristi (Bahía de Monte Cristi) marks the westernmost part of the north coast. Further east, Cape Francés Viejo (Cabo Francés Viejo) projects north into the Atlantic. Southeast of Cape Francés Viejo, the Samaná Peninsula and its cape (Cabo Samaná) project eastward, forming a narrow bay of the same name.

The Caribbean coast in the south is better suited to port development, since there are fewer reefs and islets and inland access to ports is easier. The best of the natural harbors are located on rivers that meet the Caribbean

at the cities of Santo Domingo, San Pedro de Macorís, and La Romana. The Pedernales Peninsula juts into the Caribbean at the west end of this coastline, with the Bay of Neiba (Bahía de Neiba) on its eastern side. Otherwise, the coast is fairly even, meeting with the north coast to form Cape Engaño at the eastern end of the island.

6 INLAND LAKES

The largest of the country's natural lakes is Lake Enriquillo in the Neiba Valley. A remnant of the strait that once occupied the area, its surface is 46 meters (151 feet) below sea level, which also makes this lake the lowest point in the country and the lowest-lying lake in the West Indies. Although Lake Enriquillo is fed by many streams from the surrounding mountains and has no outlet, the high rate of evaporation in the valley is causing its waters gradually to recede. On Isla Cabritos, a small

DOMINICAN REPUBLIC



EPD/Saxifraga/Adriaan Dijkse

Scenery in the Sierra de Neiba, Dominican Republic.

island in the center of Lake Enriquillo, there is a national park that supports and preserves the habitat of the crocodile.

7 🌐 **RIVERS AND WATERFALLS**

The rivers of the Dominican Republic are mostly shallow and subject to wide seasonal change in flow. Consequently, they are of little use for transportation.

The North Yaque River (Yaque del Norte) is the country's longest river. It begins in the Cibao Valley and flows north for 280 kilometers (170 miles), emptying into the Atlantic Ocean near Monte Cristi. The Yuna River also begins near the Cibao Valley and runs northeastward into the Bay of Samaná. A large marshland area extends inland from the delta of the Yuna River. There is also an area of salt marshes along the rivers south of Monte Cristi Bay.

Two main rivers flow from the San Juan Valley. The Artibonito River (Río Artibonito) flows westward across the border and becomes the principal watercourse of Haiti. The South Yaque (Yaque del Sur) flows into the Caribbean at the Bay of Neiba.

8 🌐 **DESERTS**

There are no desert regions in the Dominican Republic.

9 🌐 **FLAT AND ROLLING TERRAIN**

The largest of the lowland regions is the Caribbean Coastal Plain; the plain covers more than 2,849 square kilometers (1,100 square miles). It is composed principally of a limestone platform formed by corals and alluvial deposits. Inland, the soil is highly fertile, but the soil to the west of Santo Domingo is derived from acid clays and is not suited to agriculture. The

DOMINICAN REPUBLIC

Caribbean Coastal Plain is the center of the country's cattle-raising and sugar industries.

The country's other lowlands consist of long valleys that extend northwest from origins close to the Caribbean Sea to lowlands in Haiti. The fertile soils of these flood plains and terraces are suitable for intensive agriculture, and the shallower soils provide good pasture. The most extensive of the valleys, the Cibao, is the breadbasket (center of grain cultivation and harvest) of the country.

The Cordillera Oriental is a narrow band of hills that stretches from the Cordillera Central through the eastern portion of the country to the Atlantic coast and the shore of the Bay of Samaná. The western third of the range permits fairly easy access from the capital city to the interior lowlands. The remainder is more rugged. Elevations are generally less than 305 meters (1,000 feet).

10 MOUNTAINS AND VOLCANOES

The principal mountain system is the Cordillera Central, which rises in the east near Santo Domingo and veers northwestward into Haiti, where it is called the Massif du Nord. The Cordillera Central divides the country into two parts. Its ridges crest between 1,524 and 2,438 meters (5,000 and 8,000 feet), but there are individual peaks with considerably greater heights. The highest peak in the country, Pico Duarte, is found in this range. Pico Duarte has an elevation of 3,175 meters (10,417 feet) and is the highest peak in the West Indies.

The two ranges that lie to the south of the Cordillera Central, the Sierra de Neiba and the Sierra de Baoruco, begin as escarpments flanking Neiba Bay and continue northwestward into Haiti. Elevations range between 914 and 1,219 meters (3,000 and 4,000 feet), but some peaks are as high as 1,828 meters (6,000 feet). The eastern part of the Sierra de Neiba

DID YOU KNOW?

The West Indies is the chain of islands that extends from the south coast of Florida to the eastern coastline of Venezuela. The chain forms a northern boundary for the Caribbean Sea. Visited by Christopher Columbus in 1492, they were named by him in the mistaken belief that he had reached the Asian coast on his journey to discover a westward route to India.

is separated from the remainder of the range by the South Yaque and is known as the Sierra de Martin Garcfa. The Sierra de Baoruco is an extension of the southern mountain ranges of Haiti. North of the Cordillera Central lies the Cordillera Septentrional, a mountain range characterized by extremely steep slopes and deeply etched valleys.

11 CANYONS AND CAVES

The Cabarete Caves are now part of the El Choco National Park near the city of Cabarete. These limestone caves were the homes of the earliest Dominican Republic natives.

The Three Eyes of Water (Los Tres Ojos de Agua) is a series of caves located near Santo Domingo. The caves are named for the three lagoons that were created by the underground rivers that run through the caves. There are many stalactites and stalagmites throughout the caves, as well as lush tropical vegetation surrounding the lagoons.

12 PLATEAUS AND MONOLITHS

There are no major plateau regions in the Dominican Republic.

DOMINICAN REPUBLIC

13 MAN-MADE FEATURES

A dam on the North Yaque River at Tavera creates a reservoir and provides irrigation for the central Cibao Valley.

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East Timor

- **Official name:** East Timor
- **Area:** 14,609 square kilometers (5,641 square miles)
- **Highest point on mainland:** Tatamailau (2,964 meters/9,724 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Southern and Eastern
- **Time zone:** 9 P.M. = noon GMT
- **Longest distances:** 265 kilometers (165 miles) from east to west; 92 kilometers (57 miles) from north to south
- **Land boundaries:** 172 kilometers (107 miles), all with Indonesia
- **Coastline:** 620 kilometers (385 miles)
- **Territorial sea limits:** Not established

1 🌐 LOCATION AND SIZE

The new nation of East Timor, a former Portuguese colony that had been controlled by Indonesia, became officially independent on May 20, 2002. East Timor consists of the eastern half of Timor Island, one of the Lesser Sunda Islands, plus the enclave of Oecussi (30 square miles/78 square kilometers) on the north coast of the Indonesian half of the island (West Timor).

The Banda Sea is to the north, the Timor Sea to the south. Many aspects of the new country, such as its territorial waters, had yet to be determined as of mid-2002.

2 🌐 TERRITORIES AND DEPENDENCIES

East Timor has no territories or dependencies.

3 🌐 CLIMATE

East Timor has an equatorial climate with two basic seasons: the hot northwest monsoon of November through May, and the cooler southeast monsoon of April through December. The average annual temperature is 21°C (70°F), with a range of 18°C to 32°C (64°F to 90°F) and humidity averaging 73 percent. On average, from 120 to 150 centimeters (47 to 59 inches)

of rain falls on East Timor each year. Precipitation varies greatly according to coast location and terrain. Due to its proximity to Australia, the south receives more rain than the north.

4 🌐 TOPOGRAPHIC REGIONS

The country is primarily mountainous, with many short streams, an elevated interior, and narrow coastal plains and wetlands. Dili, the capital, is located on a bay situated on the north coast.

5 🌐 OCEANS AND SEAS

East Timor is enclosed on the south by the rough waters of the Timor Sea (part of the Indian Ocean) and on the north by the calmer Banda Sea of the Pacific Ocean. The enclave of Oecussi is on the Savu Sea of the Pacific Ocean.

Seacoast and Undersea Features

Although East Timor has extensive coral reefs, they have sustained damage from dynamite fishing.

Sea Inlets and Straits

The deep Wetar Strait separates East Timor from Indonesia's Wetar Island to the north.

EAST TIMOR



Australia is about 500 kilometers (311 miles) to the south across the Timor Gap.

Islands and Archipelagos

Atauro Island lies 141 square kilometers (54 square miles) north of Dili. Jaco Island (11 square kilometers/4 square miles), off the easternmost point of East Timor, is a Protected Wild Area.

Coastal Features

East Timor's coastline has little indentation, with steep slopes along the north coast, and river outlets meeting the sea. The easternmost point is Tutuala Beach, which is a Protected Wild Area, as is Christo Rei Beach. The wetlands of East Timor are mostly marshes in estuaries along the south coast and small mangrove swamps.

6 🌐 INLAND LAKES

The largest lake in East Timor is Lake Iralalero, in the far east of the island. With an area of 19

square kilometers (8 square miles), the lake is surrounded by much of the country's remaining rainforest, which constitutes a Protected Wild Area. Smaller lakes include Be Malae, Maubara, and Tibar.

7 🌐 RIVERS AND WATERFALLS

East Timor has twenty-five rivers or streams, all of which originate in the central mountains. They experience strong torrential flow during rainy periods, but their water levels drop severely in the dry months. Significant rivers include the Lois (80 kilometers/50 miles), which is the country's longest, as well as the Laklo, Karau Ulun, and Tafara, all in the south. The Tono River runs through Oecussi. There are hot springs along the Marobo River, in the north border region, and waterfalls occur throughout the country.

8 🌐 DESERTS

An area between Venilale and Los Palos in the far east of the island has been desertified severely; it is now known as "dead earth," where very little will grow.

9 🌐 FLAT AND ROLLING TERRAIN

East Timor has extensive grasslands on its coastal plains and hillsides.

10 🌐 MOUNTAINS AND VOLCANOES

The Ramalau, the central mountain range of East Timor, is characterized by deep valleys and looming cliffs. Tatamailau (2,964 meters/9,724 feet) is the highest peak in the country. Six other summits rise above 2,000 meters (6,566 feet): Sabiria, Usululi, Harupai, Cablake, Laklo, and Matebian.

11 🌐 CANYONS AND CAVES

River gorges and deep streambeds cut through the center of the country.

EAST TIMOR



AP Photo/Joel Rubin

An East Timorese coffee farmer dries his coffee beans.

12 🌐 PLATEAUS AND MONOLITHS

In the east, Fuiloro, a plateau with elevations of 500 to 700 meters (1,640 to 2,297 feet), is the remnant of a fossil atoll. Nari, Lospalos, and Rere are other eastern plateaus. Baucau and Laga are coral-rock plateaus along the north coast, and the Maliana Plateau rises along the West Timor border.

13 🌐 MAN-MADE FEATURES

East Timor is a poor country with an undeveloped infrastructure and no outstanding man-made features. Even before the damage caused by the violent fighting that preceded statehood, only about one-fifth of all households had electricity, and paved roads reached only half of all villages.

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Ecuador

- **Official name:** Republic of Ecuador
- **Area:** 283,560 square kilometers (109,483 square miles), including the Galápagos Islands
- **Highest point on mainland:** Chimborazo (6,267 meters/20,681 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern, Southern, and Western
- **Time zones:** Mainland: 7 A.M. = noon GMT; Galápagos Islands: 6 A.M. = noon GMT
- **Longest distances:** 714 kilometers (444 miles) from north to south; 658 kilometers (409 miles) from east to west
- **Land boundaries:** 2,010 kilometers (1,158 miles) total boundary length; Colombia 590 kilometers (366 miles); Peru 1,420 kilometers (880 miles)
- **Coastline:** 2,237 kilometers (1,398 miles)
- **Territorial sea limits:** 363 kilometers (200 nautical miles)

1 🌐 LOCATION AND SIZE

Ecuador is a small country on the western coast of South America. Its name comes from its location on the equator. It is bordered by Colombia to the northeast, and by Peru to the east and southeast. To the west lies the Pacific Ocean. The Galápagos Islands, which are located far off the western shore of the country, form one of the twenty-two provinces of Ecuador. With a total land area of about 283,560 square kilometers (109,483 square miles), the country is slightly smaller than the state of Nevada.

2 🌐 TERRITORIES AND DEPENDENCIES

Ecuador has no territories or dependencies.

3 🌐 CLIMATE

Ecuador has a generally tropical climate, but there are slight variations between regions. The cold Peruvian Current in the Pacific Ocean keeps the coastal region cool, with temperatures ranging from 25° to 31°C (76° to 90°F). In the Sierra region, temperatures depend on

altitude, with cooler temperatures at higher altitudes; the temperature can vary greatly over the course of the day. The highest mountains are snow-covered year-round. The Eastern Region normally has a warm, humid, and rainy climate. The average temperature there varies from 23°C to 26°C (72°F to 80°F). The Galápagos Islands enjoy warm and dry weather, with an average temperature of 28°C (85°F).

The southern part of the Sierra generally has heavy rainfall, with precipitation decreasing with altitude. Both the Sierra and the Costa get most of their rain between December and June. The Eastern Region is rainy year-round, however, with some areas receiving nearly 500 centimeters (200 inches) of rain annually. The Galápagos receive very little rainfall, but most of it occurs between January and April.

Rainfall can vary greatly in Ecuador. The country sometimes has periods of drought; at other times, heavy rainfall can result in flooding.

ECUADOR



4 TOPOGRAPHIC REGIONS

The country's mainland divides naturally into three regions: a coastal lowland, known as the Costa; a central mass made up of the Andean highlands, called the Sierra; and an interior lowland that forms part of the Amazon Basin, called the Eastern Region (Oriente). A fourth region is made up of the Galápagos Islands. Ecuador is geologically active, with many volcanic eruptions and frequent earthquakes. It is situated on the South American Tectonic Plate, with the Nazca Plate off the coast to the west.

5 OCEANS AND SEAS

Seacoast and Undersea Features

Ecuador's western boundary is the Pacific Ocean, but the continental shelf of South America extends westward to the Galápagos Islands. The cold Peruvian Current moderates

the climate of the Ecuador coast and the Galápagos Islands.

Sea Inlets and Straits

The Gulf of Guayaquil (Golfo de Guayaquil) is an indentation at the southwestern end of Ecuador's coast, separated from the open ocean by the Santa Elena Peninsula. The large inhabited Puná Island lies in the Gulf.

Islands and Archipelagos

The Galápagos Islands, a province of Ecuador, lie far off the western coast of the country and are situated directly on the equator. The largest islands are Isabela Island, Santa Cruz Island, Santiago Island, Fernandina Island, Santa María Island, Pinta Island, San Cristóbal Island, Marchena Island, and Española Island. Only five of the islands have permanent populations and over half of the inhabitants live on San Cristóbal Island. The highest elevation on the Galápagos is Mount Azul, a 1,689-meter-high (5,540-foot-high) volcanic peak found on Isabela, the largest island.

Coastal Features

The land along the coast offers beautiful mangrove forests and several popular beaches.

6 INLAND LAKES

There are more than 275 lakes in the Sierra region, including many volcanic crater lakes. Among the most famous is the Cuicocha Crater Lake, in the Cotachi-Cayapas Ecological Reserve. Situated in a collapsed volcanic crater, the lake is 200 meters (600 feet) deep and almost 3 kilometers (2 miles) in diameter.

7 RIVERS AND WATERFALLS

All of Ecuador's major rivers have their sources in the Andes. The most important river system of the coastal region is that of the Guayas River and its tributaries, especially the Daule.

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EPD/Wilko Gijbsbertsen

The Galápagos Islands of Ecuador.

These waterways flow south and west into the Gulf of Guayaquil.

Many rivers flow east out of the Andes into the Eastern Region. Among the most significant rivers are the Pastaza, Napo, Santiago (or Zamora), Paute, Curaray, Tigre, Morona (Macuma), and Aguarico. These rivers have carved deep trenches that interfere with land transportation and limit the amount of land suitable for cultivation.

The longest river in Ecuador is the Putumayo (1,575 kilometers/980 miles), which flows east along the border with Colombia. All Eastern Region rivers eventually find their way to the Atlantic Ocean through the Amazon River.

8 🌐 **DESERTS**

There are no desert regions in Ecuador.

9 🌐 **FLAT AND ROLLING TERRAIN**

The western coast, called the Costa, is sometimes identified in English as the Coastal Lowlands and in Spanish as the Litoral or Littoral. The coastal region includes the basin surrounding the Guayas River drainage system; it is the country's richest agricultural zone. Since the Costa stretches through a variety of climate zones, the vegetation varies throughout the area. The Costa extends eastward into the country to be replaced by the abrupt rise of the Andean Sierra region.

Ecuador's Eastern Region is part of the greater geographical region known as the Amazon River Basin. The region is watered by a multitude of rivers and streams, several of which serve as tributaries of the Amazon River. The Eastern Region covers about 50 percent of the country and alternates between flatland



EPD/Wilko Gijbsbertsen

Cactii (plural of cactus) thrive in the dry, rocky, volcanic soil of Ecuador.

and gently undulating tropical rainforest terrain.

The trench between the Cordillera Occidental and Cordillera Central was named the Avenue of the Volcanoes by the nineteenth-century naturalist Baron Alexander von Humboldt, and is now often referred to as the Inter-Andean Lane (Callejón Interandino). Hill systems run between the mountain ranges, breaking the lane into a series of basins, calle *hoyos*, in which most of the region's population live.

10 🌐 **MOUNTAINS AND VOLCANOES**

Two parallel ranges of the Andes Mountains create the Sierra highland region. In the west, the Cordillera Occidental is a high range extending the full length of the country from north to south. To the east, the Cordillera

Central is a series of lofty peaks. Both ranges are of volcanic origin.

Still further east is a chain of lower mountains called the Cordillera Oriental.

In all, the Sierra has at least twenty-two peaks with elevations over 4,267 meters (14,000 feet). Many are active or dormant volcanoes. The highest summit, Chimborazo (6,267 meters/20,681 feet), is a snow-capped volcano located in the central portion of the country. Cotopaxi, (5,896 meters/19,344 feet) is the highest active volcano in the world.

11 🌐 **CANYONS AND CAVES**

There are a number of caves scattered throughout Napo Province. The most popular, however, are the Caves of Jumandi, three caverns that were formed by an underground river.

DID YOU KNOW?

Galápagos is an ancient Spanish word for "Tortoise." The Galápagos Islands were discovered in 1535 by the Spanish navigator Tomás de Bertanga, who named the islands for the gigantic land tortoises found there. The islands became famous throughout the world after the 1835 visit by Charles Darwin on the HMS *Beagle*. Darwin gathered evidence on plant and wildlife species on the islands, data which he later used to formulate his theory of evolution based on natural selection. His revolutionary ideas were published in his book *On the Origin of Species* in 1859.

Besides the tortoises, the Galápagos Islands are also home to a variety of land and marine animals and dozens of unique birds, such as the flightless cormorant, which exists nowhere else in the world. About 90 percent of the islands are now set aside as protected wildlife reserves, some with access strictly limited to biologists and other researchers.

12 🌐 PLATEAUS AND MONOLITHS

There are no significant plateau regions in Ecuador.

13 🌐 MAN-MADE FEATURES

The Amaluza Dam is located on the Paute River in the province of Azuay. This public works project, completed in 1982, produces most of the country's electricity.

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Egypt

- **Official name:** Arab Republic of Egypt
- **Area:** 1,001,450 square kilometers (386,599 square miles)
- **Highest point on mainland:** Mount Catherine (2,629 meters/8,625 feet)
- **Lowest point on land:** Qattara Depression (133 meters/439 feet below sea level)
- **Hemispheres:** Northern and Eastern
- **Time zone:** 2 P.M. = noon GMT
- **Longest distances:** 1,572 kilometers (997 miles) from southeast to northwest; 1,196 kilometers (743 miles) from northeast to southwest
- **Land boundaries:** 2,689 kilometers (1,667 miles) total boundary length; Israel 266 kilometers (165 miles includes Gaza Strip, 11 kilometers/7 miles); Libya 1,150 kilometers (713 miles); Sudan 1,273 kilometers (789 miles)
- **Coastline:** 2,450 kilometers (1,522 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Located in the northeast corner of Africa, Egypt is east of Libya, north of Sudan, west of the Red Sea, and south of the Mediterranean Sea. The country extends into the Sinai Peninsula in Asia, where it shares a border with Israel. Covering a total area of about 1,001,450 square kilometers (386,599 square miles), it is slightly larger than three times the size of the state of New Mexico. Egypt is divided into twenty-six governorates.

2 🌐 TERRITORIES AND DEPENDENCIES

Egypt has no territories or dependencies.

3 🌐 CLIMATE

Egypt experiences mild winters (November to April) and hot summers (May to October). In Alexandria, located in the north on the Mediterranean coast, the average temperature ranges from 13°C (56°F) in December and January to 26°C (79°F) in July

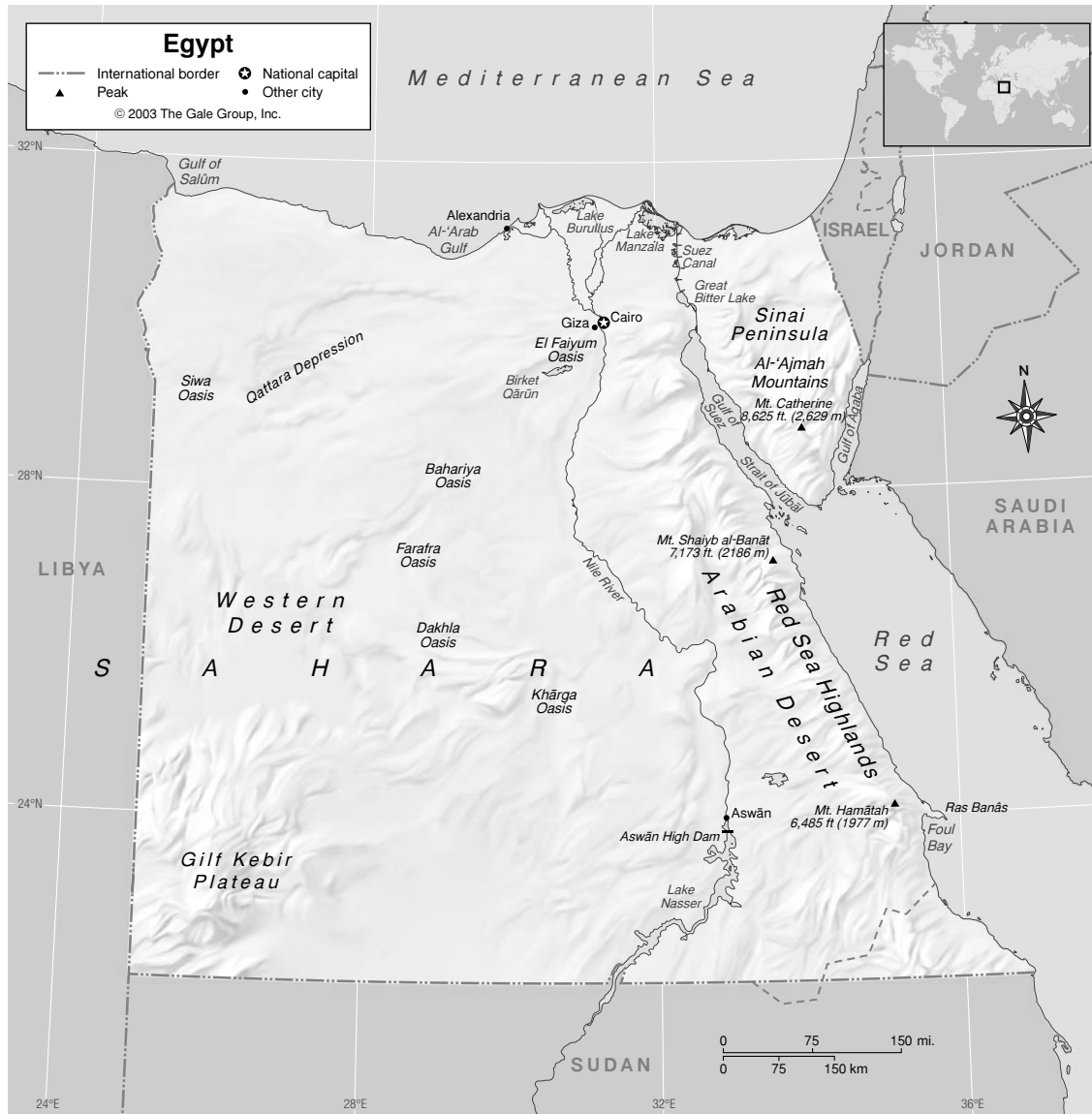
and August. Cairo, farther to the south, posts average lows of 14°C (57°F) in January and average highs of 28°C (82°F) in July. Aswan, located in the southern region, is considerably warmer with average temperatures of 16°C (60°F) in January and 34°C (93°F) in July, although highs exceeding 50°C (120°F) are not uncommon.

Except for the areas along the Mediterranean coast, where winter rains are frequent, rainfall in Egypt's harsh desert climate is scarce to nonexistent. During the summer months, even the coast receives little or no rain. As a result, droughts and windstorms (called *kham-sin*) occur often. The country also experiences frequent earthquakes and volcanic activity.

4 🌐 TOPOGRAPHIC REGIONS

The entire country lies within the wide band of the Sahara Desert. Therefore, most of Egypt's terrain is hot, dry desert, which covers about 96 percent of

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the country's surface. Most of the population finds shelter and food in the remaining territory—the long, narrow, Nile Valley and its delta—an area of only about 38,850 square kilometers (15,000 square miles).

The four major regional divisions in the country are the Nile Valley and Delta, the Western Desert, the Arabian Desert (Eastern

Desert) and Red Sea Highlands, and the Sinai Peninsula. The desert areas provide a habitat for many species of snakes and scorpions, *fennec* (desert foxes), and camels—both the two-humped Bactrian camel and the one-humped dromedary. The Nile River provides a habitat for the Nile crocodile and many water bird species, including the ibis.

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EPD/Saxifraga/Janus Verker

Egyptian lake filled with lush vegetation.

Although most of Egypt lies on the African Tectonic Plate, the Sinai Peninsula lies on the Arabian Plate.

5 🌐 **OCEANS AND SEAS**

Seacoast and Undersea Features

Egypt lies between the Red Sea to the east and the Mediterranean Sea to the north.

The Red Sea is a narrow, landlocked sea that separates Africa from the Arabian Peninsula. It links to the Mediterranean through the Gulf of Suez and the Suez Canal. In the south, the sea links to the Gulf of Aden and the Arabian Sea through the strait of Bab el Mandeb.

The Mediterranean Sea is a larger landlocked sea that links to the Atlantic Ocean through the Strait of Gibraltar.

Sea Inlets and Straits

Two noteworthy inlets along the Mediterranean shore are the Gulf of Salûm, near the Libyan border, and the Al-Arab Gulf, west of the Nile Delta. The Gulf of Aqaba is east of the Sinai Peninsula. The Gulf of Suez is west of the Sinai Peninsula; it is separated from the open sea by the Strait of Jübâl.

Islands and Archipelagos

Two small islands situated off the coast of Egypt in the Red Sea, the Brother Islands, are actually the tops of two massive reef pillars that extend up from the bottom of the sea. These islands have become popular sites for divers exploring the surrounding coral reefs.

About 144 small permanent islands line the course of the Nile River, and about 216 sea-

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EPD/Saxifraga/Adriaan Dijkse

The landscape along the coast of the Red Sea in Egypt is dry and barren.

sonal islands appear and disappear depending on the water level. The Egyptian government plans to designate these islands as natural preserves.

Coastal Features

Although undeveloped and relatively unpopulated, miles of white sand beaches cover the Egyptian coast along the Mediterranean Sea. The azure water is warm in summer and cold in winter.

The Sinai Peninsula projects into the northern end of the Red Sea. Its terrain is mainly covered by sand desert, punctuated by mountains that reach elevations as high as 2,637 meters (8,652 feet); these include Mt. Sinai, at 2,285 meters (7,498 feet).

The shoreline of the Red Sea is regular, with the exception of the small Ras Banâs peninsula in the south and the associated Foul Bay.

6 🌐 INLAND LAKES

In the north near the coast, the Nile Delta surrounds a series of lakes, including: Maryut, Idku, Burullus, and Manzala. The Great Bitter Lake forms a part of the Suez Canal. Birket Qārūn is a salt lake in the El Faiyum depression.

7 🌐 RIVERS AND WATERFALLS

The Nile River (Al-Bahr) extends across Egypt from south to north for roughly 1,600 kilometers (992 miles). With a total length of 6,693 kilometers (4,160 miles), the Nile is the longest river in the world, although other rivers carry more water. The Egyptian Nile is a combination of the White Nile, originating in Lake Victoria in Uganda and Tanzania, and the Blue Nile, originating in Ethiopia. These rivers meet in Sudan. Throughout its length in Egypt no other tributary streams enter the Nile. It enters Egypt in the form of Lake Nasser.

DID YOU KNOW?

The Sahara Desert, which covers an area of 9,065,000 square kilometers (3,500,000 square miles), is the largest desert in the world. It blankets the entire region of North Africa, from the Atlantic coast in the west to the Red Sea in the east. The Sahara borders the Mediterranean Sea and the Atlas Mountains in the north, extending south into the Sudan and a region known as the Sahel. Scientists believe that during the Ice Age (about fifty thousand to one hundred thousand years ago), the Sahara was covered with shallow lakes that provided water for large areas of lush vegetation.

North of the capital city of Cairo, the Nile branches out into a delta. Historically there were as many as seven channels to the delta, but now only two remain, the Rosetta in the west and the Damietta in the east. Between and around these channels are many small streams, irrigation canals, ponds, lakes, and marshes, growing saltier as one approaches the sea.

The Nile was once famous for its floods. These floods were due to heavy seasonal rainfall in Ethiopia, which caused the flow of the Blue Nile and Atbara to fluctuate. The floods were unpredictable and could be destructive, but also provided vast amounts of fresh, fertile,

soil. The great Nile floods are now controlled by the Aswān High Dam.

The topographic channel through which the Nile flows across the Sahara causes an interruption in the desert so that the contrast between the Nile Valley and the rest of the country is abrupt and dramatic.

8 DESERTS

Egypt lies completely within the region of the Sahara Desert, but two separate desert divisions are made within the country.

The Western Desert accounts for almost three-fourths of the total land area of Egypt. To the west of the Nile this immense desert spans the area from the Mediterranean south to the Sudanese border. It is a barren region of rock and sand, with occasional ridges or depressions but very little vegetation.

There are seven important depressions in the Western Desert, and all are considered oases except the largest, Qattara, which contains only salt water. The remaining oases depressions have fresh water provided either by the Nile waters or from local groundwater sources.

The Qattara Depression is located in the northwest, halfway between the Nile and the Libyan border and 50 miles (80 kilometers) from the Mediterranean coast. It is a desolate area of badlands, salt marshes, and brackish lakes, lying mostly below sea level. The Siwa Oasis, close to the Libyan border and west of Qattara, is isolated from the rest of the country, but has sustained life since ancient times. The El Faiyum Oasis, sometimes called the Faiyum Depression, is 64 kilometers (40 miles) southwest of Cairo. Around 3,600 years ago a canal was constructed from the Nile to the El Faiyum Oasis, probably to divert excessive floodwaters there. Over time

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this has produced an irrigated area of over 1,813 square kilometers (700 square miles).

On the floors of the remaining depressions, artesian water is available to support limited populations. The Bahariya Oasis lies 338 kilometers (210 miles) southwest of Cairo and the Farafra Oasis, larger but sparsely populated, lies directly south. The Dakhla and Kharga oases complete the chain to the south.

The Arabian Desert, east of the Nile, is quite dissimilar from the Western Desert. While equally arid, it is more elevated and rugged, with the Red Sea Highlands along the shoreline.

9 🌐 FLAT AND ROLLING TERRAIN

There are no significant plains or prairie regions in Egypt.

The Nile Valley and its delta is a long narrow strip of fertile land created by the Nile's never-ending supply of fresh water and sediment. It is in effect the world's largest oasis, and makes up virtually all of Egypt's fertile land. The delta is roughly 250 kilometers (155 miles) wide at the seaward base and about 160 kilometers (100 miles) long from north to south. Once a broad estuary, it was gradually filled by the Nile's sediment to become rich farmland.

10 🌐 MOUNTAINS AND VOLCANOES

The Red Sea Highlands run along the coast of the sea for which they are named. It is a region of hills and rugged mountains that is extremely arid. Notable peaks include Mt. Shāiyb al-Banāt (2,186 meters/7,173 feet) and Mt. Hamātah (1,977 meters/6,485 feet).

The Al-Ajmah Mountains on the Sinai Peninsula are an extension of the Red Sea Highlands. They run through the southern part of the peninsula. Egypt's highest peak,

Mt. Catherine (Gebel Katherina; 2,629 meters/8,625 feet), is located there.

11 🌐 CANYONS AND CAVES

The Cave of Swimmers is located in an area called Wadi Sora, which lies in southwest Egypt near the western edge of the Gilf Kebir plateau. It was discovered during an expedition by László Almásy in 1933. The name of the cave comes from the rock paintings found there, which seem to resemble people swimming. When Almásy published his discovery, he set forth the theory that these paintings depicted scenes from the real life of the ancient inhabitants, thus supporting the idea that this now desert area was once a valley that contained a river (as the term "wadi" suggests).

Also in Wadi Sora is Giraffe Gave, which was discovered by P.A. Clayton in 1931. This cave gets its name from the engravings of giraffes found within it.

12 🌐 PLATEAUS AND MONOLITHS

The Gilf Kebir rises out of the desert near the southwest boundary with Libya. It has an altitude of over 914 meters (3,000 feet), an exception to the otherwise flat terrain of western Egypt.

The Arabian Desert rises abruptly from the Nile Valley, sloping upwards in a plateau of sand, before giving way to the rocky hills and mountains of the Red Sea Highlands.

13 🌐 MAN-MADE FEATURES

The Aswan High Dam on the Nile River is one of the world's largest dams. The dam system essentially regulates the flow of the Nile. Although it ended the annual floods of the river, it also prevented fertile silt from being carried further downstream. When the dam was completed in 1970, it created Lake Nasser.

DID YOU KNOW?

Constructed between 2700 and 2500 B.C., the pyramids are the last surviving structures of the Seven Wonders of the Ancient World. The largest of the Egyptian pyramids, which rises over 137 meters (450 feet), was built as a tomb to house the body of Pharaoh Khufu. Historians believe that it must have taken one hundred thousand slave laborers over twenty years to complete it.

Another of the Seven Wonders of the Ancient World, the Pharos Lighthouse of Alexandria, built at about 270 B.C., was one of the tallest buildings of its time. Standing over 122 meters (400 feet) high, it was located on the small island of Pharos just off the coast. King Ptolemy II ordered its construction to help guide sailors through the harbor to the shores of Alexandria. At night, a fire served as the lighthouse's signal. During the day, sunlight was reflected from a mirror built into the top. The reflected light could be seen up to 50 kilometers (35 miles) away.

Lake Nasser, the largest lake in the country, covers an area of about 3,942 square kilometers (1,522 square miles). The lake extends south from the dam about 322 kilometers (200 miles), to the border with Sudan, and continues another 99 miles (159 kilometers) into that neighboring country.

The Suez Canal connects the Mediterranean Sea with the Gulf of Suez. The canal travels a length of 163 kilometers (101 miles), with a minimum width of 55 meters (179 feet) and a depth of at least 12 meters (40 feet). The canal has been one of the world's most important waterways since its completion in 1869.

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El Salvador

- **Official name:** Republic of El Salvador
- **Area:** 21,040 square kilometers (8,124 square miles)
- **Highest point on mainland:** Mount El Pital (Cerro El Pital) (2,730 meters/8,957 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Western and Southern
- **Time zone:** 6 A.M. = noon GMT
- **Longest distances:** 142 kilometers (88 miles) from north to south; 270 kilometers (168 miles) from west-northwest to east-southeast
- **Land boundaries:** 545 kilometers (339 miles) total boundary length; Guatemala 203 kilometers (126 miles); Honduras 342 kilometers (213 miles)
- **Coastline:** 307 kilometers (191 miles)
- **Territorial sea limits:** 363 kilometers (200 nautical miles)

1 🌐 LOCATION AND SIZE

El Salvador is located on the south side of the Central America isthmus. It has a southern coastline along the North Pacific Ocean and shares borders with Guatemala to the northwest and Honduras to the northeast. With an area of about 21,040 square kilometers (8,124 square miles), the country is slightly smaller than the state of Massachusetts. El Salvador is divided into fourteen departments.

2 🌐 TERRITORIES AND DEPENDENCIES

El Salvador has no territories or dependencies.

3 🌐 CLIMATE

Temperatures in tropical El Salvador vary more with altitude than with season. The average temperature in the central highlands is 28°C (74°F) year round. But along the coast and at lower altitudes, the temperatures tend to be hotter, while in the northern mountains, the climate tends to be cooler. Even at the highest elevations, the climate remains temperate, rarely approaching freezing even in the winter.

Most rainfall occurs during the winter, which runs from May to October. The heaviest rains are along the coast. During the wet season, this region averages 216 centimeters (85 inches), while the drier northwest area averages 150 centimeters (60 inches). Summer is the dry season, lasting from November to April.

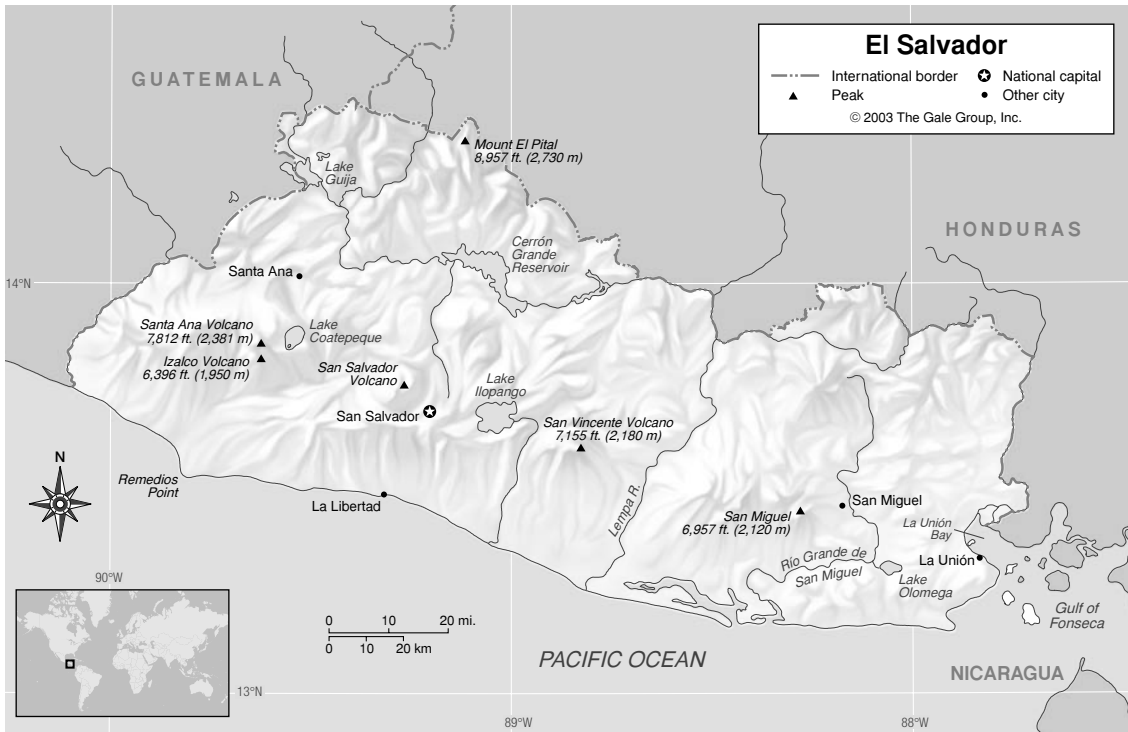
Heavy rains have become a hazard, mostly due to deforestation of the countryside. Hurricanes have caused massive landslides, property damage, and loss of life.

4 🌐 TOPOGRAPHIC REGIONS

El Salvador is divided into three geographic regions: the hot, narrow Pacific coastal belt; the central plateau; and the northern lowlands.

El Salvador is one of the most seismically active, earthquake-vulnerable areas in the Western Hemisphere. The country lies between two areas of active tectonic plate movement. In southern El Salvador, on the Pacific Ocean side, the Cocos Plate pushes itself under the relatively motionless Caribbean Plate (a process called subduction), accounting for frequent earthquakes near the coast. As the

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ocean floor is forced down, the submerged rocks melt, and the molten material spews up through fissures, producing volcanoes and geysers.

North of El Salvador, the North American Tectonic Plate abuts one edge of the same stationary Caribbean Plate, creating a major fault that runs the length of Río Motagua Valley in Guatemala. Motion along this fault generates earthquakes in both Guatemala and the northernmost part of El Salvador.

5 OCEANS AND SEAS

Seacoast and Undersea Features

El Salvador's southern border is the Pacific Ocean. Off the coast lies a deep ocean valley, called the Middle America Trench, which was created by movement of the Cocos Tectonic Plate.

Sea Inlets and Straits

At its southeastern tip, El Salvador faces Nicaragua across the Gulf of Fonseca (Golfo de Fonseca), with La Unión Bay lying between El Salvador and Honduras, just off the town of La Unión in the northwestern Gulf. Further west is Jiquilisco Bay, a narrow inlet that forms a long westward-reaching finger of water.

Islands and Archipelagos

The small islands of Meanguera and Meanguerita lie in the Gulf of Fonseca. The coasts of these islands are covered with mangroves.

Coastal Features

The area between the coastal range and the shoreline is relatively narrow; it spans about 32 kilometers (20 miles) at its widest point in the eastern end of the country, until

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AP Photo/ Douglas Engle

A field worker picks up stocks of sugar cane in a field north of San Salvador.

it eventually disappears at the western end. The beaches are black volcanic sand with many marshes. Near the small port of La Libertad, volcanoes fall steeply to the sea, leaving virtually no beach.

West of La Libertad is the popular 75-kilometer-long (45-mile-long) beach known as Balsam Coast (Costa de Bálsamo). Remedios Point (Punta Remedios) is near the westernmost end of the country.

6 **INLAND LAKES**

El Salvador contains hundreds of tiny lakes and a few larger ones. The largest lake, the scenic Lake Ilopango (Lago de Ilopango), lies just east of San Salvador and contains emerald-blue water in the caldera (crater formed by the eruption of a volcano) of an inactive

volcano. The lake has an area of about 65 square kilometers (25 square miles). In the late 1800s, an island, Burnt Island (or *Islas Quemadas*), appeared in the middle of the lake, perhaps as a result of receding water levels or seismic activity.

A second volcanic lake, Lake Coatepeque, is smaller in surface area but it is so deep, its lowest point is unknown. It is located in Cerro Verde National Park, located due north of Lago de Ilopango. A third lake, Lake Guija, lies in the northwest region on the border with Guatemala.

Jocotal Lagoon (Laguna del Jocotal) is really a permanent freshwater lake that covers 1,570 hectares (3,880 acres). The lake is 3 meters (10 feet) deep during the wet season but it

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recedes to less than 1.1 meters (4 feet) deep during the dry season. The lake is eutrophic (especially supportive of plant life) and much of the surface is covered with floating vegetation. In 1978 a wildlife sanctuary was created at the site. In May 1999, the Ramsar Convention on Wetlands registered the surrounding marsh as an internationally significant wetland. Jocotal Lagoon is located just south of the San Miguel Volcano.

7 RIVERS AND WATERFALLS

The Lempa River (Río Lemopa) is the longest river in El Salvador. It is also the only navigable river in the country. The Lempa originates in Guatemala, flowing for a short distance through Honduras before entering El Salvador. The total length of the river is 320 kilometers (200 miles). The portion that flows through El Salvador is approximately 257 kilometers (160 miles) long. Once in El Salvador, the river turns east near Lake Guija, where it is fed by a tributary from the lake. From there, the Lempa continues in an easterly direction about halfway across the country, then turns south to empty into the Pacific Ocean. The area around the mouth of the Lempa is known as Montecristo Island (Isla Montecristo). It is undeveloped with lush stands of mangroves. Hundreds of smaller rivers and streams drain from the highlands directly into the Pacific Ocean or are tributaries of the Lempa.

The Río Grande de San Miguel flows in the eastern part of the country, originating north of San Francisco and continuing southward past San Miguel. It joins a tributary that flows from Lake Olomega, and the two combined waterways then meander westward for about 40 kilometers (25 miles) before turning south to the Pacific Ocean. Another river, the Jiboa, flows from Lake Ilopango to the Pacific, where its mouth marks the country's approximate midpoint.

8 DESERTS

Although there are no true deserts in El Salvador, it has been estimated that half of the land has been severely eroded from deforestation, farming, and development. Much of this land is on the way to becoming desert. This phenomenon, known as desertification, is a worldwide problem.

9 FLAT AND ROLLING TERRAIN

The plains region of El Salvador is really part of the central plateau (see Plateaus and Monoliths).

10 MOUNTAINS AND VOLCANOES

This tiny "Land of Volcanoes" contains more "Ring of Fire" volcanoes than any other Central American country. Two volcanic-formed mountain ranges run roughly northwest to southeast across northern and southern El Salvador, with a broad high plateau between

DID YOU KNOW?

The "Ring of Fire" encircles the Pacific Ocean, stretching northward from New Zealand and running along the eastern edge of Asia, then moving across to the Aleutian Islands of Alaska and traveling south along the edges of North and South America. This area contains at least 75 percent of the world's volcanoes, and a large number of these are still active. Frequent earthquakes and volcanic activity occurs here as a result of the Pacific Tectonic Plate pushing against other adjacent tectonic plates.

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them. The northern Sierra Madre range is a continuous chain, with elevations from 1,580 to 2,200 meters (5,200 to 7,210 feet). The southern coastal range is a discontinuous chain composed of more than twenty volcanoes in five clusters. Near the western end is the Santa Ana Volcano, the highest volcano in the country at 2,381 meters (7,812 feet). Also at the western end is the Izalco Volcano (1,950 meters/6,396 feet), known as “Lighthouse of the Pacific,” which last erupted in 1966, making it El Salvador’s most recently active volcano. Other volcanoes in the chain are the San Salvador Volcano northwest of the city of San Salvador, San Vicente Volcano (2,180 meters/7,155 feet) south of the city of San Vicente, and the San Miguel Volcano (2,120 meters/6,957 feet) southwest of the city of San Miguel.

The highest mountain in El Salvador is not a volcano. Mount El Pital (Cerro El Pital) sits on the Honduras-El Salvador border and towers to a height of (2,730 meters/8,957 feet).

Some of the country’s most spectacular forests are in the mountain regions. In the northwest corner, at the junction of El Salvador, Guatemala, and Honduras, the three countries have agreed to protect an area called El Trifinio International Biosphere Reserve. The El Salvador portion is named Montecristo National Park. Montecristo National Park is perpetually covered in clouds and mist. It is a spectacular true rainforest, an increasingly rare type of ecosystem. Within the boundary of the park are giant ferns, air plants, and areas near the ground that never receive sunlight, since the foliage is so dense. The park protects a few species of mammals, including endangered jaguars, jungle foxes, tree-dwelling spider monkeys, and opossums.

Near the southwest coast, near the country’s border with Guatemala, is the Impossible Forest (Bosque El Imposible) National Park. It is named for a dangerous pass that is part of a traditional mule trail employed to transport coffee to the coast. The park is home to four hundred species of trees and nearly three hundred species of birds, as well as to unique animals such as the Tamandua anteater (antbear), pumas, and hundreds of species of butterfly. Three extinct volcanoes are located within the park boundaries, which is described as one of the last examples of coastal rainforest.

CANYONS AND CAVES

In Morozan, in northeast El Salvador, the two caves of Espíritu Santo and Cabeza de Duende have well-preserved pre-Columbian paintings on the walls.

PLATEAUS AND MONOLITHS

The central valley, running east and west between the two mountain ranges, is actually a rolling plateau peppered with lava fields, escarpments, and geysers. Comprising most of the land in the country, this high plain averages 50 kilometers (30 miles)

DID YOU KNOW?

UNESCO named the archaeological excavation site of Joya de Ceren in El Salvador a World Heritage Site. Joya de Ceren was a farming community that was completely buried under lava from a volcanic eruption around 600 A.D. The artifacts and fossils found there have provided a great deal of insight into the daily lives of the community’s inhabitants.

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in width with an average elevation of 600 meters (2,000 feet). Starting in the early 1900s, forests in the central high plateau have been cleared and farmed, creating large areas of grasslands across much of the country. Coffee, the major natural resource of El Salvador, is grown extensively across this plateau region.

13 MAN-MADE FEATURES

A dam on the Lempa River created the Cerrón Grande Reservoir.

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Equatorial Guinea

- **Official name:** Republic of Equatorial Guinea
- **Area:** 28,051 square kilometers (10,831 miles)
- **Highest point on mainland:** Santa Isabel Peak (Pico Basilé) (3,008 meters/9,869 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Eastern, Southern, and Northern
- **Time zone:** 1 P.M. = noon GMT
- **Longest distances:** Río Muni: 248 kilometers (154 miles) from east-northeast to west-southwest; 167 kilometers (104 miles) from south-southeast to north-northwest; Bioko: 74 kilometers (46 miles) from northeast to southwest; 37 kilometers (23 miles) from southeast to northwest
- **Land boundaries:** 539 kilometers (334 miles) total boundary length; Cameroon 189 kilometers (117 miles); Gabon 350 kilometers (217 miles)
- **Coastline:** 296 kilometers (183 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Equatorial Guinea is a country in West Africa. The mainland, called Río Muni (or sometimes Río Mbini), is located south of Cameroon and north of Gabon, with a western coast on the Bight of Biafra in the Atlantic Ocean. The country includes five inhabited islands: Bioko, Annobón, Corisco, and the two Elobey Islands (Islas Elobey): Little Elobey (Elobey Chico) and Great Elobey (Elobey Grande). Annobón is the only part of the country located south of the equator. With a total area of about 28,051 square kilometers (10,831 miles), the country is slightly smaller than the state of Maryland. The country is divided into seven provinces.

2 🌐 TERRITORIES AND DEPENDENCIES

Equatorial Guinea has no other territories or dependencies.

3 🌐 CLIMATE

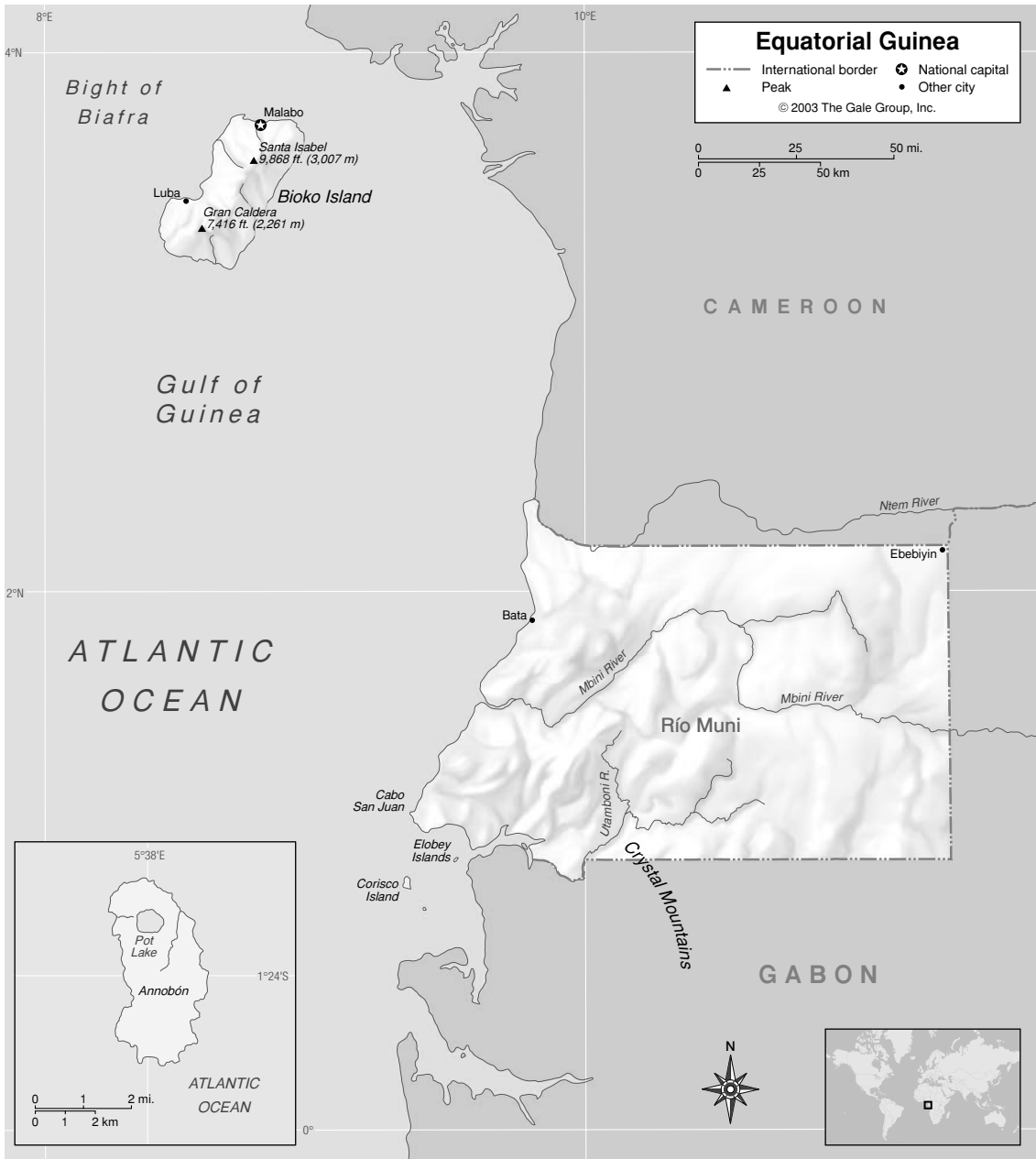
As a result of its location near the equator, Equatorial Guinea has a warm, tropical climate that varies mainly by altitude. At Malabo (the capital city, located on Bioko Island), temperatures range from 16°C (61°F) to 33°C (91°F). In the city of Mbini, the average temperature is about 27°C (80°F).

Annual rainfall varies from 193 centimeters (76 inches) at Malabo to 1,092 centimeters (430 inches) at Ureka. The country often experiences violent windstorms and flash floods.

4 🌐 TOPOGRAPHIC REGIONS

The sandy coastal plain of Río Muni rises to the low hills and spurs of the Crystal Mountains. East of the mountains, most of the country is a large plateau covered by tropical rainforest. The islands are all volcanic in origin.

EQUATORIAL GUINEA



5 🌐 OCEANS AND SEAS

Seacoast and Undersea Features

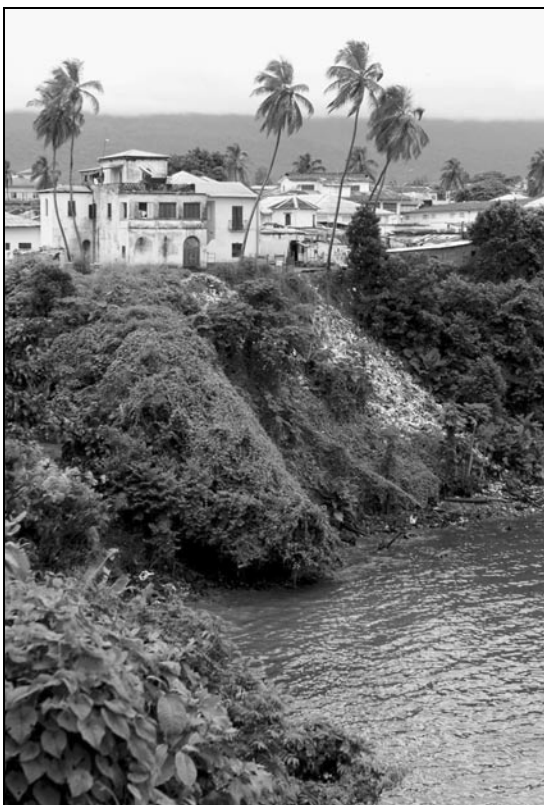
The Bight of Biafra separates the mainland from the islands. The Bight is part of the broad Gulf of Guinea, from which the coun-

try takes its name. The Gulf is an inlet of the Atlantic Ocean.

Sea Inlets and Straits

Corisco Bay, located at the southernmost point of the coast, receives waters from the

EQUATORIAL GUINEA



AP Photo/Christine Nesbitt

Rubbish is seen sprawling down the cliff into the Bight of Biafra from a residential area in the capital, Malabo, on the island of Bioko, Equatorial Guinea.

Mandiyani, Congüe, Mitong and Untamboni Rivers as they converge into the Muni estuary.

Islands and Archipelagos

The largest island, Bioko, is located 32 kilometers (20 miles) from the coast of Cameroon. It is a volcanic island roughly 2,018 square kilometers (779 square miles) in size. The other islands are also volcanic, but are much smaller than Bioko. For example, Annobón, which is located 350 kilometers (220 miles) from mainland Gabon, is about 18 square kilometers (7 square miles) in size.

Corisco and the Elobey Islands are all located near the southwest coast of Río Muni,

off of Corisco Bay. Corisco covers 15 square kilometers (6 square miles) and the Great and Little Elobey are each about 2.5 square kilometers (1 square mile). Bioko and Annobón are part of the volcanic chain that includes the Cameroon Highlands and stretches into the Atlantic Ocean as far as St. Helena.

Coastal Features

Sandy shores and estuaries make up the coastal mainland. Near Río Muni's southern tip, Cabo San Juan protrudes into the sea to form the Corisco Bay. On Bioko, the coastline is high and rugged in the south but lower and more accessible in the north.

6 🌐 INLAND LAKES

Pot Lake (Lago á Pot) on the island of Annobón fills the central crater of the volcano, now inactive, that formed the island.

7 🌐 RIVERS AND WATERFALLS

The main rivers are the Mbini, the Ntem, and the Muni. The Mbini is the longest river with a length of 248 kilometers (155 miles). It runs east to west, dividing the mainland into two. It is not navigable except for a short stretch of about 20 kilometers (12 miles). The Ntem flows along part of the northern border with Cameroon. The Muni is not really a river at all—it is an estuary of several rivers, of which the Utamboni is the most notable. The islands contain several streams and brooks that are mostly filled by rainwater.

8 🌐 DESERTS

There are no desert regions in Equatorial Guinea.

9 🌐 FLAT AND ROLLING TERRAIN

Besides the sandy coastal plains of Río Muni, there are no other significant plains regions in Equatorial Guinea.

EQUATORIAL GUINEA

10 🌐 MOUNTAINS AND VOLCANOES

Bioko has two large volcanic formations separated by a valley that bisects the island. In the north of the island is Santa Isabel Peak (Pico Basilé). It is the country's highest point and rises to 3,008 meters (9,869 feet). In the south is Gran Caldera, which has an elevation of 2,261 meters (7,416 feet). All of the other islands are also volcanic, but of much lower elevation. There are no active volcanoes in the country.

The Crystal Mountains on the mainland separate the coast from the inland plateau. The highest peaks are Mount Chocolate at 1,100 meters (3,609 feet) and Mount Chime at 1,200 meters (3,937 feet).

11 🌐 CANYONS AND CAVES

There are no significant caves or canyons in Equatorial Guinea.

12 🌐 PLATEAUS AND MONOLITHS

The tropical rainforest of the plateau region contains at least 140 species of trees, particularly palms and hardwoods.

13 🌐 MAN-MADE FEATURES

There are no significant man-made structures affecting the geography of Equatorial Guinea.

14 🌐 FURTHER READING

Books

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Eritrea

- **Official name:** State of Eritrea
- **Area:** 121,320 square kilometers (46,842 square miles)
- **Highest point on mainland:** Soira (3,018 meters/9,902 feet)
- **Lowest point on land:** Denakil Depression, near Kulul (75 meters/246 feet below sea level)
- **Hemispheres:** Northern and Eastern
- **Time zone:** 3 P.M. = noon GMT
- **Longest distances:** 830 kilometers (520 miles) from northwest to southeast; 400 kilometers (250 miles) from north to south
- **Land boundaries:** 1,630 kilometers (1,013 miles) total boundary length; Djibouti 113 kilometers (70 miles); Ethiopia 912 kilometers (567 miles); Sudan 605 kilometers (376 miles)
- **Coastline:** 2,234 kilometers (1,388 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Eritrea is located in northeast Africa on the western coast of the Red Sea. The country shares borders with Djibouti, Ethiopia, and Sudan. With an area of about 121,320 square kilometers (46,842 square miles), the country is slightly larger than the state of Pennsylvania. Eritrea is divided into eight provinces.

2 🌐 TERRITORIES AND DEPENDENCIES

Eritrea has no outside territories or dependencies.

3 🌐 CLIMATE

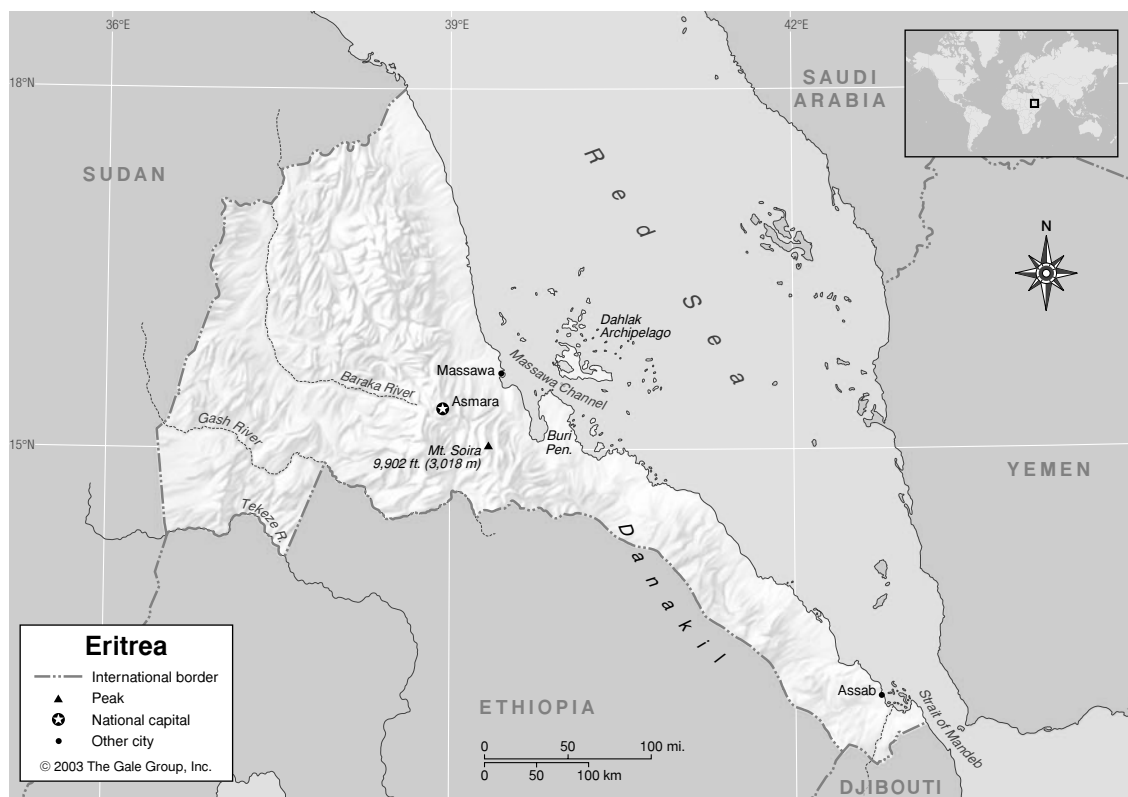
Along the Red Sea, temperatures average from 27°C (81°F) to 30°C (86°F) in the daytime, but at midyear, in the Danakil Depression in the southeast, temperatures may reach 60°C (140°F). The highlands are moderate, with temperatures that average about 17°C (63°F). The coast enjoys a Mediterranean-like climate when the northeast trade winds blow in January.

Rainfall varies according to season, elevation, and location. The semiarid western hills and lowlands along the Sudanese border receive up to 50 centimeters (20 inches) of rain annually, with the heaviest rainfall occurring from June through August. In January, monsoons originating in Asia cross the Red Sea, bringing rain to the coastal plains and the eastern escarpment. The eastern lowlands receive less than 50 centimeters (20 inches) of rainfall annually, while the cooler and wetter highlands receive up to twice that amount.

4 🌐 TOPOGRAPHIC REGIONS

The country of Eritrea resembles a funnel lying on its side and tilted to the southeast. It occupies the northern portion of a high, mountainous plateau reaching north from Ethiopia to the Red Sea. The mountains descend to a network of high hills on the northeast and to a low, arid coastal strip along the Red Sea. A corridor of low

ERITREA



rolling plains marks the southwestern perimeter with Sudan. Bordering Ethiopia in the southeast, the Danakil Depression at its deepest point lies 130 meters (423 feet) below sea level. The hottest temperatures in the world have been reported there. Only 3 percent of the land is arable.

Eritrea lies along the boundary between the African and Arabian Tectonic Plates. The Great Rift Valley, which extends from Mozambique in southern Africa all the way north into the Middle East, passes near Eritrea's eastern border.

5 OCEANS AND SEAS

Seacoast and Undersea Features

Eritrea has an eastern coast on the Red Sea, which is a narrow, landlocked sea that separates Africa from the Arabian Peninsula.

In the north, the Red Sea links to the Mediterranean through the Gulf of Suez and the Suez Canal. In the south, the sea links to the Gulf of Aden and the Arabian Sea through the Strait of Mandeb (Bab el Mandeb). The Red Sea is a busy shipping channel, potentially rich in oil and natural gas.

Sea Inlets and Straits

Massawa Channel separates the mainland from the Eritrean islands of the Dahlak Archipelago.

Islands and Archipelagos

The Dahlak Archipelago, a collection of coral-line (coral-like) islands, lies opposite the Buri Peninsula. The many islands are mostly small and sparsely inhabited.

ERITREA



EPD/Terry Prosser/Travel-Images.com

Mountain scenery between Asmara and Massawa in Eritrea.

Coastal Features

Coastal hills drain inland into saline lakes and sinks from which commercial salt is extracted.

Although subject to torrid temperatures much of the year, Eritrea's coastal beaches and Red Sea islands hold significant tourism potential. The, hot, arid, and treeless coastal lowlands range in width from 16 to 80 kilometers (10 to 50 miles).

6 🌐 INLAND LAKES

There are no major lakes in Eritrea.

7 🌐 RIVERS AND WATERFALLS

The longest river in Eritrea is the Tekeze, with a length of about 755 kilometers (470 miles). The Tekeze and the Mereb Rivers form sections of the southern border with Ethiopia. The Gash River drains westward to Kassala in Sudan and the Baraka River flows northward to Sudan from its source near Asmara. Volume

in these rivers is highly seasonal; at certain times of the year, they are completely dry.

8 🌐 DESERTS

Eritrea has semiarid western hills and a very dry and hot coastal strip of land along the eastern seaboard. The desert-like coast is home to vegetation such as acacia, cactus, aloe vera, prickly pear, and olive trees. The Danakil Depression is a desert region.

DID YOU KNOW?

The waters surrounding the more than three hundred islands of the Dahlak Archipelago provide a habitat for diverse species of marine life and extensive coral reefs, providing scuba divers with much to explore.

9 🌐 FLAT AND ROLLING TERRAIN

About 49 percent of the lowlands in Eritrea are characterized as permanent pasture.

10 🌐 MOUNTAINS AND VOLCANOES

Ethiopia's northwestern highlands extend into Eritrea, reaching elevations of more than 2,000 meters (6,500 feet) above sea level. A line of seismic belts extends along the length of Eritrea and the Danakil Depression, but no serious earthquakes were recorded in the area during the twentieth century.

The Danakil Depression is also the site of the Alid volcano. Alid is an elliptical mountain about 5 kilometers wide (3 miles), 7 kilometers long (4 miles), and 900 meters tall (2,953 feet). United States researchers have been working with the Eritrean government to assess the area of this volcano for possible geothermal resources, which may be used in the future to produce electricity.

11 🌐 CANYONS AND CAVES

There are no major caves or canyons in Eritrea, although southeast of Asmara there are some small caves, with ancient art drawn and etched into the rock walls.

12 🌐 PLATEAUS AND MONOLITHS

Eritrea shares the northeast section of the Ethiopian high plateau, which in appearance looks more like a set of rugged uneven mountains. The plateau, also known as the Northwestern Highlands, rises up on the western scarp of the Great Rift Valley and projects northward from Addis Ababa in Ethiopia to the Red Sea coastline in Eritrea. It descends to the Red Sea coast in a series of hills.

13 🌐 MAN-MADE FEATURES

There are over one hundred small dams built along the rivers of Eritrea, used primarily for irrigation.

DID YOU KNOW?

The Great Rift Valley, which passes just outside the western border of Eritrea, is a massive fault system that stretches over 6,400 kilometers (4,000 miles) from the Jordan Valley in Israel to Mozambique. In general, the Great Rift Valley ranges in elevation from 395 meters (1,300 feet) below sea level at the Dead Sea to 1,830 meters (6,000 feet) above sea level in south Kenya. A large number of volcanoes lie along this rift, which was created by the violent underground activity of the African Plate (Nubian) to the west and the Eurasian, Arabian, Indian, and Somalian Plates to the east.

14 🌐 FURTHER READING

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Estonia

- **Official name:** Republic of Estonia
- **Area:** 45,226 square kilometers (17,462 square miles)
- **Highest point on mainland:** Suur Munamägi (318 meters/1,043 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Eastern
- **Time zone:** 2 P.M. = noon GMT
- **Longest distances:** 350 kilometers (220 miles) from east to west; 240 kilometers (150 miles) from north to south
- **Land boundaries:** 633 kilometers (392 miles) total boundary length; Latvia 339 kilometers (210 miles); Russia 294 kilometers (182 miles)
- **Coastline:** 3,794 kilometers (2,352 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Estonia is a country in northeastern Europe, located between Latvia and Russia and bordering the Gulf of Finland, the Baltic Sea, and the Gulf of Riga. With a total area of about 45,226 square kilometers (17,462 square miles), which includes about 1,520 islands in the Baltic Sea, the country is slightly smaller than the combined areas of the states of New Hampshire and Vermont. Estonia is divided into fifteen counties.

2 🌐 TERRITORIES AND DEPENDENCIES

Estonia has no outside territories or dependencies.

3 🌐 CLIMATE

Estonia's marine location keeps the climate moderate along the coast. Inland, temperatures are typically more extreme. Summers in Estonia are generally cool, with temperatures rarely exceeding 18°C (64°F). Winters are cold, with temperatures usually remaining below freezing from mid-December to late February.

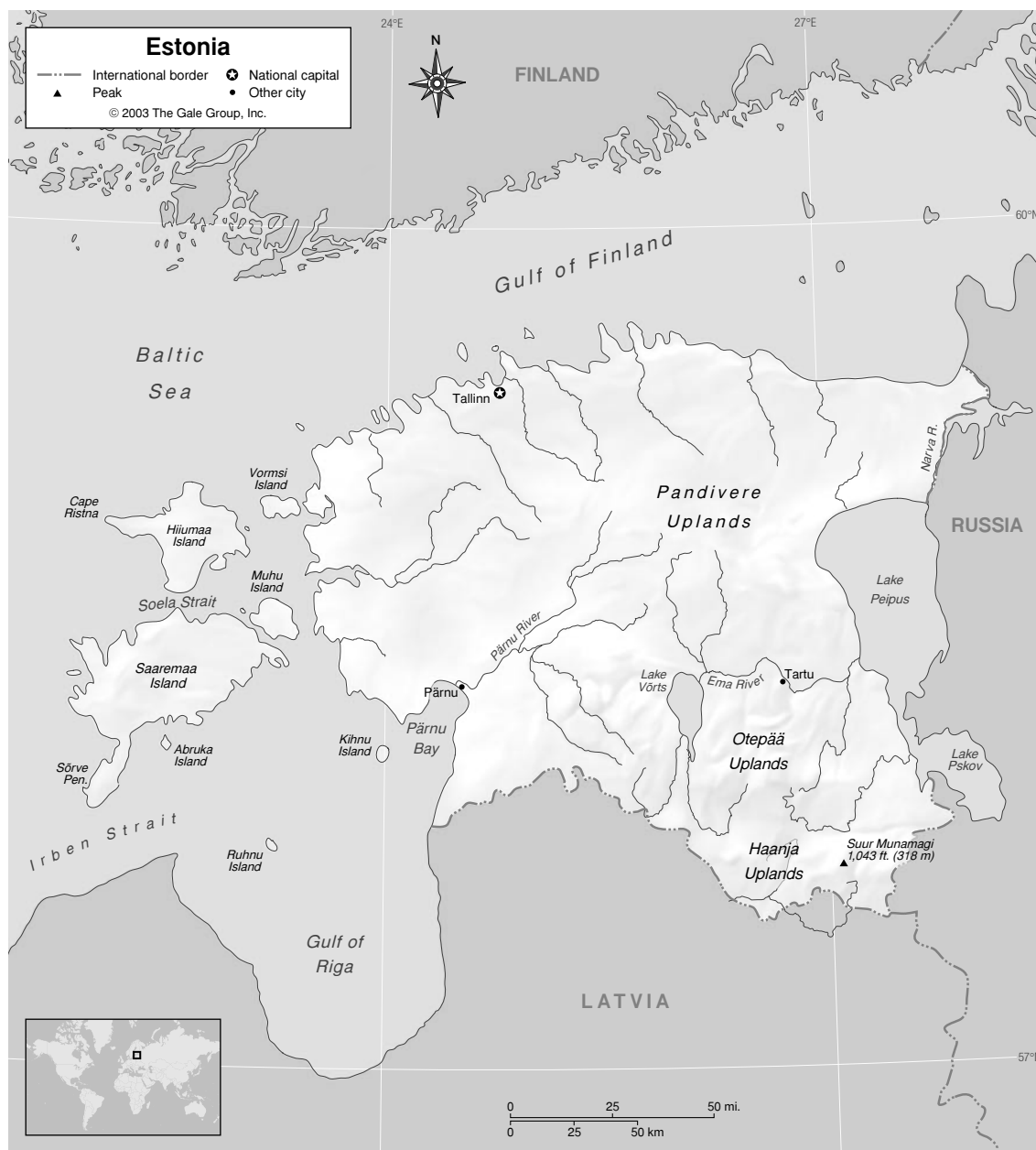
July and August are the wettest months. Precipitation is moderate, ranging from 48 to 69 centimeters (19 to 27 inches). The annual average precipitation is about 58 centimeters (23 inches). Rain and melting snow cause some flooding of rivers in the spring.

4 🌐 TOPOGRAPHIC REGIONS

The smallest of the three Baltic states (the other two are Latvia and Lithuania), Estonia is a low, flat country with a hilly region in the southeast. It has a long, shallow coastline on the Baltic Sea, with many islands off the coast. Over a third of the country is forest. A wide variety of native birds and animals live in the wooded countryside of Estonia. The golden eagle, white-tailed eagle, spotted eagle, eagle owl, and black stork are all protected species; the European flying squirrel is a common sight in the Estonian forest.

The country is dotted with more than one thousand natural and artificial lakes. Estonia is located on the Eurasian Tectonic Plate.

ESTONIA



5 OCEANS AND SEAS

Seacoast and Undersea Features

The northwestern part of the country borders on the Baltic Sea, which is a part of the Atlantic Ocean. The rest of Estonia's coastline is on two

major inlets of the Baltic: the Gulfs of Finland and Riga.

The Gulf of Finland reaches east about 400 kilometers (250 miles) between Finland on the north and Estonia and Russia on the south.



EPD/Saxifraga/Henk Sierdsema

Estonia's low-lying coastal region.

Its width varies from 19 to 129 kilometers (12 to 80 miles), with the narrowest part at the eastern end.

The Gulf of Riga is found to the southwest of mainland Estonia, directly south of Estonia's major islands, with Latvia on the far shore. It is about 145 kilometers (90 miles) long from north to south, and ranges from 72 to 129 kilometers (45 to 80 miles) wide from east to west.

Sea Inlets and Straits

Narva Bay, at the northeastern edge of the country's coastline, links the Gulf of Finland with Lake Peipus to the south through the Narva River.

Pärnu Bay, on the southwest coast, is an inlet of the Gulf of Riga.

Islands and Archipelagos

There are thousands of islands along Estonia's coastline. The largest islands lie west of the mainland. Saaremaa is the largest island, at 2,714 square kilometers (1,048 square miles). It lies between the Baltic Sea and the Gulf of Riga. The Sõrve Peninsula extends off the southern end of the island, and is separated from Latvia by the Irben Strait. Raising livestock and tourism are the principal economic activities of this low-lying island.

Hiiumaa, the next-largest of Estonia's islands, measures 961 square kilometers (371 square miles) in area. It is located in the Baltic Sea, southwest of the entrance to the Gulf of Finland. The Soela Strait separates it from Saaremaa to the south. Its most distinctive feature is Cape Ristna, which projects off the western

ESTONIA

coast into the Baltic. Fishing and tourism are the island's chief industries. Many of its inhabitants are of Swedish descent.

The other islands are all much smaller. Vormsi and Muhu Islands lie between the larger islands and the Estonian mainland. Arbuka, Kihnu, and Ruhnu Islands are in the Gulf of Riga.

6 🌐 **INLAND LAKES**

The two largest lakes are Lake Peipus on the eastern border with Russia and Lake Võrts (Võrtsjarv) in south-central Estonia. Lake Peipus covers 3,520 square kilometers (1,360 square miles). A long, narrow channel connects it on the south with the smaller Lake Pskov, which lies mostly within Russian territory. Lake Peipus is drained on the north by the Narva River, which flows into the Gulf of Finland. Fishing is the chief industry. Lake Peipus is navigable for about eight months of the year. Lake Võrts's area is 270 square kilometers (105 square miles).

7 🌐 **RIVERS AND WATERFALLS**

The Pärnu is the longest river in Estonia at 144 kilometers (89 miles) long. It flows southwest, emptying into the Gulf of Riga at Pärnu Bay. Other important rivers include the Ema in the southeast and the Narva, which forms the country's northeastern border with Russia.

8 🌐 **DESERTS**

There are no desert regions in Estonia.

9 🌐 **FLAT AND ROLLING TERRAIN**

While Estonia is a flat country, much of its area is forested or marshy. Approximately 25 percent of the land (9,260 square kilometers/3,575 square miles) is considered arable, but with no permanent crops. Permanent pastures (1,810 square kilometers/699 square miles) comprise 11 percent of land use.

About 110 square kilometers (68 square miles) of land is irrigated for crop production.

About 44 percent of Estonia's area consists of forests and woodlands. Meadows cover about 2,520 square kilometers (973 square miles). Tree species are chiefly pine, birch, aspen, and fir. Wildlife includes elk, deer, and wild boar. Beaver, red deer, and willow grouse have been protected by legislation because of their dwindling numbers.

Estonia is mostly a low-lying plain, but there are some modest hills in the central and southern regions, known as the Pandivere, Otepää, and Haanja Uplands. The country's highest point, Suur Munamägi (318 meters/1,043 feet), is in the extreme southeast corner of the country near the Russian border.

Along the north coast is an area of slightly elevated limestone known as the Glint. There, waterfalls as high as 56 meters (185 feet) tumble down the exposed limestone cliffs.

10 🌐 **MOUNTAINS AND VOLCANOES**

The hills and other uplands of Estonia are not high enough to be considered mountains, and there are no volcanoes in the country.

11 🌐 **CANYONS AND CAVES**

Humans created most of the larger caves in Estonia. The Piusa Glass Sand Caves, located near Tartu, are a series of eight caves that were dug into hills of Devonian sandstone, which is a sedimentary deposit formed in the Devonian Era about 360 to 408 million years ago. This sand was found to be highly suitable for making glass, but mining operations ceased some time ago. Now, the caves serve as a hibernation site for what is considered by naturalists to be the largest bat colony in the Baltic countries.

12 🌐 **PLATEAUS AND MONOLITHS**

There are no plateau regions or monoliths in Estonia.

ESTONIA

13 MAN-MADE FEATURES

A hydroelectric power plant was built in 1956 near the city of Narva, on the Narva River. This dam created the artificial reservoir now known as Lake Narva.

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DID YOU KNOW?

The region known as the Baltic States includes the independent nations of Estonia, Latvia, and Lithuania, all of which line the eastern coast of the Baltic Sea. Finland and Sweden, two other countries which also touch the Baltic Sea, are generally included in the region known as Scandinavia.

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Ethiopia

- **Official name:** Federal Democratic Republic of Ethiopia
- **Area:** 1,127,127 square kilometers (435,186 square miles)
- **Highest point on mainland:** Ras Dshen (4,620 meters/15,157 feet)
- **Lowest point on land:** Danakil Depression (125 meters/410 feet below sea level)
- **Hemispheres:** Northern and Eastern
- **Time zone:** 3 P.M. = noon GMT
- **Longest distances:** 1,639 kilometers (1,018 miles) from east to west; 1,577 kilometers (980 miles) from north to south
- **Land boundaries:** 5,311 kilometers (3,300 miles) total boundary length; Djibouti 337 kilometers (209 miles); Eritrea 912 kilometers (567 miles); Kenya 830 kilometers (516 miles); Somalia 1,626 kilometers (1,010 miles); Sudan 1,606 kilometers (998 miles).
- **Coastline:** None
- **Territorial sea limits:** None

1 🌐 LOCATION AND SIZE

Ethiopia is located in eastern Africa in the area known as the Horn of Africa: the northeastern extension of the continent. The country lies west of Somalia, north of Kenya, east of Sudan, and south of Eritrea and Djibouti. With an area of about 1,127,127 square kilometers (435,186 square miles), the country is slightly less than twice the size of the state of Texas. Ethiopia is divided into nine states and two self-governing administrations.

2 🌐 TERRITORIES AND DEPENDENCIES

The territory of Eritrea was once a part of Ethiopia. Eritrea became an independent nation in 1993, however, after a long and bloody war fought over several decades. As of 2002, the governments of both nations were in dispute concerning the official boundaries between the countries.

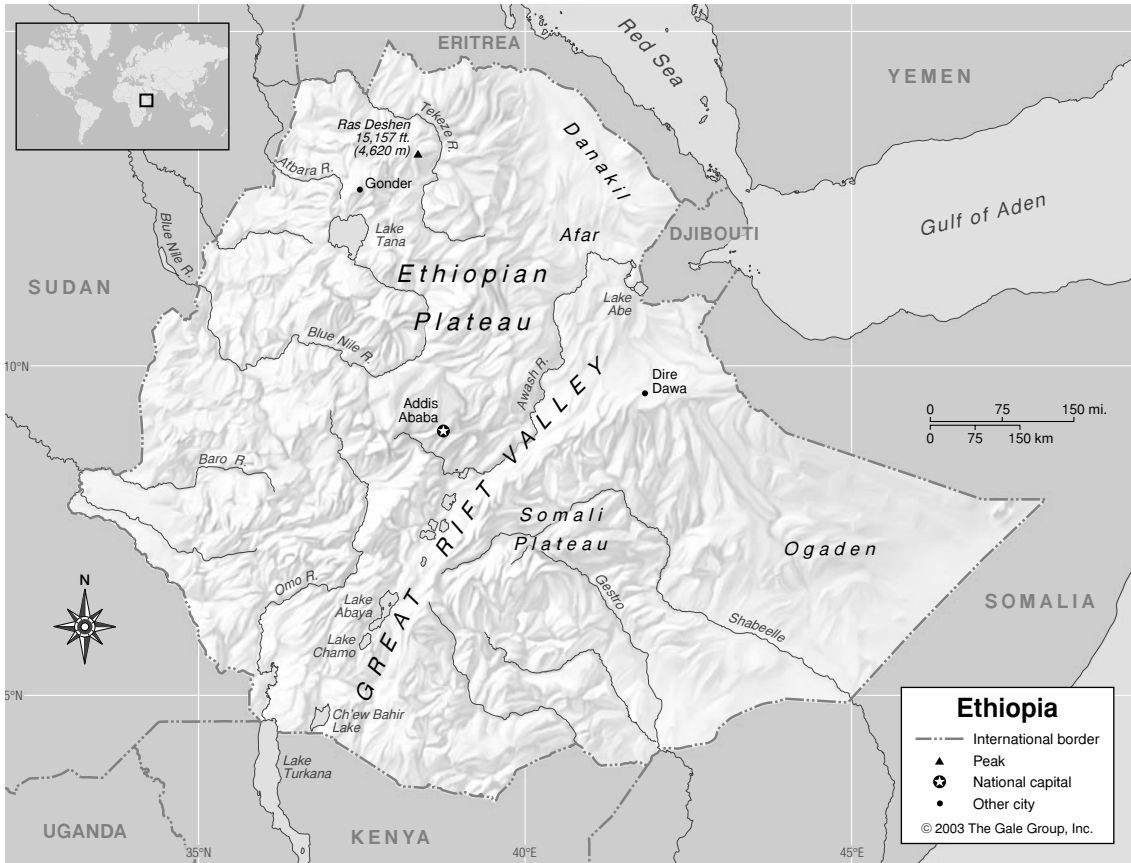
3 🌐 CLIMATE

Ethiopia has three main climatic zones: the *dega*, or cool zone; the *weina dega*, or tem-

perate zone; and the *kolla*, or hot zone. In the highlands above 2,400 meters (7,800 feet) in elevation, daily temperatures range from near freezing to 16° C (61° F), with March, April, and May the warmest months. Nights are usually cold throughout the year, and it is not uncommon to greet the day with light frost. Snow is found at the highest elevations. Daily temperatures at lower elevations—from 1,500 meters to 2,400 meters (4,875 feet to 7,800 feet)—range from 16° C (61° F) to 30° C (86° F). Below 1,500 meters (4,875 feet) is the *kolla* zone, with daytime temperatures averaging 27° C (81° F), but soaring to 40° C (104° F) in the Ogaden region during midyear.

Ethiopia is affected by the seasonal monsoon trade winds from the Atlantic Ocean that cross the African continent. The country receives most of its rain from mid-June to mid-September, with the high plateau experiencing a second and light rainy season from December to February. Converging winds in April and May bring lighter rains known as

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the *balg*. Annual precipitation is heaviest in the southwest, reaching up to 200 centimeters (80 inches). Up to 122 centimeters (48 inches) of rain falls annually in the highlands. The Ogaden in the east receives as little as 10 centimeters (4 inches), and precipitation in the Great Rift Valley and the Danakil Depression is negligible.

4 🌐 TOPOGRAPHIC REGIONS

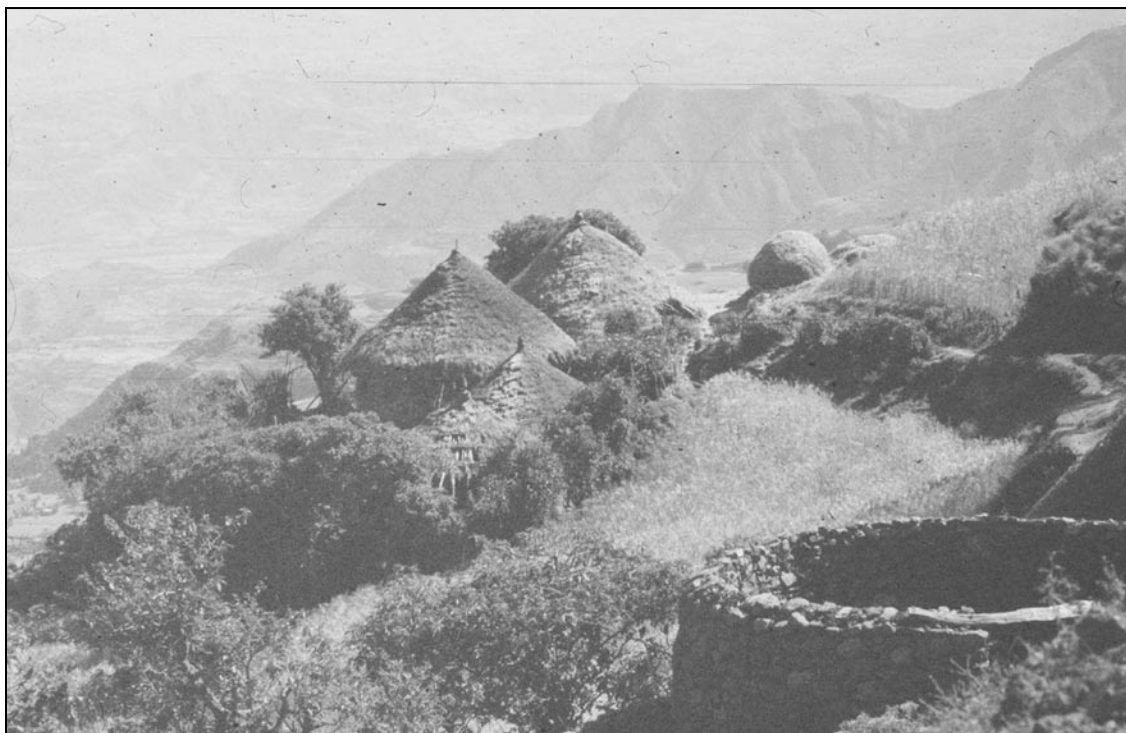
Ethiopia has some of the most spectacular scenery in Africa. Much of the country is set on a high plateau, with a massive central highland complex of mountains divided by the deep Great Rift Valley and a series of lowlands along the periphery (edges) of the higher elevations. The wide diversity of terrain pro-

duces regional variations in climate, natural vegetation, soil composition, and settlement patterns.

In the northwest, Simien Mountains National Park provides a habitat for such native animals as baboons, ibex, Simien fox, and birds of prey including a large vulture species, the bearded vulture or *lammergeyer*.

Most of Ethiopia is seismically active. There are hot springs that bubble up from deep below the earth's crust in Addis Ababa and elsewhere. There is potential for serious and damaging earthquakes in the area surrounding the Great Rift Valley. Ethiopia is located on the African Tectonic Plate, with the Arabian

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EPD/Ron Reminick

This Ethiopian homestead is built on the rocky central highland plateau on the western edge of the Great Rift Valley escarpment.

Tectonic Plate somewhat further to the north, beyond Eritrea. The Great Rift Valley extends across the country from the southwest to the northeast.

Neighboring Somalia claims the Ogaden border region in the southeast, but an exact border between the two countries has never been determined.

5 🌐 **OCEANS AND SEAS**

Ethiopia is a landlocked country.

6 🌐 **INLAND LAKES**

A chain of large lakes dots the southern half of the Ethiopian area of the Great Rift Valley. Some are freshwater lakes, fed by small streams from the east; others contain various salts and minerals. Lake Turkana (also called Lake Rudolf), fed by the Omo River, is the

largest lake in the country, with an area of about 6,405 square kilometers (2,473 square miles). However, most of Lake Turkana is situated in Kenya; only the northernmost portion extends into Ethiopia. Other lakes in the southern Rift Valley are Ch'ew Bahir, Chamo, and Abaya. Lake Abe, fed by the Awash River, is located in the northern part of the Rift Valley, on the border with Djibouti.

Lake Tana is located in the northwest, on the Ethiopian Plateau. It is the largest lake located entirely within Ethiopia, with an area of about 2,849 square kilometers (1,110 square miles), and it is the source of the Blue Nile.

7 🌐 **RIVERS AND WATERFALLS**

Most of the northern and western rivers are a part of the vast Nile River system. Most notable of these is the Blue Nile (Abay), which

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DID YOU KNOW?

The Blue Nile, one of the tributary streams that eventually flow into the Nile River, has its source in Ethiopia. With a total length of 6,693 kilometers (4,160 miles), the Nile is the longest river in the world. Its main headstream rises from Lake Victoria of Tanzania and Uganda. These rivers meet in Sudan and flow into Egypt. Throughout its length in Egypt, no other tributary streams enter the Nile before it empties into the Mediterranean Sea through a large delta.

flows out of Lake Tana towards the center of the country before curving northwest into Sudan. In the center of Sudan, the Blue Nile meets the White Nile to form the Nile River. The Atbara River and its tributary, the Tekeze River, both begin in Ethiopia and also flow into the Nile in Sudan. Together, the Blue Nile and the Atbara provide about 70 percent of the water volume in the Nile River. The Baro River in southwestern Ethiopia is another Nile tributary. Taken together, these four Nile tributaries account for about half of the outflow of water from the country.

Near Bahir Dar, the Blue Nile Falls (Tsisat Falls) are known as a site where many rainbows appear.

In the northern half of the Great Rift Valley, the Awash River flows between steep cliffs. Originating some 80 kilometers (50 miles) west of Addis Ababa, it courses northward and descends several thousand feet to the valley

floor. There it is joined by several tributaries until it becomes a river of major importance, only to disappear into the saline lakes of the Danakil Depression, most notably Lake Abe. The Omo River rises near the source of the Awash, but flows south into Lake Turkana at the other end of Ethiopia's portion of the Great Rift Valley.

In the southeast regions of the Somali Plateau, seasonally torrential rivers provide drainage toward the southeast. Chief of these is the Shabeelle, which has its source in several smaller rivers in the south and flows into Somalia. While it does not carry as much water as the Blue Nile, the Shabeelle is the longest river to flow through Ethiopia, with a total length of about 2,011 kilometers (1,250 miles). It is a tributary of the Gestro (Jubba), which also has its source in Ethiopia and flows into Somalia. The Gestro generally flows year-round into the Indian Ocean, thanks in part to its northern tributary, the Dawa. In contrast, the Shabeelle can dry up in the deserts of Somalia before ever reaching the Gestro.

8 DESERTS

The Danakil Depression is a sunken desert region in the northeast that stretches between the Red Sea to the Great Rift Valley. It is a large, triangular-shaped basin that in some places is as low as 125 meters (410 feet) below sea level. The lowest elevation in the country, it is also said to be one of the hottest places on Earth.

9 FLAT AND ROLLING TERRAIN

Sections of marshy lowlands exist along the Sudanese border in the west and southwest.

The Borena and Ogaden plains in the south are characterized by grassy ranges and are highly vulnerable to drought and erosion, especially from overgrazing.

Highlands in remote areas above 1,800 meters (5,850 feet) are covered with a varied as-

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EPD/Ron Reminick

The Ethiopian Plateau is rugged and mountainous.

sortment of evergreens and conifers, especially zigba and tid. Due to population pressures, however, many forests' borders have shrunk into relatively inaccessible areas.

High mountain elevations above the tree line along the Sudanese border are under intensive agricultural development. Even steep slopes and marginal areas are being cultivated for crop production.

10 🌐 **MOUNTAINS AND VOLCANOES**

The highest point in Ethiopia is a volcanic cone in the northeast, Ras Deshen (Mount Rasdajan). With an elevation of about 4,620 meters (15,157 feet), Ras Deshen is Africa's fourth-highest mountain.

There are sixty-seven volcanoes in Ethiopia, more than any other country in Africa; yet many are rather small. The most famous

of these is Erta Ale, which has a relatively low peak at only 613 meters (2,011 feet). It has been erupting almost continuously since 1967 and has an active lava lake in its summit crater. The existence of these small volcanoes, hot springs, and many deep gorges indicates that large segments of the land mass are still geologically unstable. Despite the line of seismic belts that extends along the length of the Eritrean border and the Danakil Depression, no serious earthquakes were recorded in the area during the twentieth century.

11 🌐 **CANYONS AND CAVES**

Some geographers, especially Ethiopians, consider the Great Rift Valley a distinct region. It is the most extensive fault on Earth's surface, extending from the Jordan River Valley in the Middle East to the Shire tributary

of the Zambezi River in Mozambique. The vast segment that runs through the center of Ethiopia is marked in the north by the Danakil Depression. To the south, the rift becomes a deep trench slicing through the high plateau from north to south, with an average width of 48 kilometers (30 miles). The Awash River courses through the northern section of the trench.

While the Great Rift Valley is by far the most impressive of Ethiopia canyons, millennia of erosion have produced other steep-sided valleys throughout the country; in some areas, these have been measured at about 1.6 kilometers (1 mile) deep and several kilometers wide.

The Blue Nile winds in a great arc starting at Lake Tana and courses in an arc through canyons more than 1,200 meters (4,000 feet) in depth before flowing into Sudan.

The Sof Omar caves are located about 450 kilometers (280 miles) southeast of Addis Ababa. They consist of a series of tunnels and chambers carved into limestone and chalk by the Web River. The caves are considered to be a sacred place by some Muslims. Legend tells that Sheik Sof Omar was seeking refuge in the area when Allah opened the mouth of the cave for him. Omar was said to have used the caves as a mosque for his entire life.

In the northwest, the Simien Mountains National Park features a rocky massif, with deep gorges cut into it by streams.

12 🌐 **PLATEAUS AND MONOLITHS**

The highland that comprises much of the country consists of two regions: the Ethiopian Plateau in the west, which is bisected by the Great Rift Valley, and the Somali Plateau in the east. The higher Ethiopian Plateau is rugged and mountainous, while the Somali Plateau is sparsely populated, arid, and rocky.

DID YOU KNOW?

The Horn of Africa is a peninsula that juts out from the northeast of the African continent, just below the Red Sea. It separates the Gulf of Aden from the Indian Ocean. Because the two main countries on the Horn of Africa are Ethiopia and Somalia, it is sometimes called the Somali Peninsula.

Northward from Addis Ababa, the Ethiopian Plateau inclines slightly toward the west and northwest, then abruptly descends near the boundary with Sudan. Given the rugged nature of these massifs and the surrounding tableland, this region's name is somewhat misleading. Little of the Ethiopian Plateau is actually flat, except for a scattering of level-topped mountains known to Ethiopians as *ambas*.

South of Addis Ababa, the plateau is also rugged, but its elevation is slightly lower than in its northwestern section. The eastern segment beyond the Great Rift Valley exhibits characteristics almost identical to those of its western counterpart.

13 🌐 **MAN-MADE FEATURES**

The Churches of Lalibela are located in that town in the central highland region of Ethiopia. At least eleven monolithic cave churches were carved into the rocks here in the thirteenth century. People come to Lalibela to see these rock churches, hewn out of the bedrock. The churches have been maintained by generations of priests who guard their treasures

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of ornamented crosses, illuminated Bibles, and illustrated manuscripts. The site has been named a World Heritage Site of the United Nations Educational, Scientific, and Cultural Organization (UNESCO).

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Fiji

- **Official name:** Republic of the Fiji Islands
- **Area:** 18,270 square kilometers (7,054 square miles)
- **Highest point on mainland:** Mount Tomanivi (1,324 meters/4,344 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Southern and Eastern
- **Time zone:** Midnight = noon GMT
- **Longest distances:** 595 kilometers (370 miles) from southeast to northwest; 454 kilometers (282 miles) from northeast to southwest
- **Land boundaries:** None
- **Coastline:** 1,129 kilometers (702 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Fiji is an island nation in the South Pacific located about 2,735 kilometers (1,700 miles) northeast of Sydney, Australia; 1,769 kilometers (1,100 miles) north of Auckland, New Zealand; and 4,466 kilometers (2,776 miles) southwest of Honolulu, Hawaii. It is roughly one-third of the way from New Zealand to Hawaii. Fiji consists of around three hundred islands—about one-third of which are inhabited—and some five hundred islets, covering a total land area of 18,270 square kilometers (7,054 square miles).

2 🌐 TERRITORIES AND DEPENDENCIES

Fiji has no territories or dependencies.

3 🌐 CLIMATE

Fiji's tropical climate is modified by easterly trade winds. Temperature variation between seasons is modest. High temperatures in the summer (October to March) reach 29°C (85°F); winter lows drop to only 20°C (68°F). Cooler temperatures are recorded at higher elevations.

Annual rainfall ranges from an average of 178 centimeters (70 inches) on the drier leeward sides of the islands to 305 centimeters (120 inches) on the windward sides. The leeward sides have a dry season from April to October, while rainfall is distributed throughout the year on the windward sides. The hurricane season lasts from November to April, but disastrous hurricanes are rare.

4 🌐 TOPOGRAPHIC REGIONS

There are no specific topographic regions in Fiji.

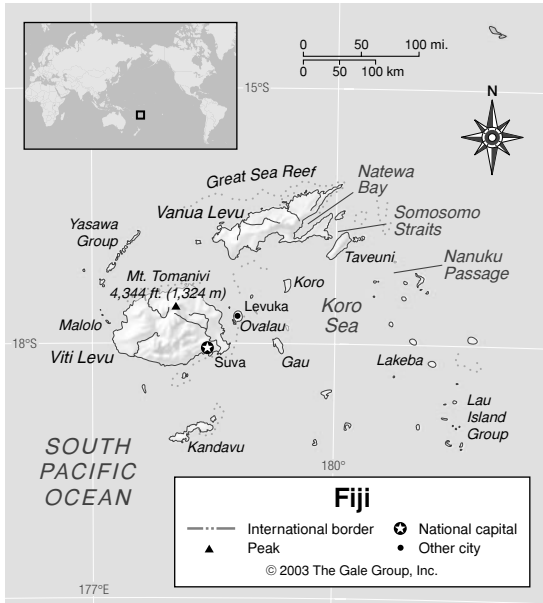
5 🌐 OCEANS AND SEAS

Fiji is located in the South Pacific Ocean and surrounds the Koro Sea.

Seacoast and Undersea Features

Coral reefs fringe the islands, and circular or U-shaped coral atolls and barrier reefs encircle large coastal lagoons. The reefs, rocks, and shoals in the waters off Fiji make navigation on the Koro Sea dangerous.

FIJI



and several smaller ones. At the northwest end of Fiji lies a string of islands called the Yasawa Group. The Polynesian island of Rotuma, located 708 kilometers (440 miles) north of Suva, also belongs to Fiji, although it is separate from the rest of the island group. The larger islands are generally mountainous, with flatter land along their river deltas and fertile coastal plains.

Coastal Features

Fiji is known for its sandy beaches, which support a thriving tourist industry. Mangrove swamps are found on the eastern coastlines of many of Fiji's islands.

6 🌐 INLAND LAKES

Fiji has no inland lakes.

7 🌐 RIVERS AND WATERFALLS

On Viti Levu, the largest island, the major river is the Rewa; this river is navigable for 113 kilometers (70 miles). The island also has other river systems, including those of the Nadi, Ba, and Sigatoka. All of these rivers rise in the island's central mountains. The main river on Vanua Levu is the Dreketi.

8 🌐 DESERTS

There are no deserts on Fiji.

9 🌐 FLAT AND ROLLING TERRAIN

The western parts of Fiji's larger islands are flat, dry grasslands.

10 🌐 MOUNTAINS AND VOLCANOES

Fiji's largest island, Viti Levu, has a central mountain range dividing it down the middle, with some peaks rising higher than 914 meters (3,000 feet), including Fiji's highest mountain, Mount Tomanivi. The mountain system includes the picturesque Nausori Highlands. The next-largest island, Vanua Levu, also has a central range, which spans its length and has peaks of roughly equal height. Fiji's other large

Sea Inlets and Straits

The Somosomo Straits separate the islands of Vanua Levu and Taveuni. Taveuni is in turn separated from the Lau island group by the Nanuku Passage. Several other passages separate the various islands and island groups. The coastline of Vanua Levu is much more deeply indented than that of Viti Levu and includes the long, narrow Natewa Bay.

Islands and Archipelagos

By far the two largest islands in Fiji's archipelago are Viti Levu, near its western end, and Vanua Levu, which reaches almost to the northernmost point. The fifty-seven easternmost islands are collectively known as the Lau Group. With a land area of only 160 square kilometers (62 square miles), they stretch over an expanse of ocean covering 112,000 square kilometers (43,232 square miles).

The islands in the central part of the archipelago make up the area called Lomaiviti, or Central Fiji. There are seven larger islands



Susan D. Rock

The southern coast of Viti Levu, Fiji, is known as the coral coast.

DID YOU KNOW?

The tagimaucia, a beautiful red-and-white flowering plant that resembles the hibiscus, blooms in only one place in the world: on the banks of the Tagimaucia River in the mountains of Taveuni Island.

islands are also mountainous, with slopes that often rise dramatically near the shoreline.

11 🌐 CANYONS AND CAVES

There are no notable caves or canyons on Fiji.

12 🌐 PLATEAUS AND MONOLITHS

Some of the higher mountain peaks on Fiji's large islands give way to plateaus before descending to the lowlands near the coast.

13 🌐 MAN-MADE FEATURES

There are no significant man-made features affecting the geography of Fiji.

14 🌐 FURTHER READING

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Finland

- **Official name:** Republic of Finland
- **Area:** 305,470 square kilometers (117,942 square miles)
- **Highest point on mainland:** Mount Haltia (1,328 meters/4,343 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Eastern
- **Time zone:** 2 P.M. = noon GMT
- **Longest distances:** 540 kilometers (335 miles) from east to west; 1,160 kilometers (719 miles) from north to south
- **Land boundaries:** 2,628 kilometers (1,629 miles) total boundary length; Norway 729 kilometers (452 miles); Sweden 586 kilometers (363 miles)
- **Coastline:** 1,126 kilometers (698 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Located in northeastern Europe, Finland is one of the world's northernmost countries—roughly one-third of the country lies north of the Arctic Circle. Finland covers 305,470 square kilometers (117,942 square miles), or slightly less than the state of Montana, and has six provinces.

2 🌐 TERRITORIES AND DEPENDENCIES

The Åland Islands, in the Gulf of Bothnia off the southwest coast, are an autonomous region of Finland. They have an area of 1,552 square kilometers (600 square miles) and encompass over 6,500 islands and islets, only about 80 of which are inhabited. They are farther from shore than any of Finland's other islands.

3 🌐 CLIMATE

In spite of its proximity to the Arctic Circle, Finland has a relatively mild climate, thanks to the warming influence of the Gulf Stream. Temperatures are coldest in the north, however, with winter lows down to 30°C below zero

(22°F below zero) and permanent snowcaps resting on the northern slopes of its highest peaks. Temperatures for the country as a whole average -14°C to -3 °C (7°F to 27°F) in winter and about 13°C to 18°C (55°F to 65°F) in summer. Summer temperatures average about 20°C (68°F) in the southern part of the country, with daytime summer highs reaching 30°C (86°F). Average annual precipitation (a mix of both snow and rain) varies from about 43 centimeters (17 inches) in the north to 71 centimeters (28 inches) in the south.

The north of Finland is famous for its “midnight sun.” For about seventy days beginning in mid-May, the sun never sets and is visible even at night. Even the southern part of the country can have as many as nineteen hours of sunlight on summer days. Another climate-related phenomenon experienced in the north is *kaamos*, the sunless winter, when it is dark even at the height of day, and spectacular displays of northern light often are visible in the sky.

FINLAND



4 🌐 TOPOGRAPHIC REGIONS

Finland is a generally low-lying country. The terrain is close to sea level in the southern half of the country, rising in the north and northeast. Nearly the entire northern half of Finland, including its most elevated terrain, belongs to the larger region known as Lapland, which stretches across Norway, Sweden, Finland, and Russia, lying largely within the Arctic Circle.

It is one of the coldest zones in Europe, and is home to such wildlife species as tundra reindeer. The easternmost part of Finland is called Karelia, where native brown bears roam. Part of Karelia was ceded to the Soviet Union at the close of World War II.

5 🌐 OCEANS AND SEAS

Finland is located northeast of the Baltic Sea. At some points, only a narrow strip of land in Norway separates Finland from the Barents Sea to the north, and some of its rivers drain northward in that direction.

Seacoast and Undersea Features

There are thousands of small islands dotting the coast of Finland.

Sea Inlets and Straits

Finland is bordered on the west by the Gulf of Bothnia and on the south by the Gulf of Finland.

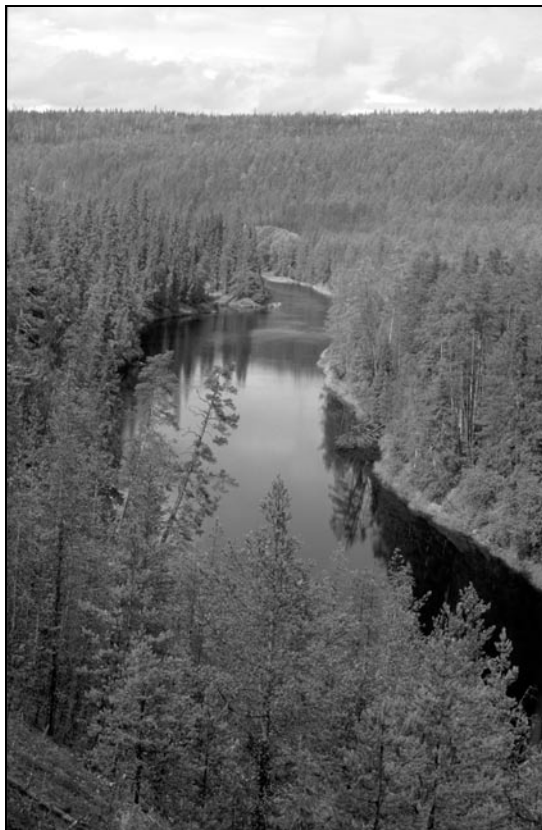
Islands and Archipelagos

Aside from the Åland Islands (see Territories and Dependencies), other major island groups include the Turku Archipelago, which lies between the Åland Islands and the mainland, and a group of islands lying off the western coast near Vaasa. The southwest islands rise to elevations of over 122 meters (400 feet). There is also a group of low-lying islands off the southeast coast in the Gulf of Finland.

Coastal Features

Finland's heavily indented coastal zone, which has been called the "golden horseshoe," is dominated by the cities of Helsinki and Turku, the former capital of the country. The entire coast is paralleled by an island zone, which reaches its greatest breadth and complexity in the southwest with the Turku Archipelago.

FINLAND



EPD/Saxifraga/Henk Sierdsema

The densely forested region in the northeast of Finland is hilly.

6 INLAND LAKES

Finland's outstanding physical feature is the multitude of lakes that were formed when the glaciers retreated at the close of the Ice Age. The same phenomenon created the marshes that gave Finland its native name—*Suomi*, or “swamp.” In relation to its size, Finland has more lakes than any other country—their total number has been estimated at close to two hundred thousand. Fifty-five thousand lakes are at least 200 meters (656 feet) in breadth, and nineteen large lakes span more than 200 square kilometers (77 square miles). The largest, Lake

Saimaa, is the fifth-largest lake in Europe. Other large lakes include Inari (Enar) to the north, Oulujärvi in the central part of the country, and Päijanne and Pielinen in the south. Most of Finland's lakes are quite shallow, with an average depth of only 7 meters (23 feet).

Both above and below the tree line, the north country region has extensive swamps, and about a third of this area is covered with bogland. The vast expanses of swamp are the least attractive elements in the northern landscape.

7 RIVERS AND WATERFALLS

A network of interconnected lakes and rivers covers the greater part of southern Finland. About 10 percent of Finland's area consists of inland water. The north is drained by long rivers, such as the Muonio, the Tornio (Torneå), and the Kemi. In the central part of the country, the streams become shorter, except for the Oulu. In the lake district in the southeast, rivers are long and narrow and crossed by the great east-to-west ridge called the Salpausselkä, which runs parallel to the Gulf of Finland coast. The areas south of the lake district and westward along the coast are drained mostly by a series of short streams.

Some of the northern rivers, such as the Kemi, empty into the freshwater Bothnian Gulf. Others, including the Paats and the Tenu (Tano), drain into the Arctic, and some have carved dramatic gorges through to Russian Karelia. Farther south, a series of parallel rivers originates at the high point of Suomenselka and flows northwest to the broad coastal plain of the Gulf of Bothnia. Among these are the Oulu, Pyha, and Lapuan Rivers.

FINLAND



EPD/Saxifraga/Henk Sierdsema

There are thousands of shallow lakes in Finland.

8 🌐 **DESERTS**

There are no desert regions in Finland.

9 🌐 **FLAT AND ROLLING TERRAIN**

More than half of eastern Finland is hilly, with the land gently sloping toward the southwest.

Most of the densely forested land in the north and east consists of landforms with rounded ridgetops at elevations from 457 to 762 meters (1,500 and 2,500 feet). Near Lake Inari (Lake Enar), these hills are intersected by a plain with a height between 91 and 183 meters (300 to 600 feet).

Low-lying plains make up much of the coast. South of the Salpausselkä ridge, the plain is narrow, along the Gulf of Finland. It

widens in the southwest and west, where it borders the Gulf of Bothnia. Finland's farmland is concentrated in this region.

10 🌐 **MOUNTAINS AND VOLCANOES**

Finland's mountains are situated in the extreme northwest, near the borders with Sweden and Norway. Peaks in this small area rise to an average height of 1,000 meters (3,281 feet). The highest is Mount Haltia (Haltiatunturi).

11 🌐 **CANYONS AND CAVES**

There are no notable canyons or caves in Finland.

12 🌐 **PLATEAUS AND MONOLITHS**

There are no notable plateaus or monoliths in Finland.

FINLAND

13 MAN-MADE FEATURES

One of the most impressive structures in Finland, the Saimaa Canal dominates the Karelia region. The artificial reservoirs of Lokan and Porttipahdan are among Finland's largest lakes.

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DID YOU KNOW?

The two bodies of water bordering Finland—the Gulf of Finland and the Gulf of Bothnia—can freeze over entirely for months at a time due to frigid winter temperatures.

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France

- **Official name:** French Republic
- **Area:** 547,030 square kilometers (211,208 square miles)
- **Highest point on mainland:** Mont Blanc (4,807 meters/15,772 feet)
- **Lowest point on land:** Rhône River Delta (2 meters/7 feet below sea level)
- **Hemispheres:** Northern and Eastern
- **Time zone:** 2 P.M. = noon GMT
- **Longest distances:** 950 kilometers (590 miles) from east to west; 962 kilometers (598 miles) from north to south
- **Land boundaries:** 2,889 kilometers (1,795 miles) total boundary length; Andorra 56.6 kilometers (35 miles); Belgium 620 kilometers (385 miles); Germany 451 kilometers (280 miles); Italy 488 kilometers (303 miles); Luxembourg 73 kilometers (45 miles); Monaco 4.4 kilometers (2.8 miles); Spain 623 kilometers (387 miles); Switzerland 573 kilometers (356 miles)
- **Coastline:** 3,427 kilometers (2,130 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

France is the largest country in Western Europe and the third largest in Europe. With an area of 547,030 square kilometers (211,208 square miles), it is surpassed only by Russia and Ukraine. Roughly hexagonal in shape, it is bordered by three different bodies of water (the Atlantic Ocean, the English Channel, and the Mediterranean) and three mountain chains (the Pyrenees to the south and the Jura and Alps to the east and southeast, respectively). The tiny principality of Monaco, a self-contained enclave, lies entirely within French borders, at the far southeastern tip of the country.

2 🌐 TERRITORIES AND DEPENDENCIES

France has a number of overseas departments and territories throughout the world. They are all islands except for French Guiana, on the northeast coast of South America. The northernmost of France's island dependen-

cies, in the Atlantic Ocean off the coast of Newfoundland, is the archipelago of St. Pierre and Miquelon, consisting of two islands and a number of rocky islets. Farther south, in the Lesser Antilles, lie the tropical islands of Guadeloupe and Martinique.

Several French islands are located in the Indian Ocean. Mayotte, part of the Comoros archipelago that lies east of Mozambique, belongs to France (the other Comoros islands declared their independence in 1975). The volcanic island of Réunion, east of Madagascar, administers two other French dependencies in the Mozambique Channel: the island of Europa and the atoll of Bassas da India. France also has an overseas territory farther south in the Indian Ocean, collectively called the Southern and Antarctic Lands. The Southern Lands comprise two individual volcanic islands and two archipelagos. "Antarctic Lands" refers to a section of Antarctica called "Adelie Land." France has three dependencies in the

FRANCE



Pacific: New Caledonia, Wallis and Futuna, and French Polynesia, which is a group of five archipelagos halfway between South America and Australia.

3 CLIMATE

France's various regions have three major types of climate: oceanic, continental, and Mediterranean. Temperatures generally increase from

north to south. The western part of the country, which borders the Atlantic Ocean, has a temperate, humid oceanic climate, characterized by relatively modest annual temperature variations, heavy precipitation, and overcast skies, with cool summers and winters. Average temperatures in Brest, at the tip of Brittany, are 6°C (43°F) in January and 16°C (61°F) in July. Much of eastern and central France has

FRANCE



EPD/Wilko Gijssbertsen

The Alps lie in western France near the border with Italy.

a continental climate, with a wider range of temperatures and greater variations between seasons. Winters are cold and snowy, and storms are frequent in June and July. Paris has an average annual temperature of 11°C (53°F). The eastern part of the country has the most severe winters.

The Mediterranean climate predominates in the south and southeast, stretching inland from the coast to the lower Rhône Valley. Winters are mild and humid, with only short periods of frost, and summers are hot and dry. Temperatures above 32°C (90°F) are common. Annual temperatures in Nice, on the Côte d'Azur, average 15°C (59°F). Southern France occasionally experiences a cold northern wind called the *mistral*.

Average annual rainfall in France ranges from as little as 43 centimeters (17 inches) on the Languedoc coast to 130 centimeters (50 inches) at high elevations in the mountains, on the Massif Central, and in the northwest. Annual rainfall averages 68 centimeters (27 inches) in Paris and 100 centimeters (39 inches) in Bordeaux.

4 🌐 **TOPOGRAPHIC REGIONS**

Although France's topography is varied, it can be broken down into three major types of terrain. At the center of the country are the four Hercynian Massifs, with the Massif Central at their center. The higher mountain peaks of the Pyrenees, the Jura, and the Alps rise in the south and east, forming natural borders with the neighboring countries of Spain, Switzerland, and Italy. Between these geographical

FRANCE



EPD/Saxifraga/Jan van der Straaten

The west coast of Brittany, France, is rocky.

features are the low-lying plains of the Paris Basin and the regions to the west.

The following ten regions have been identified based on geographical and cultural factors: the Nord; the Paris Basin; the East; Burgundy and the Upper Rhine; the Alps; Mediterranean France; Aquitaine and the Pyrenees; the Massif Central; the Loire Valley and Atlantic France; and Armorica. An additional area of France is the large island of Corsica in the Mediterranean Sea.

5 OCEANS AND SEAS

The North Atlantic Ocean lies to the west of France, and the Mediterranean Sea to the south. In addition, a small portion of its northern coast borders the North Sea.

Sea Inlets and Straits

France has coastlines on the English Channel to the northwest and the Bay of Biscay to the

west. In the north, the Seine River empties into the English Channel in the Baie de la Seine, and the Saint-Malo Gulf lies between the Côtentin Peninsula and Brittany. The western part of France's Mediterranean coast borders the Golfe de Lion.

Islands and Archipelagos

France's largest island, and the fourth largest in the Mediterranean, is Corsica. Separated by over 160 kilometers (100 miles) of sea from the mainland, the island rises to over 1,676 meters (5,500 feet) and has a coastal plain only on its eastern side. France also has a number of islands off the Atlantic coast. The largest of these are Ouessant Island, off the tip of Brittany; Belle-Île-En-Mer, to Brittany's south; and Île de Ré and Oléron Island, both of which are near La Rochelle.

FRANCE

Coastal Features

Dramatic chalk cliffs mark the northern coastline, dropping abruptly to sandy beaches that border the English Channel. There is a deep coastal indentation north of Bordeaux where the Garonne River and its tributary, the Dordogne, empty into the Bay of Biscay. Fine sand lines the beaches along this coast, and there are dunes in the southern area known as the Landes.

The shoreline on the western edge of the Golfe de Lion consists of sandbars and lagoons. Farther east are headlands and bays, and the marshland known as the Camargue. The eastern part of the Mediterranean coast is the Côte d'Azur, the famous resort area that lies between the hills of Provence and the sea.

6 INLAND LAKES

France's inland waterways include a number of natural and artificial lakes. The largest natural lake, Lake Bourget, lies at the western edge of the Alps, as does Lake Annecy. There are also lakes in the Vosges Massif and in the valleys of the Jura Mountains. Ponds and lagoons lie along the Atlantic coast in the Landes region and the Mediterranean coast in Languedoc.

DID YOU KNOW?

Scientists named the Jurassic Period (which occurred 145 to 208 million years ago) for France's Jura Mountains, because fossils discovered there date back to this era.

7 RIVERS AND WATERFALLS

The drainage system of France is based on five major rivers. In the north, the Seine—the most gentle, regular, and navigable of French rivers—flows across the Paris Basin for 780 kilometers (485 miles). Before draining into the English Channel at Le Havre, it is joined by three tributaries: the Yonne, the Marne, and the Oise. It has a number of islands, of which the most famous is the Île de la Cité in Paris.

The Loire, whose river basin occupies the central part of France, is the longest river located entirely in France (1,020 kilometers/634 miles) and covers the largest area (115,000 square kilometers/44,400 square miles). From the Massif Central it flows northwestward to Orléans, then westward to the Atlantic.

The Garonne is the shortest of France's major rivers. It rises in the Pyrenees, across the border with Spain, and empties into the Bay of Biscay at Bordeaux. Its tributaries include the Tarn, the Aveyron, and the Dordogne.

The Rhône is the largest and most complex of French rivers. Rising in Switzerland, it gathers its major tributary, the Saône, at Lyon and flows southward through France for 521 kilometers (324 miles) of its total length of 813 kilometers (505 miles), emptying into the Mediterranean. Lastly, there is the Rhine, which is considered more a European river than specifically a French one. It flows along the eastern border for about 190 kilometers (118 miles), fed by Alpine streams. The Moselle and the Meuse, which drain the Paris Basin, are both tributaries of the Rhine that join it in neighboring countries. There also are some smaller rivers in the northeast; the best known of these is the Somme, which flows into the English Channel.

8 DESERTS

There are no deserts in France.

9 🌐 FLAT AND ROLLING TERRAIN

France's plains are mostly located in the Paris Basin to the north and in a series of lowland regions in the west. The Paris Basin is the cradle of France, occupying one-third of the nation's territory. It is centered among France's four major massifs: the Ardennes, the Vosges, the Massif Central, and the Armorican Massif. At the center of the basin lies Paris itself. Southwest of the Paris Basin, along the valley of the Loire River, lie the plains of Anjou and, to their south, Poitou. Still farther south are the lowlands of Aquitaine, including the basins of the Garonne and the Adour Rivers and the plain of Landes, which borders the Bay of Biscay. The marshes of the Camargue region, on the Mediterranean coast between the two mouths of the Rhône River, are known for unusual fauna, including the pink flamingo. They cover 787 square kilometers (304 square miles).

There are hills in many parts of France. Especially noted for their hilly terrain are the northwest region of Lower Normandy and Brittany, the Champagne region northeast of the Paris Basin, which is one of France's most famous wine-growing areas, and the southern region of Provence.

10 🌐 MOUNTAINS AND VOLCANOES

France has three major mountain systems: the Pyrenees, the Alps, and the Jura Mountains.

The Pyrenees extend for over 450 kilometers (280 miles), from the Atlantic Ocean to the Mediterranean Sea and along the southwestern coast of France, rising above 3,048 meters (10,000 feet). The French Alps, in the southeastern part of the country, occupy 38,849 square kilometers (15,000 square miles) and include Europe's highest peak, Mont Blanc, as well as its greatest expanses of glacier and permanent snowcaps. Extending as far north

as Lake Geneva and as far westward as the Rhône River, they form a natural barrier with Italy and Switzerland in the southeast. Among their various sections are the Maritime Alps, the Provence Alps, and the Dauphiné Alps. The limestone ridges of the Jura rise to 1,524 meters (5,000 feet), forming France's eastern border with Switzerland north of Lake Geneva. They cover an area of some 12,950 square kilometers (5,000 square miles), with hills in the south and high plateaus in the north, and extend into Switzerland in the northeast. Their highest peak is Mount Neige, at 1,723 meters (5,653 feet).

11 🌐 CANYONS AND CAVES

There are no notable caves or canyons in France.

12 🌐 PLATEAUS AND MONOLITHS

The plateaus of the four Hercynian Massifs form a "V" shape that covers much of central France. At its midpoint is the Massif Central, which covers roughly one-sixth of the country's total area and rises to over 1,524 meters (5,000 feet). This granite plateau separates northern and southern France. The Ardennes Plateau in the northeast occupies 1,554 square kilometers (500 square miles). Open valleys lie between its ridges, traversed by the Meuse and Sambre Rivers. Southeast of the Ardennes, the Vosges Massif rises to rounded granite summits which exceed 1,219 meters (4,000 feet). The highest points in the Vosges, called ballons, are located near the Alps; the most elevated is the Ballon de Guebwiller, at 1,423 meters (4,669 feet). The Armorican Massif covers 64,750 square kilometers (25,000 square miles), thrusting out into the Atlantic Ocean and the English Channel in two rocky promontories: Brittany and the Côtentin Peninsula. Its hills seldom exceed 365 meters (1,200 feet).

FRANCE

13 MAN-MADE FEATURES

Major reservoirs are found in the Massif Central (Sarrans and Bort-les-Orgues) and in the Alps (Serre-Ponçon). Many of France's cities and towns are connected by a system of canals, including the Canal du Midi, which links Toulouse in the southwest with the Languedoc coast, the Canal du Nivernais in Burgundy, and the Nantes-Brest Canal in Brittany. Canals also link the Loire and Seine Rivers.

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Gabon

- **Official name:** Gabonese Republic
- **Area:** 267,667 square kilometers (103,347 square miles)
- **Highest point on mainland:** Mt. Iboundji (1,575 meters/5,167 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern, Southern, and Eastern
- **Time zone:** 1 P.M. = noon GMT
- **Longest distances:** 717 kilometers (446 miles) from north-northeast to south-southwest; 644 kilometers (400 miles) from east-southeast to west-northwest
- **Land boundaries:** 2,551 kilometers (1,585 miles) total boundary length; Cameroon 298 kilometers (185 miles); Republic of the Congo 1,903 kilometers (1,182 miles); Equatorial Guinea 350 kilometers (217 miles)
- **Coastline:** 885 kilometers (550 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Gabon is located on the equator in western Africa. It shares borders with Cameroon and Equatorial Guinea to the north and with the Republic of the Congo to the south and east. The country's western coast lies along the South Atlantic Ocean. With an area of 267,667 square kilometers (103,347 square miles), the country is slightly smaller than the state of Colorado. Gabon is divided into nine provinces.

2 🌐 TERRITORIES AND DEPENDENCIES

Gabon has no outside territories or dependencies.

3 🌐 CLIMATE

Gabon has the hot and humid climate typical of tropical regions. The hottest month is January; at Libreville, the average high is 31°C (88°F) and the average low is 23°C (73°F). Average July temperatures in the capital city range between 20 and 28°C (68° and 82°F).

From June to September, virtually no rain falls but high humidity prevails. There is occasional rain in December and January. During the remaining months, rainfall is heavy. The excessive rainfall is caused by the condensation of moist air resulting from the meeting of two Atlantic Ocean currents: the cold Benguela Current from the south and the warm Guinea Current from the north. At Libreville, the average annual rainfall is more than 254 centimeters (100 inches). Farther north on the coast, it is 381 centimeters (150 inches).

4 🌐 TOPOGRAPHIC REGIONS

The low-lying coastal plain of Gabon is narrow in the north (approximately 29 kilometers/18 miles wide) and broader in the estuary regions of the Ogooué River. Much of the coastal area is wooded, with savannah (grassland) separating the wooded coast from the rainforest of the interior. The rainforest includes some unique

GABON



plants, such as climbing vines and hardwood tree species.

The land in the interior is not strictly flat plains; it is more complex, but not dramatic. In the north, mountains enclose the valleys of the Woleu and Ntem Rivers and the Ivindo Basin. In southern Gabon, the coastal plain is dominated by granitic hills. Between the Ngounié and the Ogooué Rivers, the Chaillu Massif rises to 915 meters (3,000 feet). Almost the entire country is contained in the basin of the Ogooué River and its two major tributaries. Within the rainforests grows an encyclopedic range of flora, including climbing palms, rubber vines, liana, and hardwood trees such as purpleheart, ebony, and mahogany. The hardwoods, including the okoumé (unique to central Africa) and Ozigo

tree, are harvested for their timber—a cash crop of significant value to Gabon's economy.

Besides plant life, the rainforests' floors and canopies also provide habitats for all sorts of animals. Snakes such as vipers and pythons slither around hunting for their prey— insects, field mice, and other unlucky small animals. Hedgehogs, porcupines, and tortoises lumber around on the forest floor, while squirrels, monkeys, baboons, lemurs, toucans, and African parrots occupy the trees. Crocodiles and hippopotamuses claim the riverbanks, and big game animals such as antelope, buffalo, and elephants roam the grasslands. Even gorillas, endangered in most other parts of Africa, are so numerous in Gabon that they have become an environmental nuisance.

5 🌐 OCEANS AND SEAS

Seacoast and Undersea Features

Gabon borders the South Atlantic Ocean south of the Bight of Biafra and the Gulf of Guinea.

Sea Inlets and Straits

The northern coastline is deeply indented by bays, estuaries, and deltas as far south as the mouth of the Ogooué River, featuring Cape Santa Clara in the north, and Cape Lopez, the country's westernmost point, just north of the Ogooué River mouth. These bays and estuaries form excellent natural shelters, thus providing ports and harbors. Numerous lagoons, such as Ndogo and Nkomi, line the coastline south of the Ogooué River. Much of this coastal area contains mangrove swamps as well. Corsica Bay is located along the northern coast.

6 🌐 INLAND LAKES

In the west of Gabon, near the city of Lamberene, are most of the country's lakes, which were formed by crisscrossing rivers. Lake Onangue, an offshoot of the Ogooué River, is one of the largest.

GABON



AP Photo/Saurabh Das

Clouds hang over the rain forest in Lope Reserve, Gabon.

7 🌐 RIVERS AND WATERFALLS

Virtually the entire territory of Gabon is contained in the basin of the Ogooué River. It is Gabon's longest river—about 1,100 kilometers (690 miles) long and navigable for about 400 kilometers (250 miles). It flows from the southeastern point of Gabon and winds its way up through the center of the country, turning west and cutting through the Crystal Mountains to reach its mouth on the Atlantic Ocean at Port-Gentil. Its two major tributaries are the Ivindo and the Ngounié, which are navigable for 80 to 160 kilometers (50 to 100 miles) into the interior. The Ivindo drains the northeastern part of Gabon, and the Ngounié runs parallel to the Crystal Mountains along their western face. In the east, the Sébé River also joins the Ogooué. The relatively short Gabon River rises just inside Equatorial Guinea and flows southwest into Gabon, over the Kingulé Falls, then dumps into the Atlantic Ocean at Kango.

8 🌐 DESERTS

There are no major desert regions in Gabon.

9 🌐 FLAT AND ROLLING TERRAIN

There are no major prairie regions within the country of Gabon. Only about 1 percent of the land is arable, with permanent crops. About 18 percent of the terrain is considered to be permanent pasture.

10 🌐 MOUNTAINS AND VOLCANOES

Rivers descending from the interior have carved deep channels in the face of the escarpment, dividing it into distinct blocks and separating the Crystal Mountains from the Chaillu Massif. The Crystal Mountains run roughly north to south across the country, just west of the center. The highest point in Gabon is the peak of Mount Iboundji, which reaches an altitude of 1,575 meters (5,167 feet). It is located in the northern Crystal Mountains.

GABON



AP Photo/Christine Nesbitt

*A security helicopter hovers over the beach at a resort south of Libreville, Gabon.
The location is a popular spot for international meetings.*

11 🌐 CANYONS AND CAVES

The Oklo Uranium mine in Gabon is an important research site for nuclear physicists. In 1972, researchers discovered that the mine had been the site of a natural fission reaction that occurred at least 1.5 billion years ago. The chain reaction may have continued intermittently for hundreds of thousands of years before becoming inactive. This natural nuclear reaction created radioactive wastes that have been buried there for centuries. Scientists are studying the area to develop safer methods of nuclear waste disposal.

12 🌐 PLATEAUS AND MONOLITHS

Plateaus cover the north and east and most of the south of the country. They rise from the coastal lowlands, which range in width from 30 to 200 kilometers (20 to 125 miles), to form a rocky escarpment which is more than 96 kilo-

meters (60 miles) wide, and which ranges in height from 450 to 600 meters (1,480 to 1,970 feet).

13 🌐 MAN-MADE FEATURES

There are no major man-made structures affecting the geography of Gabon.

14 🌐 FURTHER READING

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The Gambia

- **Official name:** Republic of The Gambia
- **Area:** 11,300 square kilometers (4,363 square miles)
- **Highest point on mainland:** Unnamed location (53 meters/173 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** Noon = noon GMT
- **Longest distances:** 338 kilometers (210 miles) from east to west; 47 kilometers (29 miles) from north to south
- **Land boundaries:** Senegal 740 kilometers (460 miles)
- **Coastline:** 71 kilometers (44 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Except for its Atlantic coastline, Anglophone (English-speaking) The Gambia is surrounded entirely by its only neighbor, Francophone (French-speaking) Senegal. Its twisting land boundary surrounds the Gambia River. In area, The Gambia is roughly twice the size of the state of Delaware, making it the African continent's smallest country. The Gambia River, the country's major waterway, is its most prominent geographic feature.

2 🌐 TERRITORIES AND DEPENDENCIES

The Gambia has no territories or dependencies.

3 🌐 CLIMATE

The Gambia has a subtropical climate with distinct cool and hot seasons. From November to mid-May there is uninterrupted dry weather, with temperatures as low as 16°C (61°F) in Banjul and surrounding areas. Hot, humid weather predominates the rest of the year, with a rainy season from June to October.

During this period, temperatures may rise as high as 43°C (109°F) but are usually lower near the sea. Mean temperatures range from 23°C (73°F) in January to 27°C (81°F) in June

along the coast, and from 24°C (75°F) in January to 32°C (90°F) in May inland. The average annual rainfall ranges from 92 centimeters (36 inches) in the interior of the country to 145 centimeters (57 inches) along the coast. Rainfall has decreased by 30 percent in the last thirty years, leading to problems with agricultural yield. Most of the rain falls from June to October.

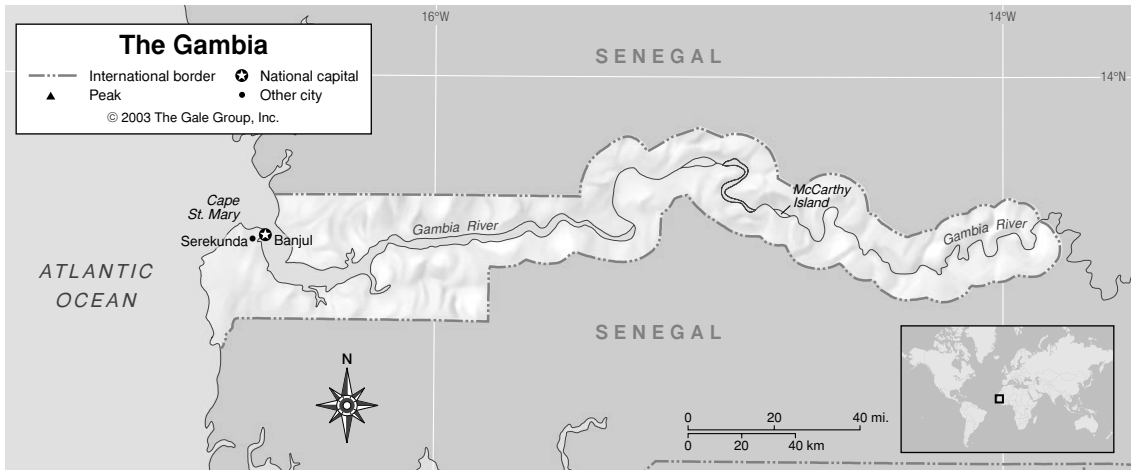
4 🌐 TOPOGRAPHIC REGIONS

To the west lies the Atlantic coastline, which is fringed with sandy beaches. The interior is generally low-lying on both sides of the Gambia River, although elevations are higher in the east. Throughout the country, low, flat-topped hills alternate with valleys or depressions. Fertile alluvial soil is found in the areas to the east, while sandy soil predominates in the west. Mangrove swamps are found along the coast and riverbanks.

5 🌐 OCEANS AND SEAS

At its western end, The Gambia borders the Atlantic Ocean.

THE GAMBIA



Seacoast and Undersea Features

In addition to the lower reaches of the Gambia River, the coast is marked with capes and lagoons.

Islands and Archipelagos

Though The Gambia has no islands in the ocean, it has several on the Gambia River, including James Island and McCarthy Island, where Georgetown is located.

Coastal Features

Most of The Gambia's Atlantic border is composed of the peninsula on which the cities of Banjul and Serekunda sit. Sandy white beaches cover most of The Gambia's 71-kilometer-long (44-mile-long) coast (also called the "smile coast"). Sand dunes line the coast at The Gambia's southern border with Senegal.

6 🌐 INLAND LAKES

There are no sizable lakes in The Gambia; however, brown mangrove swamps line the lower reaches on both banks of the Gambia River for the first 145 kilometers (90 miles) inland from the sea. Behind these mangroves are the "flats," which are submerged completely during the wet season.

7 🌐 RIVERS AND WATERFALLS

The Gambia River rises in Guinea and follows a twisting path for about 1,600 kilometers (1,000 miles) to the sea. For its last 470 kilometers (292 miles), the river flows through The Gambia, narrowing to a width of 5 kilometers (3 miles) at Banjul. During the dry season, tidal saltwater intrudes as far as 250 kilometers (155 miles) upstream. The Gambia River is navigable by seagoing vessels as far as Kuntaur, 240 kilometers (150 miles) upstream, and as far as Koina by vessels of shallow draft.

8 🌐 DESERTS

There are no deserts in The Gambia.

9 🌐 FLAT AND ROLLING TERRAIN

Past the riverbanks, the land on either side of the Gambia River is generally open savannah with wooded areas along the drainage channels.

10 🌐 MOUNTAINS AND VOLCANOES

There are no mountains or other significant elevated areas in The Gambia. The country's terrain, which closely surrounds and parallels the Gambia River, rises only to a few steep hills

THE GAMBIA



EPD/Saxifraga/Marijke Verhagen

The Gambia River.

of insignificant height. The highest elevation is 53 meters (173 feet) above sea level.

11 🌐 **CANYONS AND CAVES**

There are no significant caves or canyons in The Gambia.

12 🌐 **PLATEAUS AND MONOLITHS**

The Gambia occupies a fairly flat fluvial (produced by the action of a stream) plateau dissected by streams, broad valleys, and a few low hills.

13 🌐 **MAN-MADE FEATURES**

Fort Bullen, located on Barra Point at the mouth of the Senegal River, is a two-hundred-year-old structure that was built by the British, who colonized the country.

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Georgia

- **Official name:** Georgia
- **Area:** 69,700 square kilometers (26,807 square miles)
- **Highest point on mainland:** Mount Shkhara (5,201 meters/17,064 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Eastern
- **Time zone:** 3 P.M. = noon GMT
- **Longest distances:** Not available
- **Land boundaries:** 1,461 kilometers (906 miles) total boundary length; Armenia 164 kilometers (102 miles); Azerbaijan 322 kilometers (200 miles); Russia 723 kilometers (448 miles); Turkey 252 kilometers (156 miles)
- **Coastline:** 310 kilometers (192 miles)
- **Territorial sea limits:** None

1 🌐 LOCATION AND SIZE

Georgia is located in southwestern Asia, east of the Black Sea. It borders Turkey and Armenia on the south, Azerbaijan on the southeast, and Russia on the north. With a total area of about 69,700 square kilometers (26,807 square miles), the country is slightly smaller than the state of South Carolina. Georgia is divided into fifty-three rayons, nine cities, and two autonomous republics.

2 🌐 TERRITORIES AND DEPENDENCIES

Georgia has no outside territories or dependencies.

3 🌐 CLIMATE

The Georgian climate is notably humid, warm, and pleasant on the Black Sea coast. The Greater Caucasus Mountains to the north protect this area from truly cold weather. Even in midwinter, the average temperature is 5°C (41°F). The average summer temperature along the coast is 22°C (72°F). The plains region to the east, blocked from the sea by the Suram Mountains, is more continental in climate with hot summers and cold winters. Summer temperatures there range from 20°C (68°F) to 24°C (75°F),

while in winter they range from 2°C (36°F) to 4°C (39°F). The climate becomes cooler in the mountains, with alpine conditions starting at about 2,100 meters (6,800 feet). Above 3,600 meters (12,000 feet), the mountains are covered with snow and ice year-round.

The areas along the Black Sea coast and inland through the Kolkhida Lowlands experience high humidity and heavy precipitation of 100 to 200 centimeters (40 to 80 inches) per year. The Black Sea port of Batumi receives 254 centimeters (100 inches) of rain per year. At higher elevations, humidity is lower and rainfall averages 46 to 81 centimeters (18 to 32 inches) per year.

4 🌐 TOPOGRAPHIC REGIONS

Although it is a small country, Georgia features extremely diverse terrain, with both high mountain ranges and fertile coastal lowlands. Most of the country is mountainous, with the Greater Caucasus Mountains in the north and the Lesser Caucasus in the south. In the mountains, earthquakes and landslides frequently destroy life and property. In the west,

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the Kolkhida Lowland borders the Black Sea, while the terrain in the east consists of the plains of the Kura River Basin. The country is situated in the isthmus between the Caspian and Black Seas.

Included within Georgia's boundaries are two autonomous republics: Ajaria in Georgia's southwestern corner, and Abkhazia in the northwest. Another autonomous region is South Ossetia, in the north-central part of Georgia. Separatists have sought to detach these areas from Georgia, especially in Abkhazia and South Ossetia.

5 🌐 OCEANS AND SEAS

Seacoast and Undersea Features

Georgia's shoreline lies at the easternmost edge of the Black Sea. The Black Sea is a tideless, nearly landlocked body of water that lies between southeastern Europe and Asia Minor. It connects to the Sea of Marmara to the southwest through the Bosphorus Strait. The

principal Black Sea ports in Georgia are Pot'i and Batumi.

6 🌐 INLAND LAKES

The largest lake in Georgia is Lake Paravani, which is located in the south-central area of the country and covers an area of about 37 square kilometers (14 square miles). Lake Ritisa, located in the Caucasus Mountains in the northwest corner of the country, is the nation's deepest lake, at 116 meters (382 feet). Other major lakes include Paliastomi, Kartsakhi, and Yabatskuri. There are also several small lakes found in the mountains.

7 🌐 RIVERS AND WATERFALLS

The Kura (Mtkvari) River is the largest river in Georgia. It flows 1,514 kilometers (941 miles) from its source in Turkey across the plains of eastern Georgia, through the capital, Tbilisi, and on into Azerbaijan before entering the Caspian Sea. The largest river in western Georgia, the Rioni, flows from the Greater Caucasus into the Black Sea at the port of Pot'i. The

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EPD/Saxifraga/Adriaan Dijkse

The Lesser Caucasus Mountains near Mount Kazbek in Georgia.

country's other rivers include the Iori, Khrami, and Inguri.

8 🌐 **DESERTS**

There are no desert regions in Georgia.

9 🌐 **FLAT AND ROLLING TERRAIN**

With a mostly mountainous terrain, Georgia has no significantly large sections of flatland or prairie.

10 🌐 **MOUNTAINS AND VOLCANOES**

About 85 percent of the total land area of Georgia consists of rugged mountains. The Greater Caucasus Mountains, stretching across the northern border with Russia, is the tallest range in the country. Mount Shkhara (5,201 meters/17,064 feet), on the Georgian-Russian border, is the highest peak. Mount Kazbek (5,037 meters/16,526 feet), also in this chain, is the tallest mountain fully within Georgia's borders. In the south, the Lesser

Caucasus peaks rarely exceed 3,000 meters (10,000 feet). The Suram Mountains follow a northeast-southwest path across the center of the country, connecting the Greater and Lesser Caucasus Ranges.

11 🌐 **CANYONS AND CAVES**

The cave towns of Georgia are considered to be among the most significant historical and cultural monuments of the nation. As the name suggests, these are ancient towns built entirely of caves that include both natural caves and those hand-carved into the mountains and hills. The mountain locations and underground structures served to protect the inhabitants from early invaders.

The ancient city of Uplistsikhe, dating from the sixth century B.C., was inhabited well into the ninth and tenth centuries. It is located near Gori and carved into a rocky plateau that forms a bank of the Kura River.

Besides living quarters, the complex includes huge banquet halls, long corridor-shaped streets, chapels for pagan worship and the remains of Georgia's oldest theater—with an auditorium, stage, and orchestra pit.

Vardzia is a cave monastery complex in southern Georgia, near the border with Armenia, that was built in the twelfth century by Queen Tamar, the daughter of King Giorgi III. The complex stretches for five hundred meters along the Kura River. It includes a large cathedral, as well as a number of smaller churches, wine cellars, feast halls, and hundreds of small cells, which served as living quarters for the monks.

The Gareji Complex is also a cave monastery system which was founded by the Syrian monk David Gareji, who lived in a natural cave that became the center of the complex. Located south of Tbilisi, it is built into a hill area near the separation of the Kura and Iori Rivers, and includes at least twelve individual cave dwellings. During the twelfth and thirteenth centuries, the monks of the Gareji order became famous for their own school of fresco painting. A number of the walls of the cave structures are covered with such paintings.

12 PLATEAUS AND MONOLITHS

A high plateau known as the Kartaliniya Plain follows the eastern side of the Suram Range, along the Kura River to the border with Azerbaijan. Further east, a semiarid region called the Iori Plateau borders the Iori River.

13 MAN-MADE FEATURES

In Georgia's Soviet period (1921-1991), engineers turned the Rioni River lowlands into prime subtropical agricultural land by

DID YOU KNOW?

The Caucasus Region is the land area between the Black and Caspian Seas, which includes southwest Russia, Georgia, Azerbaijan, and Armenia. This area forms part of the traditional natural boundary between Europe and Asia.

straightening and banking much of the river and building an extensive network of canals.

Numerous man-made reservoirs exist throughout the country to provide water for drinking and irrigation. They include the Khrami, Djandari, Shaori, Tbilisi, Sioni, and Zhinvali, among others.

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Germany

- **Official name:** Federal Republic of Germany
- **Area:** 357,021 square kilometers (137,847 square miles)
- **Highest point on mainland:** Zugspitze (2,963 meters/9,721 feet)
- **Lowest point on land:** Freepsum Lake (2 meters/6.6 feet below sea level)
- **Hemispheres:** Northern and Eastern
- **Time zone:** 1 P.M. = noon GMT
- **Longest distances:** 853 kilometers (530 miles) from north to south; 650 kilometers (404 miles) from east to west
- **Land boundaries:** 3,618 kilometers (2,248 miles) total boundary length; Austria 784 kilometers (487 miles); Belgium 167 kilometers (104 miles); Czech Republic 646 kilometers (401 miles); Denmark 68 kilometers (42 miles); France 451 kilometers (280 miles); Luxembourg 135 kilometers (84 miles); Netherlands 577 kilometers (359 miles); Poland 456 kilometers (302 miles); Switzerland 334 kilometers (208 miles)
- **Coastline:** 2,389 kilometers (1,484 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Germany is located in central Europe, bordering the Baltic Sea and the North Sea between the countries of Poland and The Netherlands. The country also shares borders with Denmark, Belgium, Luxembourg, France, Switzerland, Austria, and the Czech Republic. With an area of about 357,021 square kilometers (137,847 square miles), the country is slightly smaller than the state of Montana. Germany is divided into sixteen states.

2 🌐 TERRITORIES AND DEPENDENCIES

Germany has no outside territories or dependencies.

3 🌐 CLIMATE

Germany has a temperate and marine climate. The Gulf Stream westerly winds from the North Sea moderate temperatures throughout the year. In the lowlands, mid-winter temperatures average more than 1.6°C (35°F), while

summer temperatures average between 16° and 18°C (61° and 64°F). In the south, temperatures are somewhat more extreme, averaging about -2°C (28°F) in winter and 19.4°C (67°F) or higher in summer. The yearly mean for the entire country is 9°C (48°F).

Rainfall varies from 200 centimeters (79 inches) in the Alps to 40 centimeters (16 inches) in the vicinity of Mainz. In the maritime region, precipitation varies between 61 and 64 centimeters (24 and 25 inches), close to the national yearly average of between 60 and 80 centimeters (24 and 31.5 inches).

4 🌐 TOPOGRAPHIC REGIONS

Topographically, Germany is composed of northern lowlands, central uplands, Alpine foothills, and Bavarian Alps. The northern plain covers the upper one-third of the country and contains the coastal area in the far north. Inland, the plain becomes hilly and is

GERMANY



crisscrossed by rivers and valleys. These hills open to the Alpine Foreland where north-south ranges interspersed with deep valleys climb to the wooded slopes and craggy peaks of the German-Austrian Alps. Germany lies on the Eurasian Tectonic Plate.

5 🌐 OCEANS AND SEAS

Seacoast and Undersea Features

Germany faces the North Sea to the northwest and Baltic Sea to the northeast. A narrow strip of land on which Germany borders Denmark

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separates the two seas, both of which are extensions of the Atlantic Ocean.

Sea Inlets and Straits

On the Baltic Sea, Mecklenburg Bay carves into the German coast.

Islands and Archipelagos

In the North Sea, a line of inshore sand dunes became the East Frisian Islands when the shoreline sank during the thirteenth century. These islands have maximum elevations of less than 35 meters (115 feet) and they have been subject to eroding forces that have washed away whole sections of the coast during storms. In 1854, for example, the sea reclaimed the only village on Wangerooge, the easternmost of the main East Frisian Islands. The islands are strung along the coast in a nearly straight line roughly parallel to the coast.

The North Frisian Islands are located in the North Sea near the border with Denmark. They are irregularly shaped and haphazardly positioned.

At 927 square kilometers (358 square miles) in area, Germany's largest island is Rügen. It lies in the Baltic Sea off Stralsund. Another large island, Fehmarn, is located at the northern edge of Mecklenburg Bay in the Baltic Sea.

Coastal Features

The North Sea coast has wide expanses of sand, marsh, and mudflats (watten). On the Baltic side, the northern sections of Schwerin and Neubrandenburg districts, which are also coastal, are dotted with marshes and numerous lakes.

On the North Sea side, the coastal mud flats between the Frisian Islands and the shore are exposed at very low tides and are crossed by innumerable channels. The mud

and sand are constantly shifting, making navigation treacherous.

The Schleswig-Holstein coast on the Baltic Sea differs markedly from that on the North Sea. It is indented by a number of small fjords with steep banks. The deep water and shelter of the fjords provide safe sailing conditions. Fishing villages are common on this coast, which is flat and sandy. Farther east, the coastline is uneven but also generally flat and sandy. The continuous action of wind and waves has created sand dunes and ridges. Sandbars connect the mainland with some of its offshore islands.

The Jasmund National Park, along the northeast shore of the Baltic Sea, is characterized by dramatic chalk cliffs. The Königsstuhl is the highest point of this coastline, reaching 117 meters (386 feet).

6 INLAND LAKES

The northern lowlands contain numerous lakes, particularly in northeastern Germany and around Berlin. Lakes in this region include Lake Müritz, Lake Kummerow, Lake Plau, and Lake Schwerin. In general, these lakes are of little commercial value because of their shallow depth.

The Alpine Foothills are speckled with many lakes of clear, clean water and steep, wooded banks. At higher elevations, glacial lakes add to the spectacular charm of the Alpine meadows. Several lakes dot the landscape in this area of southern Germany, including Ammer Lake, Lake Chiem, and Starnberger See. Lake Constance (Bodensee), through which passes the upper Rhine River, is shared with Switzerland and Austria. It is Germany's largest lake, with a surface area of 571.5 square kilometers (220.7 square miles), of which 305 square kilometers (118 square miles) lie within

DID YOU KNOW?

After Germany was defeated in World War II, the victorious Allies had separated the country into two parts: East Germany, controlled by the Soviet Union, and West Germany, occupied by American, French, and British troops. The East German government constructed the Berlin Wall in 1961 to separate the entire border between East and West Germany. The concrete wall, topped with barbed wire and guarded by armed military personnel, was meant to keep East Germans from emigrating to the West. In 1989, when the Soviet Union abandoned its forced program of Communism for its outside territories, dismantling of the Wall began. In October 1990, East Germany was reunited with West Germany to form the present Federal Republic of Germany.

Today, most of the Berlin Wall is gone. Much of the concrete was crushed and recycled for road construction. Some large sections of the Wall were sold, and a few sections still stand today as memorials. In downtown Berlin, the line where the Wall once stood is marked with either a red line or a double row of cobblestones.

Germany. It is 74 kilometers (46 miles) long and reaches a maximum depth of 252 meters (827 feet).

7 RIVERS AND WATERFALLS

The greater part of the country drains into the North Sea via the Rhine, the Ems, the Weser, the Saale, and the Elbe Rivers. A small area north and northeast of Hamburg drains into the Baltic Sea via the Oder River on the Polish border.

Germany's two longest rivers are the Rhine and the Danube (Donau). The Rhine is one of the largest and most commercially important rivers in Western Europe. The western part of Germany is called the Rhineland. The Rhine rises in Switzerland, then flows into Lake Constance and to the west, along Germany's southern border with Switzerland, before turning north into Germany. The Rhine receives a steady flow from melting snow in the winter. In the summer, it is fed from the Neckar, the Main, and the Moselle, its three principal tributaries in Germany (the Moselle has its headwaters in France). The Rhine curves west again and branches into a delta shortly after exiting Germany for the Netherlands, after which it flows into the North Sea.

The Danube rises in the southwestern part of the country, not far from the Rhine, but the Danube flows northeast until it reaches the Bavarian Forest, where it curves southeast and exits into Austria at Passau. It then follows a winding, generally eastern course through Hungary, Yugoslavia, and Romania before finally emptying into the Black Sea 2,850 kilometers (1,771 miles) from its source. It flows for 647 kilometers (402 miles) within Germany itself. The second-longest river in Europe, the Danube is a vital commercial and transportation route.

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8 🌐 DESERTS

There are no desert regions in Germany.

9 🌐 FLAT AND ROLLING TERRAIN

Grasslands, pastures, and cultivated areas cover significant portions of the lowland plains, the Bavarian foothills, and the valleys and lower slopes of the Alps. Alpine meadows provide rich summer pastures. Barren moors cover the tops of the Harz Mountains in the Central Uplands.

At least a third of the country lies in an area of northern plains known as the central lowlands. These lowlands are part of a great plain that extends across north-central Europe, broadening from Belgium and the Netherlands until it reaches the Ural Mountains. The terrain is gentle and the landscape is marked by few sharp contrasts. Landform areas merge into one another, so no significant natural boundaries bar communications or distinguish one section of the country from another. Elevation in this region rarely exceeds 150 meters (492 feet). The land slopes imperceptibly toward the sea.

Germany's Central Uplands are part of the Central European Uplands extending from the Massif Central in France into Poland and the Czech Republic. The landscape consists of hills, high ridges, and broad, tilted blocks of sedimentary rocks interspersed with deep, trough-like valleys and lowlands.

The Central Uplands are bordered on the south by the south German scarplands, a succession of escarpments and intervening valleys stretching across the country from southern Baden-Württemberg to the northeastern corner of Bavaria. Sections of these uplands are formed by the extension of the Jura ranges from France and Switzerland. One of these ranges constitutes the Black Forest and a second chain forms the Swabian Alb

and its extension, the Franconian Alb. In the Black Forest, the Feldberg reaches an elevation of 1,496 meters (4,908 feet). The two albs are about 40 kilometers (25 miles) wide, and in several places peaks exceed altitudes of 900 meters (2,953 feet). They form an arc some 400 kilometers (248 miles) long, extending to the Central Uplands near Bayreuth.

Traditional passages into the Central Uplands include the Hessian Corridor, located between Hanover and Frankfurt, which runs through Kassel on the Weser River.

The deep incision of the valleys and their spectacular landscapes make the south German scarplands most distinctive. They give way to the gentle Alpine Foothills, which comprise all of Bavaria and the eastern portion of Baden-Württemberg. Most of this region is in the upper Danube River basin and is crossed by the Danube's main Alpine tributaries: the Iller, the Lech, the Isar, and the Inn.

Germany is dotted with patches of forest. A mixture of deciduous and conifer forests is found in the Central Uplands and southern scarplands such as the Thüringer Wald, the Bavarian and Bohemian Forests on the eastern frontiers, and the Black Forest in the southwest. In addition, the upper elevations in the Uplands surrounding the Rhine River are heavily forested, as are the Harz at lower levels. Conifers cover Alpine slopes. Good agricultural land is found at the base of the Thüringer Wald surrounding Erfurt, but soils in the southernmost districts are poor and are not favorable for cultivation.

In the southern highlands, the Haardt Mountains stretch into southwestern Germany from France, following the Rhine River. Moving northwest along the Rhine, the elevations gradually diminish, reaching the Taunus Mountains, then finally lowering to the Seven Hills and Rothaar Hills in western Germany.

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EPD/German Information Center

Snow-capped mountains in Germany.

10 🌐 **MOUNTAINS AND VOLCANOES**

The Bavarian Alps, high mountains that extend in a narrow strip along the country's southern boundary, are vital to the country's tourism industry. Three sections range eastward from Lake Constance on the Swiss border to just west of Salzburg on the Austrian border. The Allgäuer portion extends from Lake Constance to the Lech River and contains attractions such as Neuschwanstein, site of King Ludwig's whimsical mountain castle at Königsee. The central Bavarian Alps, between the Lech and the Inn Rivers, contain the highest point in Germany, the Zugspitze (2,963 meters/9,721 feet). From the Inn to the Salzburg Alps lies the third and easternmost section, which includes the Berchtesgaden resort, home of Hitler's infamous retreat, the Eagle's Nest. There are several other peaks which top 2,500

meters (8,202 feet); these include Watzmann, at 2,713 meters (8,901 feet); Hochfrottspitze, at 2,649 meters (8,691 feet); and Madelgabel, at 2,645 meters (8,678 feet). These summits rise majestically over the Bavarian Alps.

In the center of Germany are the Rhon Mountains, whose highest point is Mount Grosser Beer at 982 meters (3,221 feet). Just north and slightly to the east of this range are the Kyffhäuser Mountains. The Harz range forms the northwest section and its highest point, Brocken Peak, reaches a height of 1,141 meters (3,743 feet). To the southeast along the Czech border are the Ore Mountains, with elevations reaching 1,213 meters (3,980 feet) at Fichtelberg. Many major industrial centers are situated along the base of the Ores.

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11 🌐 CANYONS AND CAVES

The Schlossberg caves near Hamburg are Europe's largest sandstone caves. Long corridors connect their vast, multi-tiered, and multicolored sandstone rooms; visitors may explore about 1,000 meters (3,000 feet) of these tunnels. Part of a fortress that was destroyed in 1714, the caves were not rediscovered until around 1930.

The Messel Pit Fossil Site, a UNESCO World Heritage Site, has produced the largest known collection of fossils from the Eocene Age, which occurred between 36 million and 57 million years ago. Mammals began to evolve during the Eocene Age. Besides skeleton fossils, researchers also have found well-preserved organ fossils, such as animal stomachs and their contents.

12 🌐 PLATEAUS AND MONOLITHS

The Central German Uplands consist of a massive rectangular block of slate and shale covered by a gently rolling plateau averaging 400 meters (1,312 feet) in elevation, with peaks from 800 to 900 meters (2,625 to 2,952 feet). The plateau extends from the Rheinisch Uplands on the French border to the Ore Mountains, part of the Bohemian Massif, on the Czech border. The plateau contains several river valleys: the Rhine and the Moselle in the west, the Weser in the center, and the Elbe on the east. The southern edge is demarcated by the Main River, which flows westerly to the Rhine.

13 🌐 MAN-MADE FEATURES

Germany has an extensive system of canals that effectively link all of its major rivers together. A series of canals runs across the middle of the country, including the Dortmund-Ems Canal, connecting the Rhine with the Ems; the Mittelland Canal, connecting the Ems with the Weser and the Elbe; as well as other shorter canals. The Main-Danube Canal crosses through the Franconian Alb to connect those two rivers. In northern Germany, the Nord-Ostsee Canal (Kiel Canal) connects the estuary of the Elbe River on the North Sea with the Baltic Sea at Kiel. It is one of the world's busiest canals.

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Ghana

- **Official name:** Republic of Ghana
- **Area:** 238,533 square kilometers (92,098 miles)
- **Highest point on mainland:** Mt. Afadjato (885 meters/2,905 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** Noon = noon GMT
- **Longest distances:** 458 kilometers (285 miles) from north-northeast to south-southwest; 297 kilometers (178 miles) from east-southeast to west-northwest
- **Land boundaries:** 2,617 kilometers (1,626 miles) total boundary length; Togo 877 kilometers (545 miles); Côte d'Ivoire 668 kilometers (415 miles); Burkina Faso 544 kilometers (338 miles)
- **Coastline:** 528 kilometers (328 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Slightly smaller than the state of Oregon, Ghana is in western Africa, situated between Togo on the east, Côte d'Ivoire (Ivory Coast) on the west, and Burkina Faso on the north and northwest.

2 🌐 TERRITORIES AND DEPENDENCIES

Ghana has no territories or dependencies.

3 🌐 CLIMATE

Ghana has a tropical climate that is relatively mild for that latitude. The harmattan, a dry desert wind, blows from the northeast from December to March, lowering the humidity and causing hot days and cool nights in the north. Average temperatures range from 21°C to 31°C (70 to 90°F) with a relative humidity between 50 percent and 80 percent. Except in the north, there are two rainy seasons: April through June and September through November. Squalls occur in the north during March and April, followed by occasional rain

until August and September, when the rainfall reaches its peak. Rainfall ranges from 83 to 220 centimeters (33 to 87 inches) a year.

4 🌐 TOPOGRAPHIC REGIONS

Ghana faces the Gulf of Guinea in the great bulge of West Africa. Average elevation is relatively low, mostly between sea level and about 305 meters (1,000 feet).

Ghana has five major geographical regions. In the southern part of the country are the low plains, part of the belt that extends along the entire coastal area of the Gulf of Guinea. To the north of these plains are three distinct regions: the Ashanti Uplands, the Volta Basin, and the Akwapim-Togo Ranges. The fifth region, the high plains, occupies the northern and northwestern parts of the country. These plains also form part of a belt stretching generally from east to west through West Africa.

GHANA



5 OCEANS AND SEAS

Seacoast and Undersea Features

Ghana's coast stretches for 528 kilometers (328 miles) along the Gulf of Guinea in the Atlantic Ocean. It is characterized by strong surfs, which make landing ships difficult, except at artificially constructed harbors.

Coastal Features

The coast consists mostly of a low sandy shore, behind which stretches the coastal plain. Except in the west, where the forest comes down to the sea, the plain is mostly flat and generally covered with grass and scattered fan palms. Most of Ghana's rivers

GHANA



UNESCO/Dominique Fernandez

Men fold their nets at the end of a day of fishing in Ghana's coastal waters.

terminate in brackish lagoons along the coast, but there are no natural harbors.

The Volta Delta projects out into the Gulf of Guinea in the extreme southeast. As this delta grew outward over the centuries, sandbars developed across the mouth of the Volta River and also in some smaller rivers nearby, forming numerous large lagoons. Dense groves of coconut palms also grow here, and oil palms may be found at places inland in the drier, older section of the delta.

6 🌐 **INLAND LAKES**

Ghana's one large natural lake, Lake Bosumtwi (46 square kilometers/18 square miles), is located about twenty miles southeast of Kumasi.

It occupies the steep-sided caldera (crater) of a former volcano. Several small streams flow into this lake, but because there is no drainage, its level is gradually rising.

7 🌐 **RIVERS AND WATERFALLS**

Streams and rivers run across the entire country. The largest river, the Volta, has three branches, all of which originate in Burkina Faso. The Black Volta forms the northwest border, then flows southeastward into Ghana to the east. The White Volta and the Red Volta both enter the country in the northeast. About 40 kilometers (25 miles) inside the border, the Red Volta joins the White Volta, which eventually flows into Lake Volta behind the Akosombo Dam.

GHANA

Almost all streams and rivers north and east of the country's major drainage divide are part of the vast Volta drainage system, which covers some 157,989 square kilometers (61,000 square miles), or more than two-thirds of the country. To the south and southwest of the plateau several smaller independent river systems flow directly into the Gulf of Guinea. The most important of these are the Pra, the Ankobra, and the Tano. Only the Volta, Ankobra, and Tano Rivers are navigable, and only in their lower sections.

Small, seasonal waterfalls can be found in Boegoro and Huhunya.

8 🌐 **DESERTS**

Although Ghana has some dry lands and areas that may be subject to desertification, there are no notable deserts.

9 🌐 **FLAT AND ROLLING TERRAIN**

Grasslands dominate the south, mixed with coastal scrub. Ghana's forest belt extends northward from the western coast on the Gulf of Guinea about 320 kilometers (200 miles) and eastward for a maximum of about 270 kilometers (170 miles). It is broken up into heavily wooded hills and steep ridges. Cultivation, grazing, mining, and harvesting of timber and firewood have taken a heavy toll on forests and woodland; deforestation proceeds at an annual rate of 720 square kilometers (278 square miles).

The Ashanti Uplands lie just to the north of the Akan Lowlands area. They extend from the Ivory Coast border, through the western and part of the northern Brong-Ahafo Region and the Ashanti Region (excluding its eastern section), to the eastern end of the Kwahu Plateau. With the exception of the Kwahu Plateau, the uplands slope gently toward the south, gradually decreasing in elevation from about 304 to 152 meters (1,000 to 500 feet). In the

southernmost part, their valleys become more open, and the region merges into the Akan Lowlands at an elevation between sea level and 152 meters (500 feet). These lowlands make up the greater part of the low plains. Several hill ranges also appear here. Although most high points do not top 304 meters (1,000 feet), a few hills exceed 609 meters (2,000 feet).

The Volta Basin region occupies the central part of the country and covers about 45 percent of the country's total area. Much of the southern and southwestern part of this basin is less than 152 meters (500 feet) in elevation; in the northern section, however, above the upper part of Lake Volta and the Black Volta, elevations are from about 152 to 228 meters (500 to 750 feet).

10 🌐 **MOUNTAINS AND VOLCANOES**

The Akwapim-Togo Ranges in the eastern part of the country have many prominent heights composed of volcanic rocks. The ranges begin west of Accra and cross the border into the Republic of Togo. The average elevation of the Akwapim section of the mountains is about 475 meters (1,500 feet). The Togo section has broader valleys and generally low ridges. Several peaks rise above 762 meters (2,500 feet). The country's highest point, Mount Afadjato (885 meters/2,905 feet), is located in this area.

11 🌐 **CANYONS AND CAVES**

Small caves can be found near the Kwahu Plateau and in the upland areas.

12 🌐 **PLATEAUS AND MONOLITHS**

The northern and northwestern part of the country outside the Volta Basin region consists of a plateau, which averages between 152 and 304 meters (500 and 1,000 feet) in elevation.

The Kwahu Plateau, forming the northeastern and eastern part of the uplands,

GHANA

has an elevation that averages 457 meters (1,500 feet) and its high points rise to over 762 meters (2,500 feet). The greater height of the plateau gives it a comparatively cooler climate.

13 MAN-MADE FEATURES

Lake Volta is the world's largest man-made lake (8,485 square kilometers/3,276 square miles), formed by the accumulation of water from the Volta River behind Akosombo Dam. Although the dam provides much of the country's hydroelectric power, it also contributes significantly to coastal erosion. It reduces the amount of water flowing in the river, and thus it also reduces the amount of sediment the river carries to its mouth along the coast. The coast continues to erode at its natural rate,

and since less sediment is being deposited to replace it, the coast diminishes.

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Greece

- **Official name:** Hellenic Republic
- **Area:** 131,940 square kilometers (50,942 square miles)
- **Highest point on mainland:** Mount Olympus (2,917 meters/9,571 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Eastern
- **Time zone:** 2 P.M. = noon GMT
- **Longest distances:** 772 kilometers (480 miles) from east to west; 940 kilometers (584 miles) from north to south
- **Land boundaries:** 1,210 kilometers (752 miles) total boundary length; Albania 282 kilometers (175 miles); Bulgaria 494 kilometers (307 miles); Turkey 206 kilometers (128 miles); Macedonia 228 kilometers (142 miles)
- **Coastline:** 13,676 kilometers (8,498 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Greece is located at the southern tip of the Balkan Peninsula in southern Europe. Several seas surround the mainland: the Aegean, Mediterranean, and Ionian Seas. In addition, one-fifth of the country is made up of hundreds of islands, many of them uninhabited, that lie in all three of these bodies of water. With a total area of 131,940 square kilometers (50,942 square miles), Greece is almost as large as the state of Alabama. Greece is divided into fifty-one prefectures.

2 🌐 TERRITORIES AND DEPENDENCIES

Greece has no territories or dependencies.

3 🌐 CLIMATE

Greece has a temperate Mediterranean climate moderated by both sea and mountain breezes. Summers are hot and dry, while winters are generally cool and rainy. The weather at the higher elevations is colder and wetter. Average January temperatures range from 6°C (43°F) in the northern city of Thessaloníki, to 10°C

(50°F) in Athens near the southern end of the mainland peninsula, to 12°C (54°F) at Iráklion on Crete. The average July temperature at sea level is near 27°C (80°F), with the thermometer topping 38°C (100°F) on the hottest days. Rainfall increases from south to north, ranging from 41 centimeters (16 inches) in Athens to about 127 centimeters (50 inches) on the island of Corfu.

4 🌐 TOPOGRAPHIC REGIONS

The northern part of mainland Greece consists of a long strip of land between the northern shore of the Aegean Sea and the southern borders of Bulgaria and the former Yugoslav republic of Macedonia. The Rhodope Mountains occupy most of this region. The central part of the mainland, corresponding to the bulk of the Greek peninsula, is dominated by the Pindus Mountains, Greece's most extensive mountain range. To the east, between mountain spurs, lie the plains of Thessaly and to the southeast, Boeotia and Attica. To the west lie the regions of Epirus and, farther south, Arkananía.

GREECE



The southern part of the mainland, located south of the Gulf of Corinth, is a large, irregularly shaped peninsula called the Peloponnese. With an area of 21,446 square kilometers (8,278 square miles), it is connected to Attica by an isthmus that is only 6.4 kilometers (4 miles) across at its narrowest point. Although mountainous, it has a narrow coastal plain around its entire periphery.

5 🌐 OCEANS AND SEAS

Seacoast and Undersea Features

Greece is bounded on the west by the Ionian Sea, on the south by the Mediterranean, and on the east by the Aegean Sea, an arm of the Mediterranean.

Greece has 13,676 kilometers (8,498 miles) of seacoast.



EPD/Saxifraga/Jan van der Straaten

A road winds over the island of Chios, Greece, one of the Southern Sporades.

Sea Inlets and Straits

The Corinth Canal cuts through the isthmus connecting the Peloponnese to the rest of the Greek mainland, linking the Gulf of Corinth with the Saronic Gulf and making the Peloponnese technically an island. Numerous other gulfs and straits separate Greece's islands and peninsulas in the Aegean, Mediterranean, and Ionian Seas.

Islands and Archipelagos

Greece's major island regions are the Ionian Islands, which hug the western coast from Albania to the Peloponnese; the Aegean Islands, scattered about the sea of the same name; and Crete, which separates the Aegean and Mediterranean Seas. The Aegean Islands include the Cyclades, the Northern and Southern Sporades groups, and numerous individual islands. Crete, the site of the first European

civilization, is the largest of the Greek islands and the fifth-largest Mediterranean island, with an area of 8,308 square kilometers (3,207 square miles).

Coastal Features

The coast of the Greek peninsula is mostly rocky, although there are some strips of lowland along the shore. The most distinctive formation along the coast of the Greek mainland is the Chalcidice (Chalkidhiki) Peninsula in northern Greece, from which three narrow, smaller peninsulas jut into the Aegean. The port city of Thessaloniki is located on a natural harbor at the western end of this peninsula. Farther to the east, the Thracian coastline is generally smooth and uniform. The coast of central Greece has deeply indented bays about halfway down its length on both the east and west and is also indented to the south. The coast of the Peloponnese has good harbors



EPD/Saxifraga/Jan van der Straaten

Mount Olympus in Greece.

and includes some plains areas. At its southern end, cliffs meet the sea on the capes of Akirítas, Matapan, and Maléa.

6 🌐 **INLAND LAKES**

Lake Korónia and Lake Vólvi mark the northern end of the Chalkidhiki Peninsula. Lake Vistonis in western Thrace, although called a lake, is actually a lagoon. Another major lake is Lake Trichonida near the southern end of the Pindus Mountains.

7 🌐 **RIVERS AND WATERFALLS**

Greece has relatively few rivers. Those it does have are short, and none are commercially navigable. In the north, the Evros (Maritsa), Néstos, Struma, and Vardar flow across the plains of Thrace and Macedonia and into the northern Aegean Sea. With a total length of 480 kilometers (300 miles), the Evros is the country's longest river. It forms part of Greece's

border with Bulgaria in the north as well as its border with Turkey in the east. The rivers of central Greece are the Aliákman, Arakhthos, Akhelóos, Piniós, and Sperkhiós. The Aliákman (320 kilometers/200 miles) is the longest river located entirely in Greece. The major rivers of the Peloponnese are the Alpheus (Alfiós) and Evrótas.

8 🌐 **DESERTS**

There are no desert regions in Greece.

9 🌐 **FLAT AND ROLLING TERRAIN**

The most extensive plains in Greece are found at the mouths of the Struma and Nestos Rivers in the northern part of the country and in Thessaly, whose lowlands constitute the country's most fertile farmland. Attica is mountainous in the north but levels off to plains that extend from Athens to the end of the peninsula.

Fertile lowlands are also found in the alluvial plains of the Peloponnese.

10 🌐 MOUNTAINS AND VOLCANOES

Greece's terrain is generally rugged, with mountain ranges and their spurs running northwest to southeast through much of the mainland. Altogether, mountains cover four-fifths of Greece. The Rhodope Mountains in northern Greece rise to over 1,800 meters (7,000 feet) in many places. Their highest peak is Mount Órivos, at 2,212 meters (7,287 feet). The Pindus Mountains, Greece's major mountain range, belong to the Dinaric mountain system that also spans Croatia, Serbia and Montenegro, and Albania. In central Greece, the range is divided into three segments by the Métsovon Pass and, farther south, by Mount Timfristós. Its spurs extend into the eastern part of central Greece, separated by structural depressions. The mountain spur north of Thessaly is home to Greece's highest peak, the legendary Mount Olympus, mythic home of the Greek gods. The Pindus range extends southeastward through the mainland peninsula to the Gulf of Corinth, where Mount Parnassus is located. A series of ridges extending southward into the Peloponnese give the peninsula its distinctive "four-fingered" shape.

11 🌐 CANYONS AND CAVES

An extensive system of caves runs southward to the sea at the Gulf of Laconia under the southern part of the Peloponnese region. The caves include an underground river, accessible to tourists by guided boat since 1963. The caves are filled with extensive stalactite and stalagmite deposits. The first documented exploration of the caves was in 1895, when

DID YOU KNOW?

To explain their barren, rocky landscape, the Greeks adopted the legend that the gods poured the world's soil through a sieve and created Greece from the rocks that remained.

spelunkers found evidence of human bones and prehistoric fossils.

12 🌐 PLATEAUS AND MONOLITHS

There are no major plateau regions in Greece.

13 🌐 MAN-MADE FEATURES

With a height of 160 meters (525 feet), the Kremasta Dam on the Achelos River is the tallest dam in Europe.

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Grenada

- **Official name:** Grenada
- **Area:** 340 square kilometers (131 square miles)
- **Highest point on mainland:** Mount Saint Catherine (840 meters/2,756 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** 8 A.M. = noon GMT
- **Longest distances:** 34 kilometers (21 miles) from northeast to southwest; 19 kilometers (12 miles) from southeast to northwest
- **Land boundaries:** No international boundaries
- **Coastline:** 121 kilometers (75 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Located about 160 kilometers (100 miles) north of Trinidad, Grenada is the most southerly of the Windward Islands. Comprising the main island of Grenada and a number of smaller islands and islets, Grenada has an area of 340 square kilometers (131 square miles), or nearly twice the size of Washington, D.C. Grenada's capital, Saint George's, is located on the southwestern coast of the main island. Grenada is divided into six parishes.

2 🌐 TERRITORIES AND DEPENDENCIES

Grenada has no territories or dependencies.

3 🌐 CLIMATE

Grenada has a tropical climate moderated by cooling trade winds, with temperatures ranging from 24°C (75°F) to 30°C (87°F) year round. The lowest temperatures occur between November and February. Annual rainfall is roughly 150 centimeters (60 inches) along the coast, although it can be double that in the central highlands. The driest season is between January and May. Even during the rainy season, from June to December, it rarely

rains for more than an hour at a time and generally not every day. Hurricanes are a danger between June and November.

4 🌐 TOPOGRAPHIC REGIONS

The country consists of the island of Grenada, the most southerly of the Windward Islands; the islands of Carriacou, Ronde, and Petit Martinique to the north; and a number of smaller islets of the Grenadines. (The remaining islands of the Grenadines extend north to form part of the country of St. Vincent and the Grenadines.)

5 🌐 OCEANS AND SEAS

Grenada is in the southeastern corner of the Caribbean Sea.

Seacoast and Undersea Features

Lying beneath the sea off the coasts of both Grenada and Carriacou is some of the Caribbean's most dramatic underwater scenery. Abundant coral reefs fringe the islands.

GRENADA



Islands and Archipelagos

The small islets of the Grenadines that belong to Grenada include Diamond, Green, Sandy, Caille, Les Tantes, Frigate, Large, and Saline Islands.

Coastal Features

The coastline of Grenada is dotted with many small bays and both white-sand and black-sand beaches. The best-known beach and principal tourist area is Grand Anse Bay, near St. George's, a broad beach with white sand. The bay is formed by Point Salines, which juts westward at the southern end of Grenada. Mangrove swamps can be found along the coast.

6 🌐 INLAND LAKES

Lakes have formed in some of the extinct volcanic craters on Grenada. Grand Etang, at the center of the main island, is the largest

of the crater lakes. Lake Antoine and Levera Pond are close by.

7 🌐 RIVERS AND WATERFALLS

While many short, fast-running streams cross the terrain of the main island, there are no rivers of note in the country.

8 🌐 DESERTS

There are no deserts in Grenada.

9 🌐 FLAT AND ROLLING TERRAIN

Carriacou, the second-largest island, is hilly.

10 🌐 MOUNTAINS AND VOLCANOES

Volcanic in origin, the terrain of Grenada is very rugged. The mountain mass in the center of the main island consists of a number of ridges fanning out across the island. Mount Saint Catherine, the country's highest point (840 meters/2,756 feet), is located in these central highlands.

11 🌐 CANYONS AND CAVES

The coast at Halifax Bay, a popular diving site, forms a natural wall with sponge-filled caves.

12 🌐 PLATEAUS AND MONOLITHS

Carriacou's hilly interior rises to a low wooded plateau called Belair Park, 244 meters (800 feet) above sea level.

13 🌐 MAN-MADE FEATURES

One of Grenada's best-known landmarks is the 104-meter (340-foot) Sendall Tunnel in the city of St. George's, which connects the city's inner harbor (the Carenage) with its Caribbean coast.

DID YOU KNOW?

The wreck of the *S.S. Bianca C*, the largest shipwreck in the Caribbean, lies near Grenada.

GRENADA

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Guatemala

- **Official name:** Republic of Guatemala
- **Area:** 108,890 square kilometers (42,042 square miles)
- **Highest point on mainland:** Tajumulco Volcano (4,211 meters/13,830 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** 7 A.M. = noon GMT
- **Longest distances:** 457 kilometers (284 miles) from south-southeast to north-northwest; 428 kilometers (266 miles) from east-northeast to west-southwest
- **Land boundaries:** 1,687 kilometers (1,046 miles) total boundary length; Belize 266 kilometers (165 miles); El Salvador 203 kilometers (126 miles); Honduras 256 kilometers (159 miles); Mexico 962 kilometers (597 miles)
- **Coastline:** 205 miles (330 kilometers)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Guatemala is located at the northwestern end of Central America and is bordered by Belize to the northeast, Honduras and El Salvador to the east, and Mexico to the north and west. Guatemala covers an area of 108,890 square kilometers (42,042 square miles), or slightly less than the state of Tennessee.

2 🌐 TERRITORIES AND DEPENDENCIES

Guatemala has no territories or dependencies.

3 🌐 CLIMATE

The climate ranges from hot and humid in parts of the lowlands to very cold in the highlands, where frosts are common in some months and snow falls occasionally. Average annual temperatures at the coast range from 25°C to 30°C (77°F to 86°F); in the central highlands, they average 20°C (68°F); and in the higher mountain areas, they average 11°C (59°F). The rainy season lasts from May

through October inland, and into December along the coast; the dry season thus extends from November (or January) to April. Annual rainfall is heavy in the El Petén, the largest geographic region, averaging 203 centimeters (80 inches) in the north and 441 centimeters (150 inches) in the south.

4 🌐 TOPOGRAPHIC REGIONS

Most of the southern half of Guatemala consists of an interior upland region that includes high mountains and some thirty active volcanoes, as well as the plateaus and hills where the great majority of people live. There is a coastal plain to the south and swampy lowlands to the north.

5 🌐 OCEANS AND SEAS

In the east, Guatemala borders on the Caribbean Sea at the Gulf of Honduras. To the south lies the Pacific Ocean.

GUATEMALA



Sea Inlets and Straits

Amatique Bay, in the Gulf of Honduras, is 16 kilometers (10 miles) wide and 40 kilometers (25 miles) long.

Coastal Features

Guatemala's Pacific coast is straight and open, with no natural harbors and relatively shallow offshore waters. Long stretches of black sand

GUATEMALA



UNESCO/André Abbe

Fishing is an important activity for those living near Lake Atitlan in Guatemala.

line the coast, flanked by mangrove swamps and a coastal plain farther inland. The coast along the Gulf of Honduras is flat and open to Caribbean storms.

6 🌐 **INLAND LAKES**

There are two important lakes of volcanic origin in the Sierra Madre highlands. Lake Atitlán is said to be one of the most beautiful lakes in the world. The volcanoes Atitlán, San Pedro, and Toliman line its shores. The lake is over 304 meters (1,000 feet) deep in places. Lake Amatitlán, just south of Guatemala City, is smaller and less spectacular. Steam rises from this warm-water lake, and medicinal sulfur springs are found along its banks. In the east is Lake Izabal, the largest lake in the country (43 kilometers/27 miles long and 19 kilometers/12 miles wide). Lake Petén Itzá is in the north.

7 🌐 **RIVERS AND WATERFALLS**

Guatemala's eighteen principal rivers, which flow from the mountains to the Pacific Ocean, are relatively short. The Motagua River, flowing east for about 402 kilometers (250 miles), serves as part of the boundary between Guatemala and Honduras. The Polochic River empties into Lake Izabal, the largest lake in the country. The outlet of Lake Izabal is the Dulce River, which flows into Amatique Bay. The Sarstún River, to the south, serves as the boundary between Belize and Guatemala and links the El Petén region with the coast. Farther to the north, the Usumacinta River flows northeast along the Mexican border before continuing into that country. The Belize River and the Azul River both rise in El Petén and empty into the Caribbean.

GUATEMALA

8 🌐 DESERTS

There are no deserts in Guatemala.

9 🌐 FLAT AND ROLLING TERRAIN

The swampy Polochic River-Lake Izabal lowland lies north of the Sierra de las Minas and the Mico Mountains. The Pacific coastal plain is predominantly savannah.

10 🌐 MOUNTAINS AND VOLCANOES

The Sierra Madre system extends from Mexico, through Guatemala, to El Salvador and Honduras; it includes several active volcanoes. The country's highest peak, Tajumulco, is part of this system. The Sierra de Chuacús branches due east from the Sierra Madre in the central part of the country. To the east-northeast lie the Sierra de las Minas and the Mico Mountains. The Sierra de los Cuchumatanes, a great limestone massif that enters Guatemala from Mexico in the northwest, ranges from 2,743 to 3,352 meters (9,000 to 11,000 feet). To the east lie the Sierra de Chama and the Sierra de Santa Cruz.

11 🌐 CANYONS AND CAVES

Deep ravines often separate the lava plateaus and ash-filled basins of the mountains; these can be difficult to cross, even on foot.

12 🌐 PLATEAUS AND MONOLITHS

The vast area of El Petén, comprising about one-third of Guatemala, extends to the north of the mountain ranges into the Yucatan Peninsula at elevations between 152 and 213 meters (500 and 700 feet). Other smaller plateaus to the south reach elevations of 2,438 meters (8,000 feet).

DID YOU KNOW?

Tikal National Park contains a major center of the native Mayan civilization, which was inhabited from the sixth century B.C. to the tenth century A.D.

13 🌐 MAN-MADE FEATURES

The Chiquimulilla Canal, which runs 112 kilometers (70 miles) from the port of San Jose to the Salvadoran border, is part of the coastal lagoon but has been dredged to allow river traffic.

14 🌐 FURTHER READING

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Guinea

- **Official name:** Republic of Guinea
- **Area:** 245,857 square kilometers (94,926 square miles)
- **Highest point on mainland:** Mount Nimba (1,752 meters/5,748 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** Noon = noon GMT
- **Longest distances:** 831 kilometers (516 miles) from southeast to northwest; 493 kilometers (306 miles) from northeast to southwest
- **Land boundaries:** 3,399 kilometers (2,112 miles) total boundary length; Senegal 330 kilometers (205 miles); Mali 858 kilometers (533 miles); Cote d'Ivoire 610 kilometers (379 miles); Liberia 563 kilometers (350 miles); Sierra Leone 652 kilometers (405 miles); Guinea-Bissau 386 kilometers (240 miles)
- **Coastline:** 320 kilometers (199 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Guinea is located on the coast of the great western bulge of Africa, bordering the North Atlantic Ocean. The country shares borders with Senegal, Mali, Côte d'Ivoire, Liberia, Sierra Leone, and Guinea-Bissau. With an area of about 245,857 square kilometers (94,926 square miles), the country is slightly smaller than the state of Oregon. Guinea is divided into thirty-three prefectures and one special zone.

2 🌐 TERRITORIES AND DEPENDENCIES

Guinea has no outside dependencies or territories.

3 🌐 CLIMATE

The temperature in Guinea varies according to region and season. Conakry is humid nearly all year-round, with fairly uniform temperatures from 23°C (73°F) to 29°C (84°F). Temperatures in the Fouta Djallon and Forest

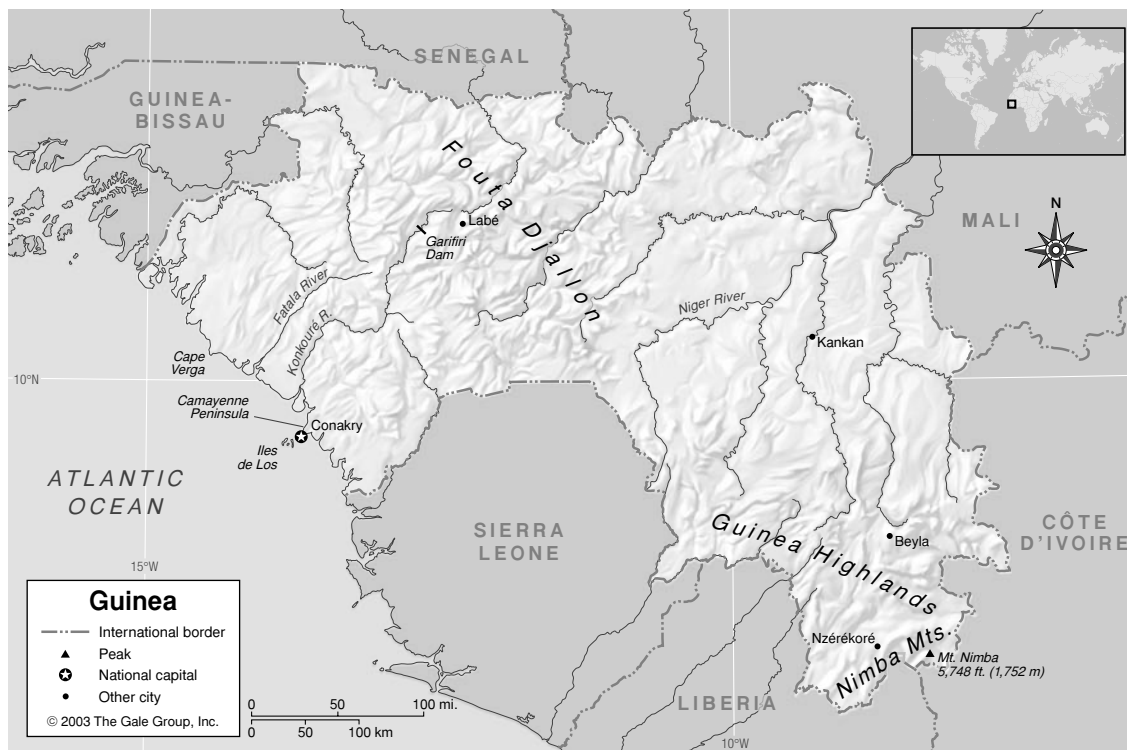
Highlands are more moderate, and in the dry season they may vary daily by 14°C (25°F).

Conakry and the maritime region receive as much as 430 centimeters (169 inches) of monsoon rains annually, with half of the rainfall in July and August. The Fouta receives about 150 to 200 centimeters (60 to 80 inches), while the Forest Highlands receive 280 centimeters (110 inches) annually.

4 🌐 TOPOGRAPHIC REGIONS

Guinea has four main geographic regions. Lower Guinea, or Maritime Guinea, consists mainly of a coastal plain that rises steeply to high central plateaus known as the Fouta Djallon, or "The Fouta," in Middle Guinea. To the northeast are broad savannahs in Upper Guinea. To the southeast are a combination of mountains and uplands in the Forest Highlands.

GUINEA



5 🌐 OCEANS AND SEAS

Seacoast and Undersea Features

Guinea's irregular coast is broken up by a number of bays and estuaries facing the Atlantic Ocean.

Islands and Archipelagoes

The Îles de Los, a cluster of small volcanic islands off Conakry, are inhabited and draw tourists during the dry season when seas are calm.

Coastal Features

Mangroves line much of Guinea's coast. The coast is broken at only two points, where spurs of resistant rock formations jut into the ocean. One is found at Cape Verga in the north, and the other is the Camayenne (or Kaloum) Peninsula on which Conakry is situated. Tides are

high along the entire coast, reaching fifteen or more feet, which results in brackish water in estuaries many miles inland. Behind the coastal swamps lies an alluvial plain which averages about 48 kilometers (30 miles) wide but is considerably narrower in its central section.

6 🌐 INLAND LAKES

There are no major lakes in Guinea.

7 🌐 RIVERS AND WATERFALLS

Guinea is the "water tower" of West Africa. Over one-half of West Africa's principal rivers rise either in the Fouta Djallon or the Forest Highlands. The longest river in Guinea is the Niger River, at 4,100 kilometers (2,460 miles). It rises in the Fouta Djallon and flows northward into Mali. A little more than halfway through Mali, the river curves to the south and flows through the countries of Niger and Nigeria before reaching the Gulf of Guinea.

GUINEA



EPD/Robert J. Groelsema

Dense rainforest characterizes the Forest Highlands.

The Niger River system in Guinea drains more than one-third of the country's total area. During the rainy season flooding occurs frequently along the sluggish rivers in the Niger River basin, including parts of the Niger itself.

Many short rivers, originating either in the Fouta Djallon or in its foothills, cascade through the coastal plain to estuaries along the Atlantic Ocean. Among the most important for navigation purposes are the Rio Nunez and the Fatala River. The Konkouré River, north of Conakry, provides hydroelectric power for the capital.

Tidal marshes and swampy flats surround Atlantic coast estuaries.

8 🌐 **DESERTS**

There are no significant desert regions in Guinea.

9 🌐 **FLAT AND ROLLING TERRAIN**

Tall grasses, interspersed with lightly wooded savannah, dominate Upper Guinea. Grasses also have colonized deforested areas of the Forest Highlands.

Dense rainforest, now largely secondary growth, characterizes the Forest Highlands in areas below 609 meters (2,000 feet). Higher areas are more lightly forested. The area around Beyla and Nzérékoré consists of rolling plains that were at one time probably covered by rainforest.

10 🌐 **MOUNTAINS AND VOLCANOES**

The Guinea Highlands in the Forest Region have general elevations ranging from about 457 meters (1,500 feet) above sea level in the west to over 914 meters (3,000 feet) in the east. Peaks at several points attain 1,219 meters (4,000 feet) and higher. Southeast of Nzérékoré are the Nimba Mountains on the Liberian and Côte d'Ivoire frontiers. Located in this range is Mount Nimba, Guinea's highest point at 1,752 meters (5,748 feet).

11 🌐 **CANYONS AND CAVES**

There are no major caves or canyons in Guinea.

12 🌐 **PLATEAUS AND MONOLITHS**

The Fouta Djallon occupies most of Middle Guinea and consists of a complex, elevated, relatively level plateau. About 12,950 square kilometers (5,000 square miles) of this area reach elevations over 914 meters (3,000 feet). The plateaus are deeply cut in many

DID YOU KNOW?

Guinea is the second-largest bauxite producer in the world, possessing more than 30 percent of the world's bauxite reserves. Bauxite is a main ingredient in the production of aluminum. Major bauxite deposits are found across western and central Guinea. Since these deposits are generally close to the surface, open pit mining operations are typical.

places by narrow valleys, many of which run at roughly right angles, giving the region a checkerboard appearance. A number of major valleys extend for long distances, providing important lines of communication; the railroad from Conakry to Kankan runs in part through one of these valleys. In the south, foothills occur in steep steps having escarpments well over 304 meters (1,000 feet) high.

13 MAN-MADE FEATURES

The Garifiri hydroelectric dam on the Konkouré River features a 75-megawatt power plant, a reservoir of 2 billion cubic meters (7.51 billion cubic feet), and a spillway that evacuates 2,000 cubic meters (70,580 cubic feet) of water per second.

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Guinea-Bissau

- **Official name:** Republic of Guinea-Bissau
- **Area:** 36,120 square kilometers (13,946 square miles)
- **Highest point on mainland:** An unnamed point located on the Gabú Plateau (300 meters/984 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** 11 A.M. = noon GMT
- **Longest distances:** 336 kilometers (209 miles) from north to south; 203 kilometers (126 miles) from east to west
- **Land boundaries:** 724 kilometers (450 miles) total boundary length; Senegal 338 kilometers (210 miles); Guinea 386 kilometers (240 miles)
- **Coastline:** 350 kilometers (217 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Guinea-Bissau is located on the North Atlantic coast of West Africa, between the countries of Guinea and Senegal. With an area of about 36,120 square kilometers (13,946 square miles), the country is slightly less than three times the size of the state of Connecticut. Guinea-Bissau is divided into nine administrative regions.

2 🌐 TERRITORIES AND DEPENDENCIES

Guinea-Bissau has no outside territories or dependencies.

3 🌐 CLIMATE

Guinea-Bissau has a very moderate, tropical climate. The average temperature does not vary significantly throughout the year. In the cooler rainy season, temperatures average from 26° to 28°C (79° to 82°F) and during the dry harmattan season, temperatures do not exceed 24°C (75°F) on average.

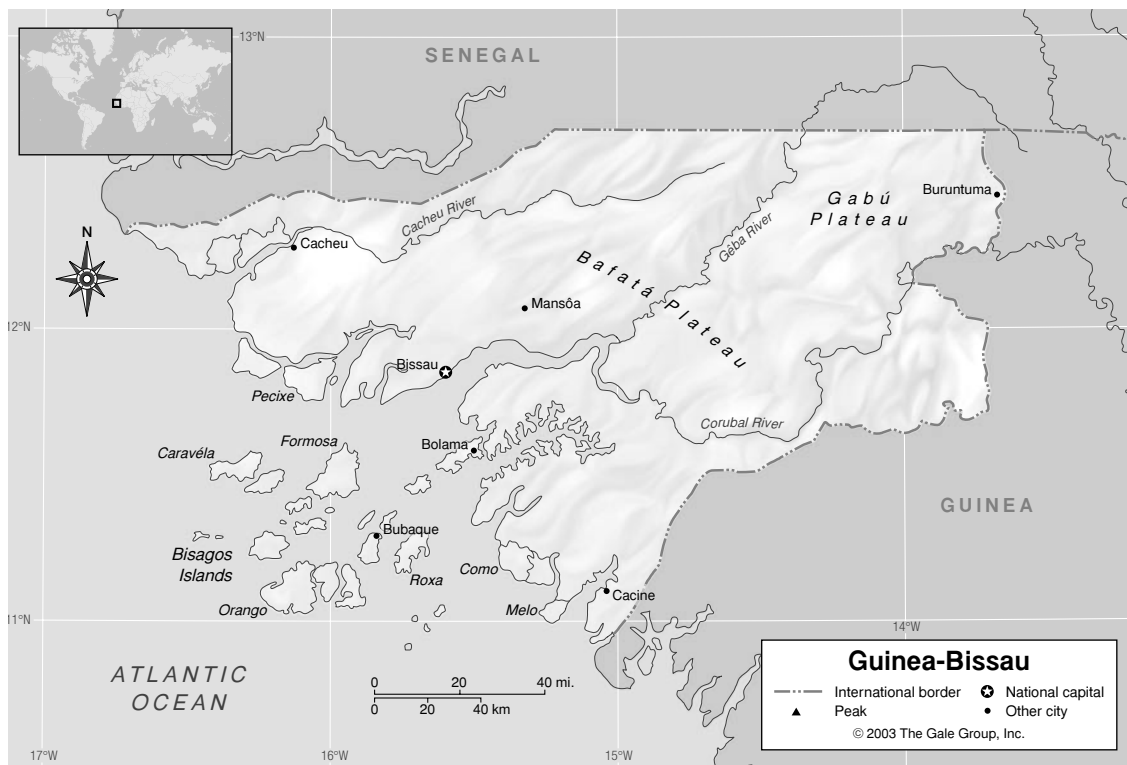
The rainy season lasts from mid-May to mid-November, with rainfall exceeding 198 centimeters (78 inches). Because of monsoon

winds blowing off the ocean, the bulk of the rain falls during July and August. The harmattan season reverses the wind direction, blowing dry, dusty air from the Sahel across the country from mid-December to mid-April. This wind brings cooler temperatures and almost no precipitation. The country is prone to drought and brush fires.

4 🌐 TOPOGRAPHIC REGIONS

Guinea-Bissau is located on the coast of West Africa where a large cluster of islands is found on the extensive continental shelf. The country is made up of a mainland, the Bisagos Islands (Arquipélago dos Bijagós), and various coastal islands. The mainland consists of a coastal plain and a transition plateau forming the Bafatá Plateau (Planalto de Bafatá) in the center and the Gabú Plateau (Planalto de Gabú), which borders the Fouta Djallon highland region of neighboring Guinea.

GUINEA-BISSAU



5 OCEANS AND SEAS

Seacoast and Undersea Features

Guinea-Bissau faces the Atlantic Ocean to the west. Coral reefs and islands dominate the coastal region.

Sea Inlets and Straits

The Gêba Canal is an inlet that connects the Gêba River to the Atlantic Ocean.

Islands and Archipelagos

Guinea-Bissau contains many islands. Located to the southwest of the capital city of Bissau, the Bisagos chain consists of over eighteen islands, including Caravéla, Caraxe, Formosa, Uno, Orango, Orangozinho, Bubaque, and Roxa. The country also includes various other

coastal islands such as Jeta, Bolama, Melo, Pecixe, Bissau, Areicas, and Como.

Coastal Features

The coast of Guinea-Bissau is very irregular and deeply indented by swampy estuaries called “rias.” Serpentine, mangrove-lined tidal rivers feed the rias. The capital, Bissau, is located on the largest of these estuaries that snakes into the center of the country.

6 INLAND LAKES

Guinea-Bissau has no significant lakes.

7 RIVERS AND WATERFALLS

There are six main rivers in Guinea-Bissau. The first, the Cacheu, flows near the northern border with Senegal and is also known as Farim for part of its course. The Mansôa

GUINEA-BISSAU



EPD/Richard Lobban

Harbor scene in Guinea-Bissau.

flows from the center of the country and dumps into the Atlantic Ocean near the city of Bissau. The Gêba originates in Senegal and bisects the country. The Corubal originates in Guinea and meanders close to the southern border. On the southern border with Guinea is the Cacine. The last of the major rivers is the Rio Grande. These rivers provide the principal means of transportation. Ocean-going vessels of shallow draught can reach most of the main towns, and flat-bottomed tugs and barges can reach most of the smaller settlements, except for those in the northeast.

8 🌐 **DESERTS**

There are no significant desert regions in Guinea-Bissau; however, the country's climate is affected by the dry, harmattan winds of the Sahel region of neighboring countries. Sahel

is an Arabic word meaning "shore." It refers to the 5,000-kilometer (3,125-mile) stretch of savannah that is the shore or edge of the Sahara Desert. The Sahel spreads west to east from Mauritania and Senegal to Somalia.

9 🌐 **FLAT AND ROLLING TERRAIN**

The low-lying coastal plain is characterized by wetlands that are submerged at high tide. Owing to excessive monsoon rains during the rainy season, swamps and marshes appear further inland as well.

About 46 percent of the land in Guinea-Bissau is meadows and pastures. Savannah predominates in the east and northeast, providing a mixture of lightly wooded forest interspersed with grasses.

GUINEA-BISSAU

About 38 percent of the land is covered in forests and woodlands. Mangroves dominate the coastal region, while tangled forests are found in the interior plains. Thick forests give way to less dense savannah cover and grasses on the planaltos.

10 🌐 MOUNTAINS AND VOLCANOES

There are no significant mountain regions in Guinea-Bissau.

11 🌐 CANYONS AND CAVES

There are no significant caves or canyons in Guinea-Bissau.

12 🌐 PLATEAUS AND MONOLITHS

Aside from the low-lying coastal plain and islands, Guinea-Bissau's most defining characteristic is the transitional plateau, rising gradually from the plain to a few hundred feet in elevation. In the center of the country this plateau is called the Bafatá Plateau, and along the eastern border with Guinea it is called the Gabú Plateau. The highest point in the country is an unnamed spot on the Gabú Plateau near the city of Buruntuma, where the plateau rises to a height of about 300 meters (984 feet).

13 🌐 MAN-MADE FEATURES

At high tide, about 10 percent of Guinea-Bissau's coastland is submerged. This causes erosion and also allows for a high level of salt deposits to remain in the soil of the coastal plain. In order to prevent this damage, many "anti-salt" dams have been constructed along the Atlantic coast.

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DID YOU KNOW?

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Guyana

- **Official name:** Cooperative Republic of Guyana
- **Area:** 214,970 square kilometers (83,000 square miles)
- **Highest point on mainland:** Mt. Roraima (2,835 meters/9,302 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** 8 A.M. = noon GMT
- **Longest distances:** 436 kilometers (271 miles) from east to west; 807 kilometers (501 miles) from north to south
- **Land boundaries:** 2,462 kilometers (1,530 miles) total boundary length; Brazil 1,119 kilometers (695 miles)
- **Coastline:** 285 miles (459 kilometers)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 LOCATION AND SIZE

Guyana is a small independent republic located on the northeastern coast of South America, between Suriname and Venezuela. A former British colony, it is the only member of the British Commonwealth—and the only English-speaking country—in South America. With an area of 214,970 square kilometers (83,000 square miles), Guyana is almost as large as the state of Idaho.

Native animals include the anteater, the tapir, and the anaconda. Endangered species include the jaguar, black cayman, and giant otter. As the rainforest environments around the world are destroyed, Guyana is one of the few places where the world's largest eagle, the harpy, still has a native habitat.

2 TERRITORIES AND DEPENDENCIES

Guyana has no territories or dependencies.

3 CLIMATE

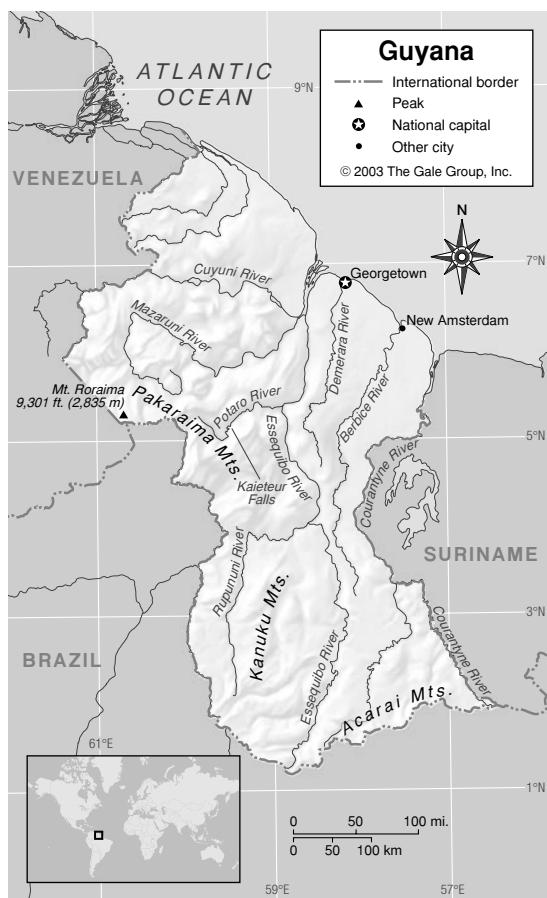
Guyana has a hot, humid subtropical climate moderated by trade winds off the Atlantic. There is little temperature variation between

seasons. Temperatures rarely rise above 32°C (90°F) or fall below 21°C (70 °F). The average annual temperature in the capital city of Georgetown is 27°C (81°F). Average annual rainfall ranges from about 165 centimeters (65 inches) in the savannah regions to 229 centimeters (90 inches) on the coast and in elevated parts of the interior. The coastal areas have two rainy seasons—one between November and January and the other between May and July—while the savannah has only one, between April and August.

4 TOPOGRAPHIC REGIONS

Guyana has four major types of terrain. A narrow but densely populated strip of plains extends the full length of the coast. Beyond the coastal plain lies a hilly, forested interior that covers most of the country. The interior also includes two major savannah regions, and highlands that rise in the south and west. The country has rich deposits of bauxite and manganese. Discovery of gold and diamond deposits likely will lead to development of greater mining.

GUYANA



5 🌐 OCEANS AND SEAS

The northern coast of Guyana borders the southeastern North Atlantic Ocean.

Seacoast and Undersea Features

Silt carried on the rivers that drain into the Atlantic Ocean keeps the water off Guyana a brown churning mass of sandbars and mud. Mud flats continue up to 24 kilometers (15 miles) offshore before navigation is considered free. Guyana's seacoast, much of which lies below sea level, is in danger of being submerged if the ocean levels rise due to global warming.

Coastal Features

The deep indentation at the mouth of the Essequibo River divides Guyana's coast into two nearly equal sections. The one to the west is smooth, while the one to the east is more indented, especially at the mouths of the Essequibo and Courentyne Rivers.

6 🌐 INLAND LAKES

There are no notable inland lakes in Guyana.

7 🌐 RIVERS AND WATERFALLS

Guyana has four major rivers—the Courantyne, Berbice, Demerara, and Essequibo—which flow northward and empty into the Atlantic. The longest and widest is the Essequibo, which has its source in Brazil, as does the Courantyne, whose course forms Guyana's border with Suriname. The Potaro, Mazaruni, and Cuyuni rivers, all tributaries of the Essequibo, drain the northwestern part of the country. The Rupununi River flows through the savannah land in the southwest that bears its name. Kaieteur Falls, in the Pakaraima Mountains, is the world's seventh most forceful waterfall. Kaieteur is only one of many waterfalls in Guyana, including several other large ones.

8 🌐 DESERTS

There are no desert regions in Guyana.

9 🌐 FLAT AND ROLLING TERRAIN

The narrow coastal plain varies in width from 16 to 65 kilometers (10 to 40 miles). It is cut off from the forested interior zone by a barrier of swamps. Poor drainage has

DID YOU KNOW?

Guyana's name comes from an Amerindian word meaning "Land of Many Waters."

GUYANA



EPD Photos/Evangelical Lutheran Church in America

Many Guyanese travel daily on the rivers of Guyana.

also created swampland along Guyana's rivers. Guyana has two savannah regions. The largest is the Rupununi in the extreme southwestern part of the country. The Rupununi features broad areas of grassland dotted with large termite mounds. Visitors to the Rupununi region must get a permit from the government. A second area, the "intermediate savannah," lies about 96 kilometers (60 miles) inland from the mouth of the Berbice River. Guyana's hilly zanderij ("white-sand") area extends down the center of the country in a band that widens in the southeast and covers over three-fourths of the country. The hills, whose elevations range from 15 meters (50 feet) to 120 meters (400 feet), gradually rise from west to east.

10 🌐 **MOUNTAINS AND VOLCANOES**

The Pakaraima Mountains rise from the Kaieteurian Plateau in the western part of the

country. Their peaks rise to over 2,743 meters (9,000 feet) near Venezuela and Brazil and include the country's highest point, Mount Roraima. Farther south the Kanuku Mountains extend from east to west in the southwestern part of Guyana. Reaching heights of 914 meters (3,000 feet), they cut the Rupununi savannah region into two sections. The Acarai Mountains rise to elevations of over 610 meters (2,000 feet) in the southeast.

11 🌐 **CANYONS AND CAVES**

There are no notable canyons or caves in Guyana.

12 🌐 **PLATEAUS AND MONOLITHS**

The Kaieteurian Plateau, which, together with the Pakaraima range, dominates west-central Guyana, is generally less than 610 meters (2,000 feet) in elevation. This ancient crystal-line plateau was once below sea level.

DID YOU KNOW?

Kourou, located at 5°14" N latitude on the northeast coast of Guyana, is perfectly situated to serve as a rocket launch site. The European Space Agency (ESA) has been launching rockets from the rocket launch site at Kourou since 1977.

13 MAN-MADE FEATURES

The coast is protected by 225 kilometers (140 miles) of seawall and an extensive system of drainage canals to keep it from flooding at high tide, as much of it lies below sea level. The swamps of the coastal plain are prevented from intruding into the croplands farther inland by a series of “back-dams.”

As of late 2002, plans for the Amaila Falls Hydroelectricity Project were progressing. The

dam is being planned at the place where the Amaila and Kuribrong Rivers join, about 250 kilometers (125 miles) southwest of Georgetown and about 195 kilometers (120 miles) north of Kaieteur Falls.

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Haiti

- **Official name:** Republic of Haiti
- **Area:** 27,750 square kilometers (10,714 square miles)
- **Highest point on mainland:** Mount La Selle (Chaîne de la Selle) (2,680 meters/ 8,793 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** 7 A.M. = noon GMT
- **Longest distances:** 485 kilometers (300 miles) from east-northeast to west-southwest; 385 kilometers (240 miles) from south-southeast to north-northwest
- **Land boundaries:** 275 kilometers (170.7 miles) total boundary length; all with the Dominican Republic
- **Coastline:** 1,771 kilometers (1,098 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Haiti is located in the western third of the island of Hispaniola, which is bordered by the Atlantic Ocean to the north, the Dominican Republic to the east, and the Caribbean Sea to the south and west.

2 🌐 TERRITORIES AND DEPENDENCIES

Haiti claims the uninhabited island of Navassa, presently a U.S. possession, about 50 kilometers (31 miles) west of Hispaniola.

3 🌐 CLIMATE

Haiti enjoys a tropical climate, which changes depending on the season and on the area's elevation. The average annual temperature ranges from 22 to 30°C (70 to 86°F), but is generally lower in highland areas. Rainfall increases with elevation; the higher the region, the greater the rainfall. Haiti has two rainy seasons: April through June and October through November. The dry season runs from November to January. Average annual rainfall near Port-au-Prince is 137 centimeters (54 inches).

4 🌐 TOPOGRAPHIC REGIONS

Located on Hispaniola, the second-largest island in the Caribbean, Haiti is composed mainly of mountains and hills. About 80 percent of the country is more than 183 meters (600 feet) above sea level, and half of that land lies at elevations about 257 meters (1,500 feet). On the western shoreline is the Gulf of Gonâve (Golfe de la Gonâve). The long and narrow Tiburon Peninsula (sometimes called the Jacmel Peninsula) is located in the south.

5 🌐 OCEANS AND SEAS

Seacoast and Undersea Features

Much of the Haitian shoreline with the Caribbean Sea is rimmed by an underwater sedimentary platform that extends around the island of Hispaniola. Waters close to the shoreline tend to be shallow. Coral reefs are common, especially around Vache Island and the Cayemites.

Sea Inlets and Straits

Haiti is located between the Atlantic Ocean in the north and the Caribbean Sea in the

HAITI



south; the Windward Passage and the Jamaica Channel connect the two bodies of water. The Windward Passage is between Haiti and Cuba; the Jamaica Channel lies between Haiti and Jamaica.

Islands and Archipelagos

Haiti includes the islands of Tortuga, Gonâve, Les Cayemites, and Vache. The largest of these islands is Gonâve, located in the Gulf of Gonâve (Golfé de la Gonâve) off Port-au-Prince. Its approximately 207 square kilometers (80 square miles) is made up of rugged terrain; its highest point, Morne la Pierre, rises to more than 762 meters (2,500 feet). Second in size is Tortuga, with an area of 181 square kilometers (70 square miles). It lies in the Atlantic Ocean off Port-de-Paix.

Coastal Features

Haiti's coastline is irregular, with a long southern peninsula, the Tiburon, as well as a shorter northern one. The peninsulas surround the large Gulf of Gonâve. At its eastern end the Gulf forms the Bay of Port-au-Prince (Baie de Port-au-Prince).

6 🌐 INLAND LAKES

Lake Saumâtre (Etang Saumâtre) is located close to the border with the Dominican Republic. It is a saltwater lake and is the habitat of many exotic species of tropical wildlife. It is the largest lake in the country. Reptiles including crocodiles, lizards, and the rose boa can be found in its waters.

7 🌐 RIVERS AND WATERFALLS

Although over a hundred streams flow throughout Haiti, the only large river is the Artibonite, which is 245 kilometers (145 miles) in length. It is shallow but long, and its

HAITI

flow averages ten times that of any of the others. Second in length is the Les Trois Rivières, which spills into the Atlantic at the town of Port-de-Paix.

Forty miles from Port-Au-Prince, the Saut d' Eau waterfalls stand 30.5 meters (100 feet) tall and are considered sacred by the people of Haiti.

8 🌐 DESERTS

There are no deserts in Haiti.

9 🌐 FLAT AND ROLLING TERRAIN

Cul-de-Sac lowland is a fertile plain that extends from Port-au-Prince to Lake Saumâtre (Etang Saumâtre). Only 20 percent of Haitian land is considered arable (suitable for cultivation). Forest land can be found south of Port-au-Prince, where some pine forests have been preserved. Only 5 percent of Haiti's land is forested.

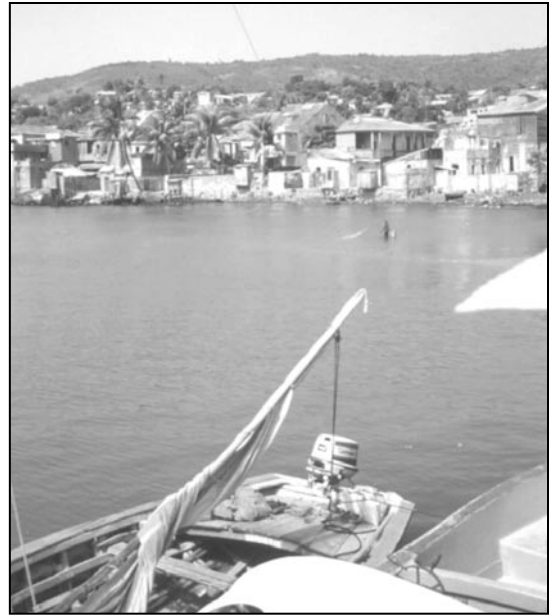
Rolling hills can be found throughout the country, especially near the mountain ranges that dominate the country's landscape. These hills are not particularly well suited for crop growth.

10 🌐 MOUNTAINS AND VOLCANOES

Many of the mountain ranges of Haiti are shared with the Dominican Republic, since they are located along the border between the two countries.

There are at least five major systems; these ranges meet one another to form a highland area. The highlands are broken in the south where the Cul-de-Sac lowland extends east from the Gulf of Gonâve at Port-au-Prince to the Dominican border.

In the north, the most extensive of the mountain systems is the Massif du Nord, which slants southeastward from the Atlantic Ocean near Port-de-Paix across the Domini-



EPD/Evangelical Lutheran Church in America

The coastal waters of Haiti are filled with small boats.

can border. It is rugged and has a complex geology including sedimentary, magmatic, and plutonic rock, with limestone cliffs scarring its slopes. To its west, at the extremity of the island, satellite ranges extend to Môle St.-Nicolas. To the southwest, the Noires Mountains have peaks as high as 610 meters (2,000 feet). This range extends across the country to the Artibonite River. Across the Artibonite is the Chaîne de Mateaux, a mountain range that extends from the Gulf of Gonâve into the Dominican Republic, where it is known as the Sierra de Neiba.

Separated from the northern mountains by the Cul-de-Sac is another system that extends the full length of the long southern peninsula of Haiti to the frontier; in the Dominican Republic, this range is called the Sierra de Bahoruco. In the west, it is the Massif de la Hotte, and in the east it is the Massif de la Selle. The latter range contains several peaks with elevations of over 2,133 meters (7,000 feet), as well

HAITI

as the country's highest peak, Mount La Selle (2,680 meters /8,793 feet).

11 CANYONS AND CAVES

Some caves in Hinche contain drawings that may have come from the island's first inhabitants.

12 PLATEAUS AND MONOLITHS

South of the Massif du Nord, the Central Plateau extends east from the Noires Mountains to the Dominican Republic border. Its more than 1,351 kilometers (840 miles) of rolling terrain make it the largest of the country's flatlands. The plateau has an average elevation of about 305 meters (1,000 feet) and its relatively thin soils are useful for raising sheep and goats.

13 MAN-MADE FEATURES

A reservoir known as Lake Péligre (Lac de Péligre) is located in the middle of the country

near the Dominican Republic border. A dam constructed on the upper Artibonite River formed this lake.

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Honduras

- **Official name:** Republic of Honduras
- **Area:** 112,090 square kilometers (43,267 square miles)
- **Highest point on mainland:** Cerro Las Minas (2,870 meters/9,417 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** 6 A.M. = noon GMT
- **Longest distances:** 663 kilometers (412 miles) from east-northeast to west-southwest; 317 kilometers (197 miles) from north-northwest to south-southeast
- **Land boundaries:** 2,340 kilometers (1,454 miles) total boundary length; El Salvador 342 kilometers (212 miles); Guatemala 256 kilometers (159 miles); Nicaragua 922 kilometers (572.6 miles)
- **Coastline:** 710 kilometers (440 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

Honduras is located in Central America and is bordered by the Caribbean Sea to the north and east, Nicaragua and the Pacific to the south, El Salvador to the southwest, and Guatemala to the west. With a total area of about 112,090 square kilometers (43,267 square miles), the country is slightly larger than the state of Tennessee. Honduras is administratively divided into eighteen departments.

2 🌐 TERRITORIES AND DEPENDENCIES

Honduras has no territories or dependencies.

3 🌐 CLIMATE

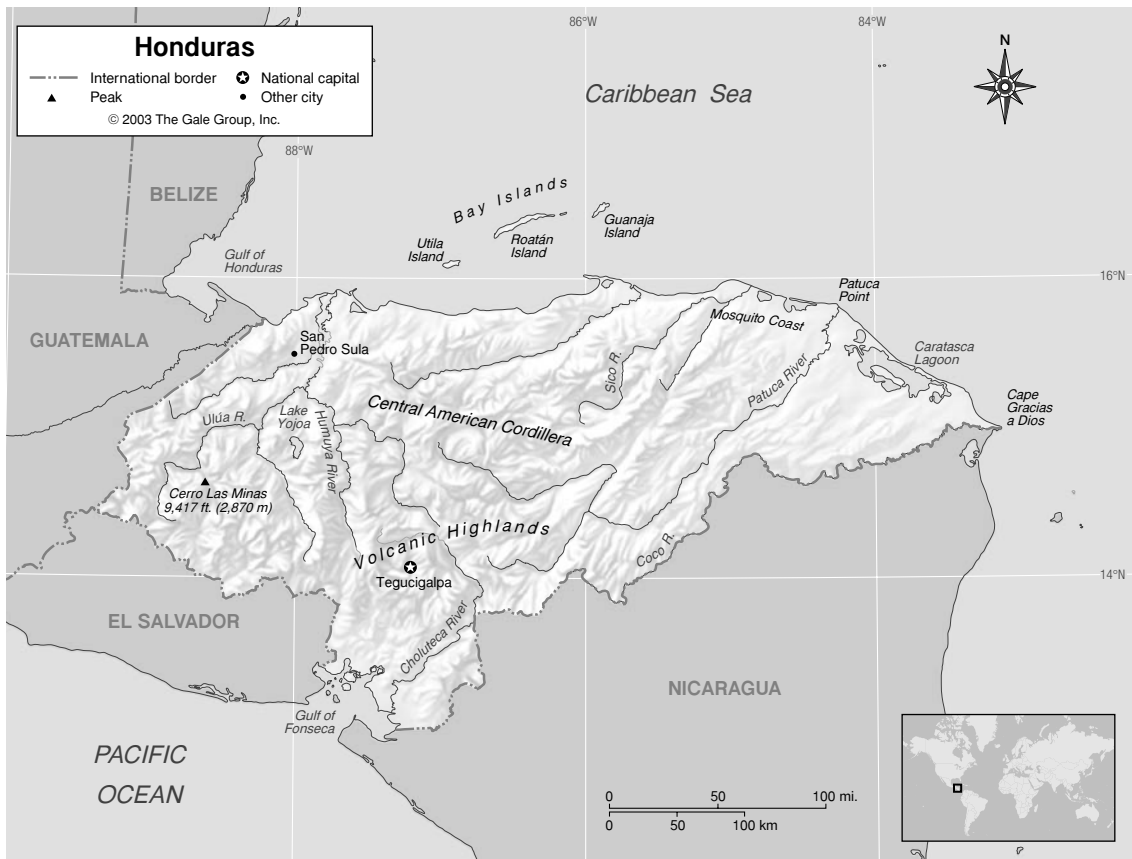
Honduras is generally warm throughout the year, with varying rainfall and humidity. Coastal temperatures average 31°C (84°F), with lower temperatures at the higher elevations. The country has only two seasons: a dry season lasting from November through April, and a wet season from May through

October. Rainfall is highest in the coastal areas, where it can exceed 240 centimeters (95 inches). The southern regions are the driest, receiving an average annual rainfall of 84 centimeters (33 inches). The Caribbean coast is subject to hurricanes.

4 🌐 TOPOGRAPHIC REGIONS

Honduras, part of the isthmus of Central America, is the second-largest Central American republic, with coasts on both the Pacific and the Caribbean Sea. It has four main regions: the eastern lowlands, the northern coastal plains, the central highlands, and the Pacific lowlands. Honduras also has many rivers, some of which have extensive valleys. Honduras is located on the Caribbean Tectonic Plate, near its boundaries with the Cocos and the North American Plates. Consequently, earthquakes are frequent, although they are generally mild.

HONDURAS



5 OCEANS AND SEAS

Seacoast and Undersea Features

Honduras has a large northern coastline along the Caribbean Sea and a shorter one to the south along the Pacific Ocean. There are many large coral reefs in the Caribbean off Honduras's northern coast.

Sea Inlets and Straits

The Caratasca Lagoon, a major inlet on the Caribbean Coast, provides a natural harbor for the city of Puerto Lempira.

Islands and Archipelagos

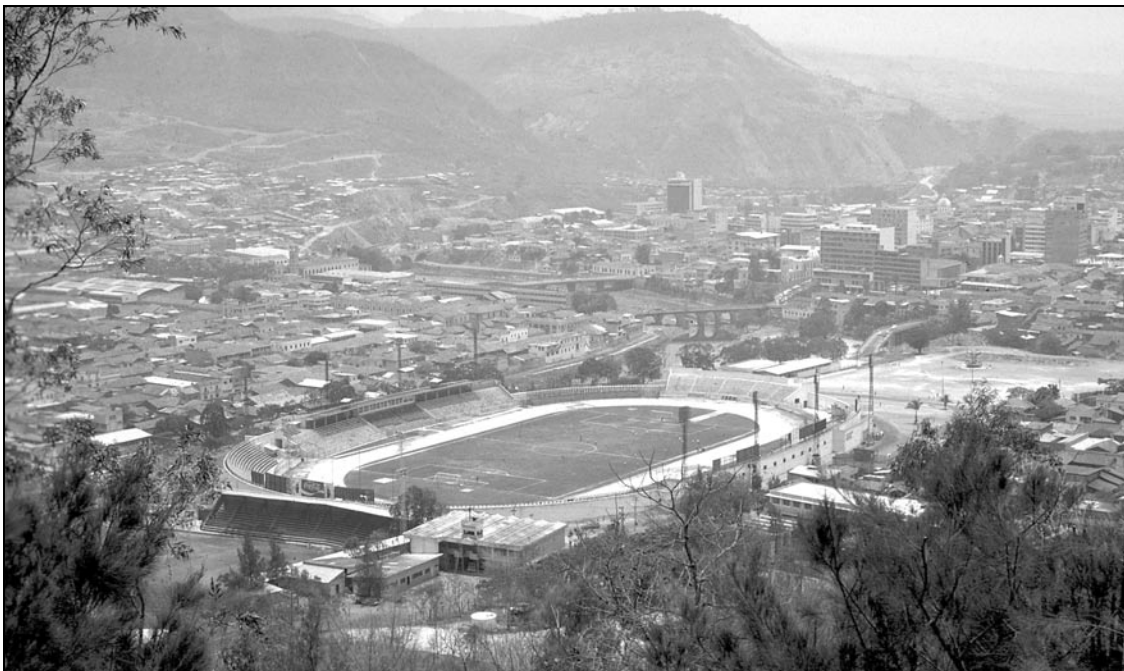
The small Swan Islands (Cajones Cays) are about 177 kilometers (110 miles) north-north-

east of Patuca Point in the Caribbean Sea. Also in the Caribbean are the Bay Islands (Islas de la Bahía) which include Guanaja, Utila, and, the largest, Roatán. Honduras also controls some small islands in the Gulf of Fonseca (Gulfo de Fonseca).

Coastal Features

Honduras's northern coast is long and even, running east from the Gulf of Honduras for most of its length before curving south as it approaches the Nicaraguan border at Cape Gracias a Dios. The Pacific coast is much shorter and uneven. It is all on the sheltered waters of the Gulf of Fonseca.

HONDURAS



UNESCO/Y. Nagata

View of soccer stadium and the Honduran capital of Tegucigalpa.

6 INLAND LAKES

Lake Yojoa (Lago de Yojoa) is the only large natural lake in Honduras. Surrounded by massive mountains, the lake itself sits at an altitude of approximately 669 meters (2,200 feet) above sea level. The Tepemecón River drains the lake on the south and the Blanco River empties the lake on the north.

7 RIVERS AND WATERFALLS

There are many large river systems in Honduras. They have formed the valleys in which many of the people live, and their alluvial deposits have contributed to the fertility of the soil. In the north, from west to east, are the Chamelecón, the Ulúa, the Aguán, the Sico, the Paulaya, the Platano, the Sicre, the Patuca, and the Coco Rivers. All the rivers in the north flow into the Caribbean Sea. The Ulúa and its tributaries drain one-third of the country. The

Coco actually rises in the south, then flows north along the border with Nicaragua. It is the longest river in Honduras.

Other than the Coco, all the rivers that arise in the south flow toward the Pacific Ocean. The Lempa, Sumpul, and the Goascoran Rivers run nearly the entire length of Honduras's border with El Salvador. Further east are the Nacaome and the Choluteca; the latter drains into the Gulf of Fonseca.

8 DESERTS

There are no notable deserts in Honduras.

9 FLAT AND ROLLING TERRAIN

Tropical lowland areas are found on both coasts, but are much larger in the north. The plains extend particularly far inland along the Ulúa River valley, about 121 kilometers (75 miles). The southern coastal plains are much shorter, with lowlands extending only about 40 kilometers (25 miles).

HONDURAS

Inland from the northern coast, Caribbean pines cover large portions of land. Other trees include hardwoods such as walnut, mahogany, cedar, and ebony. It is estimated that about 54 percent of Honduras is covered with forest and woodland areas.

Much of the small amount of cultivated area is located in the flatlands and river valleys that are between, and parallel to, the mountains. These temperate valleys and flatlands are also the primary areas of settlement, except for the north coast banana district, which was reclaimed from tropical forests in the twentieth century.

10 🌐 MOUNTAINS AND VOLCANOES

Honduras is the most mountainous country in Central America, and two distinct series of mountain ranges divide the country roughly into two halves: the north and the south. Over 80 percent of the land is mountainous, thereby limiting the area suitable for cultivation and pastures.

In the north, mountain ranges extend from the Guatemala border on the west to the Platano River on the east. These northern ranges are all extensions of the Central American Cordillera, a mountain chain that travels across Central America from Mexico to Nicaragua. The chains of the Central American Cordillera run largely parallel to the coast and to each other. The northern mountain ranges were formed by changes in the earth's crust several million years ago. Underneath the surface cover of limestone and sandstone, the mountains are composed of granite, mica, slate, and other materials.

The Volcanic Highlands extend from the border with El Salvador in the southwest and across the southern part of the country to the border with Nicaragua in the east. Unlike the mountains of the north, these southern ranges are newer, consisting of lava formed by volcanic eruption some twelve million years ago. Volca-

nic material has both eroded and been ejected from these highlands and forms fertile soil.

The Volcanic Highlands are higher overall than the Central American Cordillera chains. The highest peaks in the country, Cerro Las Minas (2,870 meters/9,417 feet) and Mount Celaque (2,848 meters/9,345 feet) are found here.

11 🌐 CANYONS AND CAVES

Various caves are located in the rainforest areas of central Honduras, including Talgua Cave, which is also known as the "Cave of the Glowing Skulls." Caves often have been used as burial grounds for the dead.

12 🌐 PLATEAUS AND MONOLITHS

In the areas between one mountain range and the other, in both the Central American Cordillera ranges and the Volcanic Highlands, are various plateaus. These intermountain flatlands average 3 to 11 kilometers (2 to 7 miles) in width and are flanked by mountains from 914 to 2,133 meters (3,000 to 7,000 feet) in height. Historically, these level lands have been the most highly populated regions.

13 🌐 MAN-MADE FEATURES

There are no notable man-made features in Honduras.

14 🌐 FURTHER READING

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Hungary

- **Official name:** Republic of Hungary
- **Area:** 93,030 square kilometers (35,919 square miles)
- **Highest point on mainland:** Mount Kékes (1,014 meters/3,327 feet)
- **Lowest point on land:** Tisza River (78 meters/256 feet)
- **Hemispheres:** Northern and Eastern
- **Time zone:** 2 P.M. = noon GMT
- **Longest distances:** 528 kilometers (328 miles) from east to west; 268 kilometers (167 miles) from north to south
- **Land boundaries:** 2,009 kilometers (1,248 miles) total boundary length; Austria 366 kilometers (227 miles); Croatia 329 kilometers (204 miles); Romania 443 kilometers (275 miles); Serbia and Montenegro 151 kilometers (94 miles); Slovakia 515 kilometers (320 miles); Slovenia 102 kilometers (63 miles); Ukraine 103 kilometers (64 miles)
- **Coastline:** None
- **Territorial sea limits:** None

1 🌐 LOCATION AND SIZE

Located in the Carpathian Basin, in the heart of Central Europe, Hungary occupies one-third of the territory of the pre-World War I Austro-Hungarian Empire. Hungary is a landlocked, predominantly flat country, with more than four-fifths of its terrain at elevations below 656 feet (200 meters). It covers an area of 93,030 square kilometers (35,919 square miles), or slightly less than the state of Indiana.

2 🌐 TERRITORIES AND DEPENDENCIES

Hungary has no territories or dependencies.

3 🌐 CLIMATE

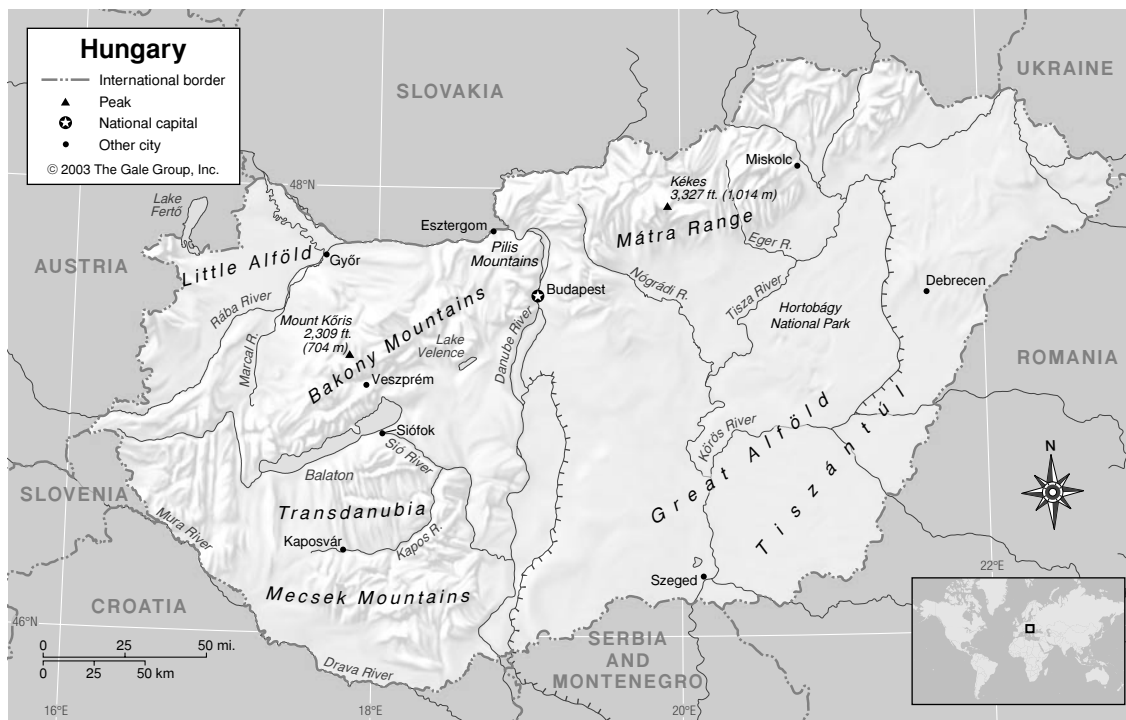
Hungary has a continental climate, with Atlantic and Mediterranean influences. It has cold winters, warm summers, and abrupt seasonal transitions. The mean temperature ranges from -4°C to 0°C (25°F to 32°F) in January, and 18°C to 23°C (64°F to 73°F) in July. Temperatures as high as 43°C (109°F)

have been recorded, however, while the record low is -34°C (-29°F). Rainfall decreases from west to east; the plains around the Tisza River depend on irrigation to prevent crop failure from summer drought. Average annual rainfall ranges from around 51 centimeters (20 inches) in the east to approximately 76 centimeters (30 inches) in the west.

4 🌐 TOPOGRAPHIC REGIONS

Hungary can be divided into four major regions. To the north, a long system of low mountains and hills stretches across the country for 400 kilometers (250 miles) from southwest to northeast. East of the Danube River and south of this mountain system is the Great Alföld, Hungary's largest region and its agricultural heartland. The northern mountains divide the land west of the Danube into two regions. In the northeast corner of the country is the Little Alföld. To the south is the hilly region known as Transdanubia, between the mountains and the Danube.

HUNGARY



5 OCEANS AND SEAS

Hungary is a landlocked country.

6 INLAND LAKES

Lake Balaton, 120 kilometers (75 miles) southwest of Budapest, is Hungary's largest lake; it is also the largest freshwater lake in Central Europe. About 72 kilometers (45 miles) long, its width varies, never exceeding 13 kilometers (8 miles). It averages a little more than 10 feet in depth. There are few other lakes in Hungary. Lake Fertő (also known as Neusiedler See), on the northwestern border, is shared with Austria; Hungary's portion is only about one-fourth of the total. Lake Velence, between Lake Balaton and Budapest, is adjusted artificially to maintain water depths between 1 and 2 meters (3 and 6 feet). Hungary has many mineral springs, which are used for both health and recreational purposes.

7 RIVERS AND WATERFALLS

Hungary's longest and most important river is the Danube (Duna), which enters the country in the northwest, where it forms the western portion of the border with Slovakia. It flows eastward until it bends north of Budapest and then flows south, roughly at the center of the country, until it crosses the border with Serbia and Montenegro. Altogether, about 386 kilometers (240 miles) of the Danube's total length of 2,776 kilometers (1,725 miles) border or flow through Hungary. The Rába River flows into the Danube on the Slovakian border, and the Drava joins it much farther south. The Tisza River, which drains much of eastern Hungary, is a tributary of the Danube. It rises in the Carpathian Mountains of Ukraine, enters Hungary in the northeast, and flows southward through the Great Plain, joining the Danube farther south in Serbia and Montenegro. Other notable rivers in Hungary include the

HUNGARY



EPD/Péter Borzsák

Beke (Peace) Cave at Aggteleki Park in Hungary.

Mura River, the Kapos River, the Sió River, and the Marcal River.

8 🌐 **DESERTS**

There are no desert regions in Hungary.

9 🌐 **FLAT AND ROLLING TERRAIN**

Hungary has two distinct plains regions. The larger and more important one is the Great Alföld, which spreads across central and eastern Hungary, occupying all of the land south of the northern mountain system. It is a fertile basin with average elevations of slightly more

than 91 meters (300 feet). The Danube forms its western boundary, and it is traversed from north to south by the Tisza River.

In the northwest corner of the country is the Little Alföld, whose composition and elevation are similar to those of the larger plain to the south.

The hills of Hungary's northern uplands rise to elevations of 244 to 305 meters (800 to 1,000 feet). A few isolated parts of the Alpine foothills on the Austrian border rise to nearly 914 meters (3,000 feet). Farther south, the

HUNGARY

Transdanubia region is composed of rolling, hilly land that rises to elevations of 610 meters (2,000 feet).

10 MOUNTAINS AND VOLCANOES

Reaching elevations of 400 to 700 meters (1,300 to 2,300 feet), the Bakony Mountains constitute the major geographical feature west of the Danube River. Farther east, the Pilis Mountains rise between the Bakony range and the Danube. The hills and mountains east of the Danube account for 4,988 square kilometers (3,100 square miles) of the country's area. They are the only uplands in the country that are part of the Carpathian system. The individual ranges in the group extend northeastward from the gorge of the Danube River near Esztergom for about 225 kilometers (140 miles). Their highest point—and the highest point in Hungary—is Mount Kékes (1,014 meters/3,327 feet) in the Mátra range.

11 CANYONS AND CAVES

The caverns of Aggteleki Park are small but fascinating.

12 PLATEAUS AND MONOLITHS

There are no significant plateaus or monoliths in Hungary.

13 MAN-MADE FEATURES

An extensive series of levees have been built on Hungary's plains to prevent disastrous flooding of the Tisza and Danube Rivers. In the nineteenth century, floods around these

DID YOU KNOW?

Geothermal aquifers underlie nearly all of Hungary, sending large volumes of water between 40°C (104°F) and 70°C (158°F) to the earth's surface. Much of this water is used to heat greenhouses.

rivers came close to destroying the two cities that currently combine to make up Budapest. The city is located on both banks of the Danube, and eight bridges across the river link its two sectors.

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Iceland

- **Official name:** Republic of Iceland
- **Area:** 103,000 square kilometers (39,769 square miles)
- **Highest point on mainland:** Öraefajökull (Hvannadalshnukur) (2,119 meters/ 6,952 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Western
- **Time zone:** Noon = noon GMT
- **Longest distances:** 490 kilometers (304 miles) from east to west; 312 kilometers (194 miles) from north to south
- **Land boundaries:** None
- **Coastline:** 4,988 kilometers (3,099 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

The westernmost European country, Iceland is an island nation in the North Atlantic Ocean just below the Arctic Circle. It is northwest of the United Kingdom and southeast of Greenland. With a total area of about 103,000 square kilometers (39,769 square miles), the country is slightly smaller than the state of Kentucky. Iceland is administratively divided into twenty-three counties and fourteen independent towns.

2 🌐 TERRITORIES AND DEPENDENCIES

Iceland claims no territories or dependencies.

3 🌐 CLIMATE

Iceland has a relatively mild and steady climate despite its high altitude and its proximity to the Arctic. Because of oceanic influences such as the North Atlantic Drift (a continuation of the Gulf Stream), climatic conditions are moderate in all sections of the island. The mean annual temperature at Reykjavík is about 5°C (about 41°F), with a range from -1°C (31°F) in January to 11°C (52°F) in July. In the northwestern, northern, and eastern coastal regions, which

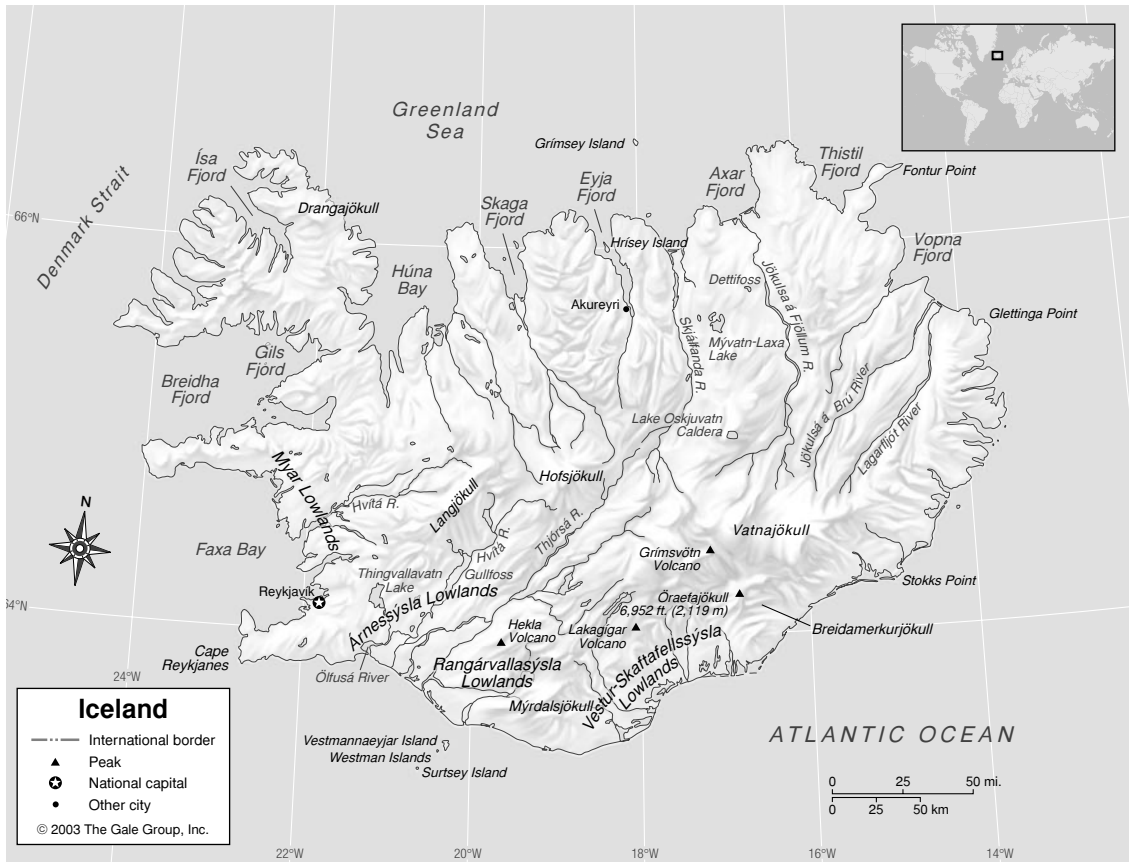
are subject to the effects of polar currents and drifting ice, temperatures are generally lower. Windstorms of considerable violence are characteristic during much of the winter season.

Annual precipitation ranges between about 127 and 203 centimeters (about 50 and 80 inches) along the southern coast, but is only about 51 centimeters (about 20 inches) along the northern coast. The southern slopes of some of Iceland's interior mountains receive up to about 457 centimeters (about 180 inches) of precipitation per year.

4 🌐 TOPOGRAPHIC REGIONS

Iceland consists mainly of a central volcanic plateau that has elevations ranging from 700 to 800 meters (2,297 to 2,625 feet) and is ringed by mountains. Lava fields cover about one-ninth of the country and glaciers cover about one-eighth. Geologically, the country is still very young and bears signs of still being in the making. It appears abrupt and jagged without the softness of outline that characterizes more mature landscapes. The average height is 500 meters (1,640 feet) above sea level.

ICELAND



The largest lowland areas include Árnessýsla, Rangárvallasýsla, and Vestur-Skaftafellssýsla in the south and Myrar in the west. In the plateaus, land is broken into more or less tilted blocks, with most leaning toward the interior of the country. Glacial erosion has played an important role in giving the valleys their present shape. In some areas, such as between Eyjafjörður and Skagafjörður, the landscape possesses alpine characteristics. There are numerous and striking gaping fissures within the glacially active volcanic belts.

Iceland straddles the Mid-Atlantic Ridge, which is a large fissure resulting from the continuing separation of the North American Plate and the Eurasian Plate. This plate activ-

ity is responsible for most of the volcanic and seismic activity in the country.

5 OCEANS AND SEAS

Seacoast and Undersea Features

The Greenland Sea, an extension of the Arctic Ocean, borders Iceland on the north. It also has a southern coastline on the Atlantic Ocean.

Sea Inlets and Straits

The Denmark Strait lies to the northwest of Iceland and separates the country from Greenland. The Strait connects the Arctic Ocean with the Atlantic Ocean.

The peninsula on which Reykjavík sits encloses the Faxa Bay.

The rugged northern coast offers many good natural harbors where the fjords have been deepened by glacial erosion. From east to west, some of these fjords are: Vopna Fjord, separated from Thistil Fjord by Fontur Point; Axar Fjord; Eyja Fjord; and Skaga Fjord. West of Skaga Fjord the coast sweeps in, forming Húna Bay, then turns north toward Denmark Strait. The western coast also contains many fjords; among these are Ísa Fjord, Gils Fjord, and Breidha Fjord.

Islands and Archipelagos

Numerous islands, some of which are inhabited, lie off the coast. The largest ones are the Westman Islands in the south, Hrísey Island in the north, and Grímsey Island at the edge of the Arctic Circle. Several small islands were formed due to underwater volcanic eruptions. The last such eruption, which began in 1963 and ended in 1967, built up the island of Surtsey, which now covers an area of 2.8 square kilometers (1.1 square miles). Other islands have been destroyed by similar eruptions, such as that of Vestmannaeyjar crater in 1973, which erupted and buried one-third of the island of the same name.

Coastal Features

Icelandic coasts can be divided into two main types. In regions not drained by the debris-laden glacial rivers, the coasts are irregular, incised with numerous fjords and smaller inlets. The other type of coast is sand, with smooth outlines featuring extensive offshore bars with lagoons behind them. The beaches from Djúpivogur in the southeast to Ölfusá in the southwest belong to this category.

Cape Reykjanes lies at the tip of the same peninsula where Reykjavík is located. Moving around the coast to the southeast, one can travel halfway around the island without encountering any notable features other than

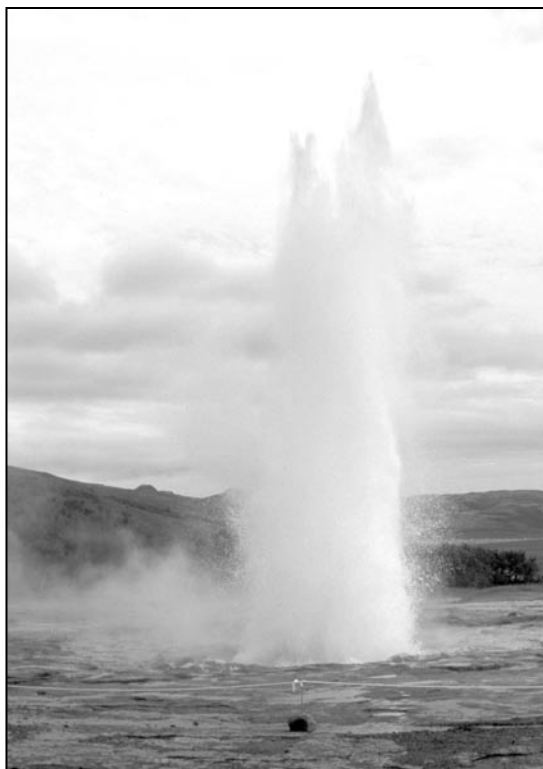
DID YOU KNOW?

Sprouting hot springs, or geysers, are found in areas of low temperatures (near glacial regions for instance), where underwater hot springs are located. The most famous is the Great Geysir in Haukadalur in South Iceland, from which the international word *geyser* is derived. It has been known to eject a column of hot water to a height of about 60 meters (200 feet). Another renowned geyser in the vicinity of the Great Geysir is Strokkur.

Stokks Point. Glettinga Point is located at the northeast corner of the country.

6 INLAND LAKES

Iceland possesses numerous lakes, mostly of tectonic origin (created by the shifting of tectonic plates). Others resulted from the deepening of valleys by glacial erosion or damming of rivers by lava flows, glacial deposits, and rockslides. Small crater lakes are common, especially in the Landmannalaugar-Veidivötn area, where the Lake Oskjuvatn Caldera has an area of 11 square kilometers (4.2 square miles) and a depth of 217 meters (712 feet). On the sandy shores, lagoon lakes are common. The largest lake in the country is Thingvallavatn in the southwest, at 84 square kilometers (32 square miles). Mývatn-Laxa Lake, in the northeast, is well-known, both for the large variety of birds that inhabits its shores and for its excellent fishing.



EPD/Saxifraga/Janus Verkerk

One of the most active geysers in the world is Strokkur, in Iceland, with 30-meter (100-foot) eruptions.

7 RIVERS AND WATERFALLS

Due to the heavy rainfall, Icelandic rivers are numerous and relatively large. Thjórsá, the longest river, has a length of 237 kilometers (147 miles). Jökulsá á Fjöllum, the second-longest river, is 206 kilometers (128 miles) long. Other major rivers include Hvítá and Ölfusá in the south, Skjálfanda in the north, and Lagarfljót and Jökulsá á Brú in the east.

Icelandic rivers are mainly of two types: glacial and clear-water rivers. Glacial rivers usually divide into numerous intertwined tributaries that constantly change their courses and swing over the plains lying below the glaciers. This is especially true of the rivers running south from Vatnajökull. In that area,

it is extremely difficult to build a permanent road, since the bridges and parts of the roads are constantly being washed away when the glacial rivers reach their maximum discharge, usually in July and August.

Clear-water rivers are of two kinds. One drains the old basalt areas and has a variable amount of water with maximum flow in late spring. The other kind drains regions covered with post-glacial lava and usually has small variations in water volume, which makes them ideally suited for hydroelectric power production. Swift currents make Icelandic rivers for the most part unnavigable.

An impressive characteristic of the youthful Icelandic landscape is its waterfalls. The most famous are Gullfoss in Hvítá, Dettifoss in Jökulsá á Fjöllum, Aldeyjarfoss and Godhafoss in Skjálfandaflljót, Hraunfossar in Hvítá in Borgarfjörður, and Skógafoss in Skógá.

Iceland presently has three sites designated as wetlands of international importance by the Ramsar Convention on Wetlands. The sites cover a total area of 590 square kilometers (228 square miles). The Grudnarfjörður wetland is an estuary and sea bay consisting of mudflats rich in invertebrates, supporting musselbanks, and saltmarsh vegetation. Part of the region of Mývatn-Laxa Lake is a marsh complex fed by both cold and thermal springs. The site supports freshwater marshes, a rich submerged variety of flora, algal communities, woodland, bog, and moorland. The abundant invertebrate fauna here provide food for large numbers of waterfowl. The site is especially important for two duck species that nest only in Iceland and for a large number of molting Anatidae (another type of waterfowl). The last site, Thjórsárver, includes abundant pools and lakes and extensive marshland dominated by sedges.

DID YOU KNOW?

The Arctic Circle is the imaginary line that circles the globe at about 66.5° north latitude. Areas north of the circle experience the phenomenon known as the midnight sun, which is a period of time when the sun is visible for twenty-four hours or longer. During the summer solstice (usually June 21 or 22), the sun is visible on the horizon at midnight from all points along the Arctic Circle. As you move farther north, seasons of sunshine get longer, so that at the North Pole, there are six months of continuous sunshine from the vernal equinox (usually March 21 or 22) until the autumnal equinox (usually September 21 or 22). The Arctic Circle also serves as a boundary between the North Temperate and the North Frigid climate zones.

8 🌐 DESERTS

There are no desert regions in Iceland.

9 🌐 FLAT AND ROLLING TERRAIN

Glaciers cover an area of 11,200 square kilometers (4,323 square miles), or 11 percent of the total land area. Nearly all types of glaciers, from small cirque glaciers to extensive plateau icecaps, are represented. The biggest of these icecaps, Vatnajökull, with an area of 8,300 square kilometers (3,204 square miles)

and a maximum thickness of 1,000 meters (3,281 feet), is larger than all the glaciers in continental Europe put together. One of its southern outlets, Breidamerkurjökull, reaches more than 120 meters (394 feet) below sea level. Other large icecaps are Langjökull (1,025 square kilometers/396 square miles) and Hofsjökull (953 square kilometers/368 square miles), both located in the Central Highlands; Mýrdalsjökull (700 square kilometers/270 square miles) in the south; and Drangajökull (160 square kilometers/62 square miles) in the northwest. The altitude of the glaciation limit is lowest in the northwest, at about 600 meters (1,961 feet), and highest in the highlands north of Vatnajökull, at over 1,500 meters (4,922 feet).

10 🌐 MOUNTAINS AND VOLCANOES

Many mountain peaks form a ring around the central plateau. Most of these peaks are volcanic in nature, affected by the underlying thermal activity that characterizes most of the country. Nearly every type of volcanic activity is found underground in Iceland. Fissures creating lava fountains, which are called “crater rows,” are the most common. The most notable one is the Lakagígar (The Laki Eruption), which in 1783 poured out the most extensive lava flow in history, covering 565 square kilometers (218 square miles). Other crater rows include Reykjanes, Krisuvik, and Brennisteinsfjöll. Shield volcanoes such as the Skjaldbreiðhur are built up over time from repeated lava eruptions.

Iceland also has active volcanoes fed by magma chambers. Many of them are blanketed by perpetual ice, such as those under the Vatnajökull glacier: Grímsvötn and Bardarbunga. Each eruption of these volcanic centers is accompanied by flooding as volcanic activity melts the ice. These floods occur about every five to ten years even without volcanic eruptions, due to underground thermal activity.

ICELAND

In 1362, the eruption of Öraefajökull (Hvannadalshnukur) devastated the settlement at the foot of the volcano. Öraefajökull, a three-peaked volcano, is the highest point in the country at a height of 2,119 meters (6,952 feet) on the southeastern coast of the island. The Vatnajökull glacier covers this volcano. The most famous Icelandic volcano is Hekla, which was renowned throughout the Roman Catholic world during the Middle Ages as the so-called “Abode of the Damned.”

11 🌐 CANYONS AND CAVES

The Kverkfjöll Glacial Cave is one of the most famous of its kind. It is located at the northern rim of the Vatnajökull glacier and extends for about 2,850 meters (9,350 feet) long and 525 meters (1,722 feet) deep. Glacial caves such as this are carved out by hot water volcanic springs below the glaciers.

Viðgelmir, Surtshellir, and Stafanshellir are lava tubes found in the Hallmundarhraun area. These caverns are formed when lava streams flow continuously in the same river-like channel for many hours or even many days. The outer edges of the flow may begin to cool and form a solid crust, creating a tube through which the molten lava continues to flow. Parts of the tube remain once the initial eruption is completed and the molten lava drains to lower ground, leaving behind a long tunnel. Lava tubes sometimes feature lava stalactites and stalagmites. The Surtshellir Cave (also known as the Fire Giants Cave) is one of the longest lava tubes in the world: 1,970 meters (6,463 feet) long and about 37 meters (121 feet) high.

Ásbyrgi is a horseshoe-shaped canyon that is part of Jökulsárgljúfur National Park, east of Húsavík and north of Dettifoss. Eldgjá is a fifteen-mile-long canyon-like rift located northeast of Mýrdalsjökull. It is actually one of the most extensive explosion fissures in the

world. It also contains one of Iceland’s most beautiful waterfalls, the Ofaerufoss.

12 🌐 PLATEAUS AND MONOLITHS

The inland plateau is a rugged, barren area above sea level. The Mid-Atlantic Ridge runs directly under the center of this region. It makes the plateau the land of violent natural wonders, including volcanoes, hot springs, steaming geysers, glaciers, and glistening lava fields. Earthquakes are frequent in Iceland, but they are rarely dangerous.

13 🌐 MAN-MADE FEATURES

A 1995 avalanche, resulting in twenty deaths, led the small village of Flateyri (population 300) to construct a massive barrier dam system to protect the area from future avalanche dangers. The “A”-shaped structure stretches uphill from the village, which lies on the coast of the Denmark Strait, and serves to deflect the massive snow slides around the village.

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India

- **Official name:** Republic of India
- **Area:** 3,287,590 square kilometers (1,269,345 square miles)
- **Highest point on mainland:** Kanchenjunga (8,595 meters/28,208 feet)
- **Lowest point on land:** Sea level
- **Hemispheres:** Northern and Eastern
- **Time zones:** 3:30 P.M. = noon GMT in West; 6:30 P.M. = noon GMT in East.
- **Longest distances:** 3,214 kilometers (1,997 miles) from north to south; 2,933 kilometers (1,822 miles) from east to west
- **Land boundaries:** 14,103 kilometers (8,744 miles) total boundary length; Bangladesh 4,053 kilometers (2,513 miles); Bhutan 605 kilometers (375 miles); China 3,380 kilometers (2,096 miles); Myanmar 1,463 kilometers (907 miles); Nepal 1,690 kilometers (1,048 miles); Pakistan 2,912 kilometers (1,805 miles)
- **Coastline:** 7,000 kilometers (4,340 miles)
- **Territorial sea limits:** 22 kilometers (12 nautical miles)

1 🌐 LOCATION AND SIZE

India is located in the southern part of Asia and borders the Arabian Sea, the Indian Ocean, and the Bay of Bengal. It occupies most of the South Asian continent and is one of the largest countries on Earth and one of the most heavily populated. India consists of twenty-eight states and seven union territories.

2 🌐 TERRITORIES AND DEPENDENCIES

Part of the southern border with Bangladesh is undefined, as is part of the border with China in the northeast (the McMahon Line). Since their creation as independent countries in 1947, India and Pakistan have disputed ownership of the northern regions of Jammu and Kashmir, a simmering conflict that has broken into fighting between the neighbors in 1948, 1965, and 1971, and continues to be a source of sporadic conflict. China also occupies portions of northeastern Jammu and Kashmir that are claimed by India, which caused fighting in 1962. A line of control divides Jammu

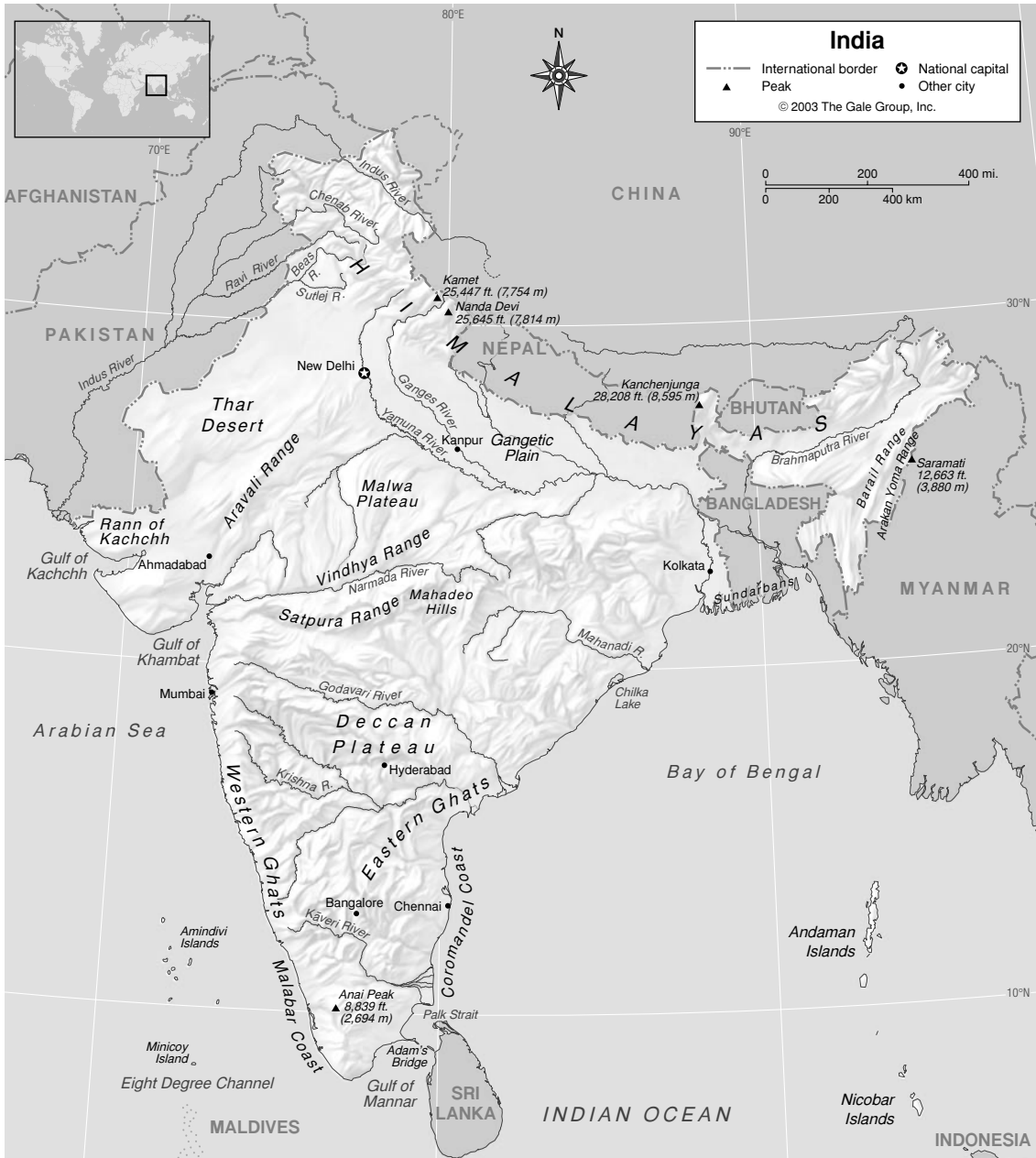
and Kashmir, excluding the eastern sector along the Siachen Glacier.

3 🌐 CLIMATE

India experiences a variety of different climate conditions due to its great size and varying terrain. The Greater Himalayan region has a dry, subarctic climate, but the valleys and outer ranges are temperate or subtropical. The inland of the peninsula ranges from subtropical to temperate. The coasts of the peninsula are humid and tropical.

India's four seasons are determined by the monsoons, a pattern of winds sweeping across southern Asia. There is a dry, cool season (winter) from December through March; a hot season (spring) in April and May; the rainy season (summer) from June through September; and a less-rainy season (autumn) in October and November. India's north has frost in the cool season and temperatures as high as 49°C (120°F) in the hot season. As an example of

INDIA



South India's climate, the city of Chennai has an average temperature of 28°C (83°F). Temperatures for the entire nation reach an average high of 38° to 40°C (100° to 104°F) and dip to an average low of 10°C (50°F).

India's weather is characterized by intense, sudden changes, such as the onset of the monsoon, flash floods, or violent thunderstorms. Cyclones from the Indian Ocean often affect the coastal areas in April through June and

September through December. Rainfall varies extremely in India, from the Thar Desert which receives less than 13 centimeters (five inches) yearly, to Cherrapunji in the northeastern mountains, known as the world's rainiest place, with an average of 1,270 centimeters (500 inches) per year. Rainfall for the entire nation of India averages 105 centimeters (41 inches). Snow falls in the Himalayan area, which also produces hailstorms that sweep down over the peninsula. Dust storms affect many regions of India.

4 TOPOGRAPHIC REGIONS

One of the largest countries on Earth, as well as one of the most heavily populated, India is a nation of great geographic diversity. The extraordinary geographic variety of India can be divided into three main regions: the Himalayan mountain range of the north; the broad and flat alluvial plain of the Ganges River to the south of the mountains; and, even further south, the vast peninsula that juts into the Indian Ocean, creating the Arabian Sea and the Bay of Bengal, with small island chains offshore. India's mountainous northeastern region is nearly separated from the rest of the country by Bangladesh and Nepal. India's wonderfully diverse geographical features, encompassing everything from snowy peaks to desert to rainforest, are at risk from environmental damage, mostly due to population pressure. Many local groups have organized to fight pollution and protect wildlife.

Local political parties changed the names of several well-known Indian locations during the 1990s. Most noteworthy of these changes are the cities of Mumbai (formerly Bombay), Chennai (formerly Madras) and Kolkata (formerly Calcutta), and the state of Bangla (formerly West Bengal).

5 OCEANS AND SEAS

Seacoast and Undersea Features

India's peninsula juts into the Indian Ocean, with the Arabian Sea on the east and the Bay of Bengal on the west. The country is situated on vital maritime trade routes between the Middle East, Africa, and East Asia.

Sea Inlets and Straits

The Eight Degree Channel separates the Lakshadweep islands from the small island nation of the Republic of Maldives. Inlets of the Indian Ocean surrounding India include the Arabian Sea to the west, the Laccadive Sea between the Indian peninsula and the Maldives to the southwest, and the Bay of Bengal in the east. In the northwest, the Gulf of Kachchh and the Gulf of Khambhat are inlets of the Arabian Sea. In the southeast, the Palk Strait separates India from Sri Lanka.

Islands and Archipelagos

Two groups of islands belonging to India lie on each side of the southern tip of the country. The areas and populations of these island chains are very small.

The eastern group, the Andaman and Nicobar Islands, formed from an undersea mountain range, are located in the Bay of Bengal. The total land area of these lightly populated islands is roughly 8,287 square kilometers (3,200 square miles).

In the Arabian Sea are the Laccadive, Minicoy, and Amindivi Islands. They are collectively named Lakshadweep. The total area of these small coral islands is only about 50 square kilometers (18.5 square miles). Most, although not all, of these low-lying small islands are occupied, and population density is high on the inhabited islands.

INDIA



EPD/Cynthia Bassett

Dal Lake in northern India.

Coastal Features

Not far south of where the India-Pakistan border meets the ocean, the broad and short Kathiwar Peninsula projects into the Arabian Sea. To the north of this peninsula lies the Gulf of Kachchh, and the Gulf of Khambhat extends to the south and east. The Gulf of Kachchh includes a Marine National Park, which is an effort to protect coral reefs and wetland wildlife habitat. South of the Gulf of Kachchh, the coast continues, with few inlets and a flat sandy shore, to its southernmost point, Cape Comorin. The southern section of this coastline is known as the Malabar Coast.

The eastern coast of India, on the Bay of Bengal, begins in the northeast at the fragmented Ganges River delta and continues generally southwest before curving to the south, at which point it becomes known as the Coromandel Coast. The Gulf of Mannar indents

India's southern tip, where Cape Comorin joins the two coasts of the immense Indian peninsula.

6 INLAND LAKES

India's landscape contains a variety of lakes—salt water and fresh water as well as natural and artificial.

Chilka Lake is the largest lake in India, with an area of 1,100 square kilometers (425 square miles). Wular Lake, in India-controlled Jammu and Kashmir, is India's largest freshwater lake (202 square kilometers/78 square miles). It contains large quantities of floating vegetation, and it is also an important source of fish and of irrigation water.

7 RIVERS AND WATERFALLS

The Indus River, rising in the Tibetan Himalayas of China, flows through Indian-controlled Jammu and Kashmir before entering Pakistan.

The Indus has five principal tributaries, also of Himalayan origin, that are of importance to India: the Sutlej, Beas, Ravi, Chenab, and Jhelum. These rivers drain part of the Indian state of Punjab, whose name is derived from panch ab, meaning five waters or rivers.

South of Punjab and east of the desert region of western India is the most revered and mightiest of India's rivers, the Ganges. The origin of the Ganges is identified in an ice cave about 48 kilometers (30 miles) north of Nanda Devi, almost on the border with China. The river is about 2,510 kilometers (1,560 miles) in length. The Yamuna, the major tributary of the Ganges, also rises in the Himalayas. The Ganges has shifted its course many times over the years, and as it approaches the border with Bangladesh it branches into many streams and rivers to the south. They are the beginnings of the enormous Ganges Delta, most of which is found within Bangladesh. After entering Bangladesh, the Ganges merges with the Brahmaputra River before emptying into the Bay of Bengal. Most of the course of the Brahmaputra is in China, but it enters India in its northeastern corner. The river then curves west and flows through northeast India in the Assam Valley along a narrow plain, before entering Bangladesh, where it merges with the Ganges.

South of the Gangetic Plain there are six major rivers. Four of these rivers—the Mahanadi, the Godavari, the Krishna, and the Kâeri—flow into the Bay of Bengal. Several of the rivers have waterfalls and cascades in their upper courses.

The Mahanadi River, which rises in Madhya Pradesh, is about 900 kilometers (560 miles) long and is an important source of irrigation water in Orissa state.

Only two major rivers of the peninsula flow into the Arabian Sea: the Narmada and the Tâpi. The Narmada rises in eastern Mad-

hya Pradesh, flows through Gujarat State, then forms a thirteen-mile-wide estuary at the Gulf of Khambhat. The shorter Tâpi River follows a companion course south of the Narmada.

8 🌐 DESERTS

Below the state of Punjab and extending southwest along the Pakistani border is the sparsely populated Thar Desert. This desert covers most of the state of Rajasthan, and 3,000 square kilometers (1,158 square miles) of its terrain of sand dunes and flat thorn scrub is protected as the Thar Desert National Park.

9 🌐 FLAT AND ROLLING TERRAIN

The Gangetic (or Indo-Gangetic) Plain lies at the foot of the Himalayan mountain barrier, extending from Assam and the Bay of Bengal on the east into Pakistan and to the Arabian Sea on the west. Covering some 776,996 square kilometers (300,000 square miles), it extends roughly 2,414 kilometers (1,500 miles) from east to west. The entire region is very fertile and very densely populated.

Other grasslands in India include the Terai region in the low mountains along the border of Nepal, which includes savannah and alpine grassland types. Bamboo grasslands occur across the Himalayan foothills, especially in northeast India.

India's forest cover is estimated at approximately 19 percent of the country. Madhya Pradesh in the center of the country and Arunachal Pradesh in the extreme northeast are the states with the most forest cover. There is a great range of forest types, including alpine scrub in the Himalayan regions; temperate evergreen in Jammu and Kashmir and other hill areas; tropical rainforest in the Western Ghats, northeastern states, and islands; and mangroves in the Sundarbans on the Bay of Bengal and in Gujarat.

DID YOU KNOW?

The Silk Road is an ancient seven thousand-mile-long trading route that extended from east-central China through the present-day countries of India, Pakistan, Iran, Iraq, and Syria. It essentially connected the region of the Yellow River Valley in China to the Mediterranean Sea. From there, costly Chinese silk could be transported throughout the Roman Empire. The Silk Road served not only as a transportation route for trade but also as a route of cultural exchange, as travelers and traders from different regions shared religious, political, and social beliefs and customs.

10 🌐 MOUNTAINS AND VOLCANOES

The name Himalaya, which means “abode of snow” in Sanskrit, is given to the tremendous system of mountain ranges, the loftiest in the world, that extends along the northern frontiers of Pakistan, India, Nepal, and Bhutan. The Himalayas are made up of three parallel ranges. The northernmost and highest are the Greater Himalayas. The world’s tallest mountains are found in this range, with most peaks over 6,096 meters (20,000 feet). India’s highest mountain is in this range, the five-peaked Kanchenjunga (8,595 meters/28,208 feet) on the border between Nepal and India. Other great peaks include Kamet (7,756 meters/25,447 feet) and Nanda Devi (7,817 meters/

25,645 feet), which lie north of New Delhi and west of Nepal.

South of the Greater Himalayas is the Lesser Himalayas range. Their peaks are mostly between 1,524 and 3,657 meters (5,000 and 12,000 feet) in height; although some exceed 4,572 meters (15,000 feet). The Outer Himalayas are the southernmost and lowest of the three ranges, with peaks between 914 and 1,219 meters (3,000 and 4,000 feet) in height.

There are many other mountain ranges in India, although none nearly so large and high as the Himalayas. At the southern end of the country are the two mountain ranges called the Ghats. The Western and Eastern Ghats run parallel to the coasts and separate the interior plateau from the coastal plains. The mountains called the Western Ghats have an average elevation of 1,066 meters (3,500 feet). The Eastern Ghats are disconnected and much lower than the Western Ghats, averaging only about 610 meters (2,000 feet) in elevation.

The easternmost part of India, nearly separated from the rest of the country by Bangladesh, is very mountainous. The chief ranges here are the Barail Range and the Arakan Yoma Range along the border with Myanmar, whose highest peak is Saramati (3,866 meters/12,683 feet). These ranges are sometimes considered a southern extension of the Himalayas.

11 🌐 CANYONS AND CAVES

The Himalayan regions of Ladakh, Zaskar, and Sikkim possess many deep canyons, as do the hill regions, such as Madhya Pradesh at India’s center. The Brahmaputra River cuts a deep gorge through the mountains of north-east India, as does the Ganges at its source in the Himalayas

12 🌐 PLATEAUS AND MONOLITHS

The largest of India’s plateaus are the central Malwa Plateau between the Aravali and

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EPD/Saxifraga/Sytske Dijkse

The Thar Desert lies along India's border with Pakistan.

Vindhya Ranges, the Chota Nagpur in the northeast of the peninsula, and the Deccan Plateau. The name Deccan, which means “south,” is often applied loosely to all the elevated land of southern India. More properly, however, it refers to the western portions of the irregular central plateau. The Deccan is actually not a single plateau but a series of plateaus topped by rolling hills and intersected by many rivers. The Deccan plateau system averages about 762 meters (2,500 feet) in elevation in the west and about 305 meters (1,000 feet) in the eastern parts.

13 🌐 **MAN-MADE FEATURES**

India has a number of artificial lakes. In Tamil Nadu state, an extensive system of shallow irrigation reservoirs known as “tanks” has been maintained since the eighth century A.D. Nagarjuna Lake, on which the extensive

Nagarjuna Dam is located, is the third-largest man-made lake in the world.

14 🌐 **FURTHER READING**

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APPENDIX A

A CONTINENTS BY AREA, FROM LARGEST TO SMALLEST

RANK	CONTINENT	AREA (SQ MI)	AREA (SQ KM)
1	Asia	17,139,445	44,391,162
2	Africa	11,677,239	30,244,049
3	North America	9,361,791	24,247,039
4	South America	6,880,706	17,821,029
5	Antarctica	5,500,000	14,245,000
6	Europe	3,997,929	10,345,636
7	Australia	2,967,909	7,686,884

B COUNTRIES OF THE WORLD BY LAND AREA, FROM LARGEST TO SMALLEST

RANK	COUNTRY	AREA (SQ MI)	AREA (SQ KM)	PERCENT OF WORLD LAND AREA
1	Russia	6,592,735	17,075,200	11.0
2	Antarctica	5,405,000	14,000,000	9.4
3	Canada	3,851,788	9,976,140	6.7
4	United States of America	3,717,792	9,629,091	6.4
5	China	3,705,386	9,596,960	6.4
6	Brazil	3,286,470	8,511,965	5.7
7	Australia	2,967,893	7,686,850	5.1
8	India	1,269,338	3,287,590	2.3
9	Argentina	1,072,157	2,776,890	1.9
10	Kazakhstan	1,049,150	2,717,300	1.8
11	Sudan	967,493	2,505,810	1.7
12	Algeria	919,590	2,381,740	1.6
13	Congo, Democratic Republic of the	905,563	2,345,410	1.6
15	Mexico	761,606	1,972,550	1.3
16	Saudi Arabia	756,984	1,960,582	1.3
17	Indonesia	741,096	1,919,440	1.3
18	Libya	679,358	1,759,540	1.2
19	Iran	636,293	1,648,000	1.1
20	Mongolia	604,247	1,565,000	1.0
21	Peru	496,223	1,285,220	0.9
22	Chad	495,755	1,284,000	0.9
23	Niger	489,189	1,267,000	0.8
24	Angola	481,350	1,246,700	0.8
25	Mali	478,764	1,240,000	0.8

APPENDIX B

B COUNTRIES OF THE WORLD BY LAND AREA, FROM LARGEST TO SMALLEST *(continued)*

RANK	COUNTRY	AREA (SQ MI)	AREA (SQ KM)	PERCENT OF WORLD LAND AREA
26	South Africa	471,008	1,219,912	0.8
27	Colombia	439,733	1,138,910	0.8
28	Ethiopia	435,184	1,127,127	0.8
29	Bolivia	424,162	1,098,580	0.7
30	Mauritania	397,953	1,030,700	0.7
31	Egypt	386,660	1,001,450	0.7
32	Tanzania	364,879	945,037	0.6
33	Nigeria	356,667	923,768	0.6
34	Venezuela	352,143	912,050	0.6
35	Namibia	318,694	825,418	0.6
36	Pakistan	310,401	803,940	0.5
37	Mozambique	309,494	801,590	0.5
38	Turkey	301,382	780,580	0.5
39	Chile	292,258	756,950	0.5
40	Zambia	290,584	752,614	0.5
41	Myanmar	261,969	678,500	0.5
42	Afghanistan	250,000	647,500	0.4
43	Somalia	246,199	637,657	0.4
44	Central African Republic	240,534	622,984	0.4
45	Ukraine	233,089	603,700	0.4
46	Botswana	231,803	600,370	0.4
47	Madagascar	226,656	587,040	0.4
48	Kenya	224,961	582,650	0.4
49	France	211,208	547,030	0.4
50	Yemen	203,849	527,970	0.4
51	Thailand	198,455	514,000	0.3
52	Spain	194,896	504,782	0.3
53	Turkmenistan	188,455	488,100	0.3
54	Cameroon	183,567	475,440	0.3
55	Papua New Guinea	178,703	462,840	0.3
56	Sweden	173,731	449,964	0.3
57	Uzbekistan	172,741	447,400	0.3
58	Morocco	172,413	446,550	0.3
59	Iraq	168,753	437,072	0.3

APPENDIX B

B COUNTRIES OF THE WORLD BY LAND AREA, FROM LARGEST TO SMALLEST *(continued)*

RANK	COUNTRY	AREA (SQ MI)	AREA (SQ KM)	PERCENT OF WORLD LAND AREA
60	Paraguay	157,046	406,750	0.3
61	Zimbabwe	150,803	390,580	0.3
62	Japan	145,882	377,835	0.3
63	Germany	137,846	357,021	0.2
64	Congo, Republic of	132,047	342,000	0.2
65	Finland	130,127	337,030	0.2
66	Malaysia	127,316	329,750	0.2
67	Vietnam	127,243	329,560	0.2
68	Norway	125,181	324,220	0.2
69	Côte d'Ivoire	124,502	322,460	0.2
70	Poland	120,728	312,685	0.2
71	Italy	116,305	301,230	0.2
72	Philippines	115,830	300,000	0.2
73	Ecuador	109,483	283,560	0.2
74	Burkina Faso	105,869	274,200	0.2
75	New Zealand	103,737	268,680	0.2
76	Gabon	103,347	267,667	0.2
77	Guinea	94,926	245,857	0.2
78	United Kingdom	94,525	244,820	0.2
79	Ghana	92,100	238,540	0.2
80	Romania	91,699	237,500	0.2
81	Laos	91,428	236,800	0.2
82	Uganda	91,135	236,040	0.2
83	Guyana	83,000	214,970	0.1
84	Oman	82,031	212,460	0.1
85	Belarus	80,154	207,600	0.1
86	Kyrgyzstan	76,640	198,500	0.1
87	Senegal	75,749	196,190	0.1
88	Syria	71,498	185,180	0.1
89	Cambodia	69,900	181,040	0.1
90	Uruguay	68,039	176,220	0.1
91	Tunisia	63,170	163,610	0.1
92	Suriname	63,039	163,270	0.1
93	Bangladesh	55,598	144,000	0.1

APPENDIX B

B COUNTRIES OF THE WORLD BY LAND AREA, FROM LARGEST TO SMALLEST *(continued)*

RANK	COUNTRY	AREA (SQ MI)	AREA (SQ KM)	PERCENT OF WORLD LAND AREA
94	Tajikistan	55,251	143,100	0.1
95	Nepal	54,363	140,800	0.1
96	Greece	50,942	131,940	0.1
97	Nicaragua	49,998	129,494	0.1
98	Eritrea	46,842	121,320	0.1
99	Korea, North (Democratic People's Republic of)	46,540	120,540	0.1
100	Malawi	45,745	118,480	0.1
101	Benin	43,483	112,620	0.1
102	Honduras	43,278	112,090	0.1
103	Liberia	43,000	111,370	0.1
104	Bulgaria	42,822	110,910	0.1
105	Cuba	42,803	110,860	0.1
106	Guatemala	42,042	108,890	0.1
107	Iceland	39,769	103,000	0.1
108	Serbia and Montenegro	39,517	102,350	0.1
109	Korea, South (Republic of)	38,023	98,480	0.1
110	Hungary	35,919	93,030	0.1
111	Portugal	35,672	92,391	0.1
112	Jordan	35,637	92,300	0.1
114	Azerbaijan	33,436	86,600	0.1
115	Austria	32,378	83,858	0.1
116	United Arab Emirates	32,000	82,880	0.1
117	Czech Republic	30,450	78,866	0.1
118	Panama	30,193	78,200	0.1
119	Sierra Leone	27,699	71,740	0.05
120	Ireland	27,135	70,280	0.05
121	Georgia	26,911	69,700	0.05
122	Sri Lanka	25,332	65,610	0.04
123	Lithuania	25,174	65,200	0.04
124	Latvia	24,938	64,589	0.04
125	Togo	21,925	56,785	0.04
126	Croatia	21,831	56,542	0.04
127	Bosnia and Herzegovina	19,741	51,129	0.03

APPENDIX B

B COUNTRIES OF THE WORLD BY LAND AREA, FROM LARGEST TO SMALLEST *(continued)*

RANK	COUNTRY	AREA (SQ MI)	AREA (SQ KM)	PERCENT OF WORLD LAND AREA
128	Costa Rica	19,730	51,100	0.03
129	Slovakia	18,859	48,845	0.03
130	Dominican Republic	18,815	48,730	0.03
131	Bhutan	18,147	47,000	0.03
132	Estonia	17,462	45,226	0.03
133	Denmark	16,638	43,094	0.03
134	Netherlands	16,033	41,526	0.03
135	Switzerland	15,942	41,290	0.03
136	Guinea-Bissau	13,946	36,120	0.02
137	Moldova	13,067	33,843	0.02
137	Taiwan	13,892	35,980	0.02
138	Belgium	11,780	30,510	0.02
139	Lesotho	11,720	30,355	0.02
140	Armenia	11,506	29,800	0.02
141	Albania	11,100	28,748	0.02
142	Solomon Islands	10,985	28,450	0.02
143	Equatorial Guinea	10,831	28,051	0.02
144	Burundi	10,745	27,830	0.02
145	Haiti	10,714	27,750	0.02
146	Rwanda	10,169	26,338	0.02
147	Macedonia	9,781	25,333	0.02
148	Belize	8,867	22,966	0.02
149	Djibouti	8,494	22,000	0.01
150	El Salvador	8,124	21,040	0.01
151	Israel	8,019	20,770	0.01
152	Slovenia	7,820	20,253	0.01
153	Fiji	7,054	18,270	0.01
154	Kuwait	6,880	17,820	0.01
155	Swaziland	6,704	17,363	0.01
156	East Timor	5,640	14,609	0.01
157	Bahamas	5,382	13,940	0.01
158	Vanuatu	4,710	12,200	0.01
159	Qatar	4,416	11,437	0.01
160	Gambia, The	4,363	11,300	0.01

APPENDIX B

B COUNTRIES OF THE WORLD BY LAND AREA, FROM LARGEST TO SMALLEST *(continued)*

RANK	COUNTRY	AREA (SQ MI)	AREA (SQ KM)	PERCENT OF WORLD LAND AREA
161	Jamaica	4,243	10,990	0.01
162	Lebanon	4,015	10,400	0.01
163	Cyprus	3,571	9,250	0.01
164	Brunei	2,228	5,770	0.004
164	Puerto Rico	3,515	9,104	0.01
165	Trinidad and Tobago	1,980	5,128	0.003
166	Cape Verde	1,557	4,033	0.003
167	Samoa	1,104	2,860	0.002
168	Luxembourg	998	2,586	0.002
169	Comoros	838	2,170	0.001
170	Mauritius	718	1,860	0.001
171	São Tomé and Príncipe	386	1,001	0.0007
172	Dominica	291	754	0.0005
173	Tonga	289	748	0.0005
174	Kiribati	277	717	0.0005
175	Micronesia	271	702	0.0005
176	Palau	177	458	0.0003
177	Bahrain	239	620	0.0004
178	Saint Lucia	239	620	0.0004
179	Andorra	181	468	0.0003
181	Singapore	250	647.5	0.0004
181	Seychelles	176	455	0.0003
182	Antigua and Barbuda	171	442	0.0003
183	Barbados	166	430	0.0003
184	Saint Vincent and the Grenadines	150	389	0.0003
185	Malta	122	316	0.0002
186	Maldives	115	300	0.0002
187	Saint Kitts and Nevis	101	261	0.0002
188	Marshall Islands	70	181.3	0.0001
189	Liechtenstein	62	160	0.0001
190	San Marino	24	61.2	--
191	Tuvalu	10	26	--
192	Nauru	8.1	21	--
193	Monaco	0.7	1.95	--
194	Vatican City	0.17	0.44	--

APPENDIX C

C COUNTRIES OF THE WORLD, BY POPULATION

RANK	COUNTRY	CONTINENT	POPULATION (JULY 2002)
1	China	Asia	1,284,303,705
2	India	Asia	1,045,845,226
3	United States of America	North America	280,562,489
4	Indonesia	Asia	231,328,092
5	Brazil	South America	176,029,560
6	Pakistan	Asia	147,663,429
7	Russia	Europe	144,978,573
8	Bangladesh	Asia	133,376,684
9	Nigeria	Africa	129,934,911
10	Japan	Asia	126,974,628
11	Mexico	North America	103,400,165
12	Philippines	Asia	84,525,639
13	Germany	Europe	83,251,851
14	Vietnam	Asia	81,098,416
15	Egypt	Africa	70,712,345
16	Ethiopia	Africa	67,673,031
17	Turkey	Asia	67,308,928
18	Iran	Asia	66,622,704
19	Thailand	Asia	62,354,402
20	United Kingdom	Europe	59,778,002
21	France	Europe	59,765,983
22	Italy	Europe	57,715,625
23	Congo, Democratic Republic of the	Africa	55,225,478
24	Ukraine	Europe	48,396,470
25	Korea, South (Republic of)	Asia	48,324,000
26	South Africa	Africa	43,647,658
27	Myanmar	Asia	42,238,224
28	Colombia	South America	41,008,227
29	Spain	Europe	40,077,100
30	Poland	Europe	38,625,478
31	Argentina	South America	37,812,817
32	Tanzania	Africa	37,187,939
33	Sudan	Africa	37,090,298

APPENDIX C

C COUNTRIES OF THE WORLD, BY POPULATION *(continued)*

RANK	COUNTRY	CONTINENT	POPULATION (JULY 2002)
34	Algeria	Africa	32,277,942
35	Canada	North America	31,902,268
36	Morocco	Africa	31,167,783
37	Kenya	Africa	31,138,735
38	Peru	South America	27,949,639
39	Afghanistan	Asia	27,755,775
40	Nepal	Asia	25,873,917
41	Uzbekistan	Asia	25,563,441
42	Uganda	Africa	24,699,073
43	Venezuela	South America	24,287,670
44	Iraq	Asia	24,001,816
45	Saudi Arabia	Asia	23,513,330
46	Malaysia	Asia	22,662,365
47	Taiwan	Asia	22,548,009
48	Romania	Europe	22,317,730
49	Korea, North (Democratic People's Republic of)	Asia	22,224,195
50	Ghana	Africa	20,244,154
51	Mozambique	Africa	19,607,519
52	Sri Lanka	Asia	19,576,783
53	Australia	Australia	19,546,792
54	Yemen	Asia	18,701,257
55	Syria	Asia	17,155,814
56	Côte d'Ivoire	Africa	16,804,784
57	Kazakhstan	Asia	16,741,519
58	Madagascar	Africa	16,473,477
59	Cameroon	Africa	16,184,748
60	Netherlands	Europe	16,067,754
61	Chile	South America	15,498,930
62	Ecuador	South America	13,447,494
63	Guatemala	North America	13,314,079
64	Cambodia	Asia	12,775,324
65	Burkina Faso	Africa	12,603,185

APPENDIX C

C COUNTRIES OF THE WORLD, BY POPULATION *(continued)*

RANK	COUNTRY	CONTINENT	POPULATION (JULY 2002)
66	Zimbabwe	Africa	11,376,676
67	Mali	Africa	11,340,480
68	Cuba	North America	11,224,321
69	Malawi	Africa	10,701,824
70	Serbia and Montenegro	Europe	10,656,929
71	Greece	Europe	10,645,343
72	Niger	Africa	10,639,744
73	Angola	Africa	10,593,171
74	Senegal	Africa	10,589,571
75	Belarus	Europe	10,335,382
76	Belgium	Europe	10,274,595
77	Czech Republic	Europe	10,256,760
78	Portugal	Europe	10,084,245
79	Hungary	Europe	10,075,034
80	Zambia	Africa	9,959,037
81	Tunisia	Africa	9,815,644
82	Chad	Africa	8,997,237
83	Sweden	Europe	8,876,744
84	Dominican Republic	North America	8,721,594
85	Bolivia	South America	8,445,134
86	Austria	Europe	8,169,929
87	Azerbaijan	Asia	7,798,497
88	Guinea	Africa	7,775,065
89	Somalia	Africa	7,753,310
90	Bulgaria	Europe	7,621,337
91	Rwanda	Africa	7,398,074
92	Switzerland	Europe	7,301,994
93	Haiti	North America	7,063,722
94	Benin	Africa	6,787,625
95	Tajikistan	Asia	6,719,567
96	Honduras	North America	6,560,608
97	El Salvador	North America	6,353,681
98	Burundi	Africa	6,373,002

APPENDIX C

C COUNTRIES OF THE WORLD, BY POPULATION *(continued)*

RANK	COUNTRY	CONTINENT	POPULATION (JULY 2002)
99	Israel	Asia	6,029,529
100	Paraguay	South America	5,884,491
101	Laos	Asia	5,777,180
102	Sierra Leone	Africa	5,614,743
103	Slovakia	Europe	5,422,366
104	Denmark	Europe	5,368,854
105	Libya	Africa	5,368,585
106	Jordan	Asia	5,307,470
107	Togo	Africa	5,285,501
108	Finland	Europe	5,183,545
109	Papua New Guinea	Asia	5,172,033
110	Nicaragua	North America	5,023,818
111	Georgia	Asia	4,960,951
112	Kyrgyzstan	Asia	4,822,166
113	Turkmenistan	Asia	4,688,963
114	Norway	Europe	4,525,116
115	Eritrea	Africa	4,465,651
116	Singapore	Asia	4,452,732
117	Moldova	Europe	4,434,547
118	Croatia	Europe	4,390,751
119	Bosnia and Herzegovina	Europe	3,964,388
120	Puerto Rico	North America	3,957,988
121	New Zealand	Asia	3,908,037
122	Ireland	Europe	3,883,159
123	Costa Rica	North America	3,834,934
124	Lebanon	Asia	3,677,780
125	Central African Republic	Africa	3,642,739
126	Lithuania	Europe	3,601,138
127	Albania	Europe	3,544,841
128	Uruguay	South America	3,386,575
129	Armenia	Europe	3,330,099
130	Liberia	Africa	3,288,198
131	Congo, Republic of the	Africa	2,958,448

APPENDIX C

C COUNTRIES OF THE WORLD, BY POPULATION *(continued)*

RANK	COUNTRY	CONTINENT	POPULATION (JULY 2002)
132	Panama	North America	2,882,329
133	Mauritania	Africa	2,828,858
134	Mongolia	Asia	2,694,432
135	Jamaica	North America	2,680,029
136	Oman	Asia	2,713,462
137	United Arab Emirates	Asia	2,445,989
138	Latvia	Europe	2,366,515
139	Kuwait	Asia	2,111,561
140	Lesotho	Africa	2,207,954
141	Bhutan	Asia	2,094,176
142	Macedonia, The Former Yugoslav Republic of	Europe	2,054,800
143	Slovenia	Europe	1,932,917
144	Namibia	Africa	1,820,916
145	Botswana	Africa	1,591,232
146	Estonia	Europe	1,415,681
147	Gambia, The	Africa	1,455,842
148	Guinea-Bissau	Africa	1,345,479
149	Gabon	Africa	1,233,353
150	Mauritius	Africa	1,200,206
151	Trinidad and Tobago	South America	1,163,724
152	Swaziland	Africa	1,123,605
153	East Timor	Asia	952,618
154	Fiji	Asia	856,346
155	Qatar	Asia	793,341
156	Cyprus	Asia	767,314
157	Guyana	South America	698,209
158	Bahrain	Asia	656,397
159	Comoros	Africa	614,382
160	Equatorial Guinea	Africa	498,144
161	Solomon Islands	Asia	494,786
162	Djibouti	Africa	472,810
163	Luxembourg	Europe	448,569
164	Suriname	South America	436,494

APPENDIX C

C COUNTRIES OF THE WORLD, BY POPULATION *(continued)*

RANK	COUNTRY	CONTINENT	POPULATION (JULY 2002)
165	Cape Verde	Africa	408,760
166	Malta	Europe	397,499
167	Brunei Darussalam	Asia	350,898
168	Maldives	Asia	320,165
169	Bahamas, The	North America	300,529
170	Iceland	Europe	279,384
171	Barbados	North America	276,607
172	Belize	North America	262,999
173	Vanuatu	Asia	196,178
174	Samoa	Asia	178,631
175	São Tomé and Príncipe	Africa	170,372
176	Saint Lucia	North America	160,145
177	Micronesia, Federated States of	Asia	135,869
178	Saint Vincent and the Grenadines	North America	116,394
179	Tonga	Asia	106,137
180	Kiribati	Asia	96,335
181	Grenada	North America	89,211
182	Seychelles	Africa	80,098
183	Marshall Islands	Asia	73,630
184	Dominica	North America	70,158
185	Andorra	Europe	68,403
186	Antigua and Barbuda	North America	67,448
187	Saint Kitts and Nevis	North America	38,736
188	Liechtenstein	Europe	32,842
189	Monaco	Europe	31,987
190	San Marino	Europe	27,730
191	Palau	Asia	19,409
192	Nauru	Asia	12,329
193	Tuvalu	Asia	11,146
194	Holy See	Europe	900
195	Antarctica	Antarctica	No permanent population

APPENDIX D

D OCEANS AND SEAS OF THE WORLD, BY AREA

All measurements are approximate and are rounded to the nearest thousand.

RANK	NAME	AREA (SQ MI)	AREA (SQ KM)
1	Pacific Ocean	60,060,000	155,557,000
2	Atlantic Ocean	29,638,000	76,762,000
3	Indian Ocean	26,469,000	68,556,000
4	Southern Ocean	7,848,000	20,327,000
5	Arctic Ocean	5,427,000	14,056,000
6	Coral Sea	1,850,000	4,791,000
7	Arabian Sea	1,492,000	3,864,000
8	South China Sea (Nan Hai)	1,423,000	3,685,000
9	Weddell Sea	1,080,000	2,796,000
10	Caribbean Sea	1,063,000	2,753,000
11	Mediterranean Sea	971,000	2,515,000
12	Tasman Sea	900,000	2,331,000
13	Bering Sea	890,000	2,305,000
14	Bay of Bengal	839,000	2,173,000
15	Sea of Okhotsk	614,000	1,590,000
16	Gulf of Mexico	596,000	1,544,000
17	Gulf of Guinea	592,000	1,533,000
18	Barents Sea	542,000	1,405,000
19	Norwegian Sea	534,000	1,383,000
20	Gulf of Alaska	512,000	1,327,000
21	Hudson Bay	476,000	1,233,000
22	Greenland Sea	465,000	1,205,000
23	Bellinghausen Sea	430,000	1,110,000
24	Amundsen Sea	400,000	1,036,000
25	Arafura Sea	400,000	1,036,000
26	Philippine Sea	400,000	1,036,000
27	Sea of Japan	378,000	979,000
28	Mozambique Channel	376,000	975,000
29	Ross Sea	370,000	958,000
30	East Siberian Sea	361,000	936,000
31	Scotia Sea	347,000	900,000

APPENDIX D

D OCEANS AND SEAS OF THE WORLD, BY AREA *(continued)*

All measurements are rounded to the nearest thousand.

RANK	NAME	AREA (SQ MI)	AREA (SQ KM)
32	Kara Sea	341,000	883,000
33	Labrador Sea	309,000	800,000
34	East China Sea (Dong Hai / Tung Hai)	290,000	752,000
35	Solomon Sea	278,000	720,000
36	Laptev Sea	270,000	700,000
37	Baffin Bay	268,000	695,000
38	Banda Sea	268,000	695,000
39	Drake Passage	240,000	620,000
40	Timor Sea	237,000	615,000
41	Andaman Sea	232,000	601,000
42	North Sea	232,000	601,000
43	Davis Strait	230,000	596,000
44	Chukchi Sea	225,000	582,000
45	Great Australian Bight	187,000	484,000
46	Beaufort Sea	184,000	476,000
47	Celebes Sea	182,000	472,000
48	Black Sea	178,000	461,000
49	Red Sea	175,000	453,000
50	Java Sea	167,000	433,000
51	Sulu Sea	162,000	420,000
52	Yellow Sea (Huang Hai)	161,000	417,000
53	Baltic Sea	147,000	382,000
54	Gulf of Carpentaria	120,000	310,000
55	Molucca Sea	119,000	307,000
56	Persian Gulf	93,000	241,000
57	Gulf of Thailand	92,000	239,000
58	Gulf of St. Lawrence	92,000	239,000
59	Bismarck Sea	87,000	225,000
60	Gulf of Aden	85,000	220,000
61	Makassar Strait	75,000	194,000
62	Ceram Sea	72,000	187,000

APPENDIX E

E OCEAN DEPTH

All measurements are approximate.

RANK	NAME	OCEAN	DEPTH (FT)	DEPTH (M)
1	Mariana Trench	Pacific	38,635	11,784
2	Philippine Trench	Pacific	37,720	11,505
3	Tonga Trench	Pacific	37,166	11,336
4	Izu Trench	Pacific	36,850	11,239
5	Kermadec Trench	Pacific	34,728	10,592
6	Kuril Trench	Pacific	34,678	10,577
7	New Britain Trench	Pacific	31,657	9,655
8	Puerto Rico Trench	Atlantic	31,037	9,466
9	Bonin Trench	Pacific	29,816	9,094
10	Japan Trench	Pacific	29,157	8,893
11	South Sandwich Trench	Atlantic	28,406	8,664
12	Palau Trench	Pacific	27,972	8,531
13	Peru-Chile Trench	Pacific	27,687	8,445
14	Yap Trench	Pacific	27,552	8,403
15	Aleutian Trench	Pacific	26,775	8,166
16	Roanche Gap	Atlantic	26,542	8,095
17	Cayman Trench	Atlantic	26,519	8,088
18	New Hebrides Trench	Pacific	25,971	7,921
19	Ryukyu Trench	Pacific	25,597	7,807
20	Java Trench	Indian	24,744	7,547
21	Diamantina Trench	Indian	24,249	7,396
22	Mid America Trench	Pacific	22,297	6,801
23	Brazil Basin	Atlantic	22,274	6,794
24	Ob Trench	Indian	21,785	6,644
25	Vema Trench	Indian	19,482	5,942
26	Agulhas Basin	Indian	19,380	5,911
27	Ionian Basin	Mediterranean Sea	17,306	5,278
28	Eurasia Basin	Arctic	16,122	4,917

APPENDIX F

F MAJOR ISLANDS OF THE WORLD, BY AREA

All measurements are approximate.

RANK	ISLAND	CONTINENT	BODY OF WATER	AREA (SQ MI)	AREA (SQ KM)
1	Greenland	North America	Atlantic Ocean	840,000	2,175,600
2	New Guinea	Oceania	Pacific Ocean	305,000	790,000
3	Borneo	Asia	South China Sea	285,000	737,000
4	Madagascar	Africa	Indian Ocean	226,657	587,040
5	Baffin	North America	Baffin Bay	196,000	507,000
6	Sumatra	Asia	Andaman Sea	164,000	425,000
7	Honshu	Asia	Pacific Ocean	88,000	228,000
8	Great Britain	Europe	North Sea	84,400	219,000
9	Victoria	North America	Viscount Melville Sound	83,900	217,000
10	Ellesmere	North America	Arctic Ocean	75,800	196,000
11	Sulawesi (Celebes)	Asia	Celebes Sea	67,400	174,000
12	South Island (New Zealand)	Oceania	Pacific Ocean	58,200	151,000
13	Java	Asia	Indian Ocean	50,000	129,000
14	North Island (New Zealand)	Oceania	Pacific Ocean	44,200	114,000
15	Newfoundland	North America	Atlantic Ocean	42,000	109,000
16	Cuba	North America	Caribbean Sea	40,500	105,000
17	Luzon	Asia	Pacific Ocean	40,400	105,000
18	Iceland	Europe	Atlantic Ocean	39,769	103,000
19	Mindanao	Asia	Pacific Ocean	36,500	94,600
20	Ireland	Europe	Atlantic Ocean	32,500	84,100
21	Hokkaido	Asia	Pacific Ocean	30,100	78,000
22	Sakhalin	Asia	Sea of Okhotsk	29,500	76,400
23	Hispaniola	North America	Atlantic Ocean	29,200	75,600
24	Banks	North America	Arctic Ocean	27,000	70,000
25	Sri Lanka	Asia	Indian Ocean	25,332	65,610
26	Tasmania	Australia	Indian Ocean	24,900	64,400
27	Devon	North America	Baffin Bay	21,300	55,200
28	Novaya Zemlya	Europe	North Kara Sea	18,900	48,900
29	Grande de Tierra del Fuego	South America	Atlantic Ocean	18,700	48,400
30	Marajo	South America	Atlantic Ocean	18,500	48,000
31	Alexander	Antarctica	Bellingshausen Sea	16,700	43,200
32	Axel Heiberg	North America	Arctic Ocean	16,700	43,200
33	Melville	North America	Viscount Melville Sound	16,300	42,100

APPENDIX F

F MAJOR ISLANDS OF THE WORLD, BY AREA (continued)

All measurements are approximate.

RANK	ISLAND	CONTINENT	BODY OF WATER	AREA (SQ MI)	AREA (SQ KM)
34	Southampton	North America	Hudson Bay	15,900	41,200
35	West Spitsbergen	Europe	Arctic Ocean	15,300	39,500
36	New Britain	Oceania	Bismarck Sea	14,600	37,800
37	Taiwan	Asia	Pacific Ocean	13,892	35,980
38	Kyushu	Asia	Pacific Ocean	13,800	35,700
39	Hainan	Asia	South China Sea	13,100	34,000
40	Prince of Wales	North America	Viscount Melville Sound	12,900	33,300
41	Novaya Zemlya	Europe	Barents Sea	12,800	33,300
42	Vancouver	North America	Pacific Ocean	12,100	31,300
43	Timor	Asia	Timor Sea	10,200	26,300
44	Sicily	Europe	Mediterranean	9,810	25,400
45	Somerset	North America	Lancaster Sound	9,570	24,800
46	Sardinia	Europe	Mediterranean	9,190	23,800
47	Bananal	South America	Araguaia River	7,720	20,000
48	Halmahera	Asia	Molucca Sea	6,950	18,000
49	Shikoku	Asia	Pacific Ocean	6,860	17,800
50	Ceram	Asia	Banda Sea	6,620	17,200
51	New Caledonia	Oceania	Coral Sea	6,470	16,700
52	Bathurst	North America	Viscount Melville Sound	6,190	16,000
53	Prince Patrick	North America	Arctic Ocean	6,120	15,800
54	North East Land	Europe	Barents Sea	5,790	15,000
55	Flores	Asia	Flores Sea	5,520	14,300
56	Oktyabrskoy Revolyutsii	Asia	Arctic Ocean	5,470	14,170
57	Sumbawa	Asia	Indian Ocean	5,160	13,400
58	King William	North America	Queen Maud Gulf	5,060	13,100
59	Samar	Asia	Pacific Ocean	5,050	13,100
60	Negros	Asia	Sulu Sea	4,900	12,700
61	Palawan	Asia	South China Sea	4,550	11,800
62	Kotelnyy	Asia	Arctic Ocean	4,500	11,700
63	Panay	Asia	Sulu Sea	4,450	11,500
64	Bangka	Asia	Java Sea	4,370	11,320
65	Ellef Ringnes	North America	Arctic Ocean	4,360	11,300
66	Bolshevik	Asia	Arctic Ocean	4,350	11,270
67	Sumba	Asia	Indian Ocean	4,310	11,200

APPENDIX F

F MAJOR ISLANDS OF THE WORLD, BY AREA *(continued)*

All measurements are approximate.

RANK	ISLAND	CONTINENT	BODY OF WATER	AREA (SQ MI)	AREA (SQ KM)
68	Bylot	North America	Baffin Bay	4,270	11,100
69	Jamaica	North America	Caribbean Sea	4,243	10,990
70	Dolak	Asia	Arafura Sea	4,160	10,800
71	Hawaii	Oceania	Pacific Ocean	4,040	10,500
72	Viti Levu	Oceania	Pacific Ocean	4,010	10,400
73	Cape Breton	North America	Atlantic Ocean	3,980	10,300
74	Bougainville	Oceania	Pacific Ocean	3,880	10,000
75	Mindoro	Asia	South China Sea	3,760	9,730
76	Prince Charles	North America	Foxe Basin	3,680	9,520
77	Kodiak	North America	Pacific Ocean	3,670	9,510
78	Cyprus	Asia	Mediterranean	3,571	9,250
79	Komsomolets	Asia	Arctic Ocean	3,480	9,010
80	Buru	Asia	Banda Sea	3,470	9,000
81	Corsica	Europe	Mediterranean	3,370	8,720
82	Puerto Rico	North America	Atlantic Ocean	3,350	8,680
83	New Ireland	Oceania	Pacific Ocean	3,340	8,650
84	Disco	North America	Davis Strait	3,310	8,580
85	Chiloe	South America	Pacific Ocean	3,240	8,390
86	Crete	Europe	Mediterranean	3,190	8,260
87	Anticosti	North America	Gulf of St. Lawrence	3,070	7,940
88	Wrangel	Asia	Chukchi Sea	2,820	7,300
89	Leyte	Asia	Visayan Sea	2,780	7,210
90	Zealand	Europe	Baltic Sea	2,710	7,020
91	Cornwallis	North America	Barrow Strait	2,700	7,000
92	Wellington	South America	Trinidad Gulf	2,610	6,750
93	Iturup (Etorofu)	Asia	Pacific Ocean	2,600	6,720
94	Prince of Wales	North America	Pacific Ocean	2,590	6,700
95	Graham	North America	Pacific Ocean	2,460	6,360
96	East Falkland	South America	Atlantic Ocean	2,440	6,310
97	Melville	Asia	Timor Sea	2,400	6,220
98	Novaya Sibir	Asia	East Siberian Sea	2,390	6,200
99	Kerguelen	Antarctica	Indian Ocean	2,320	6,000
100	Andros	North America	Grand Bahama Bank	2,300	5,960

APPENDIX G

G DESERTS OF THE WORLD, BY AREA

All measurements are approximate.

RANK	NAME	CONTINENT	COUNTRY	AREA (SQ MI)	AREA (SQ KM)
1	Sahara	Africa	Algeria, Chad, Egypt, Libya, Mali, Mauritania, Morocco, Niger, Sudan, and Tunisia	3,475,000	9,000,000
2	Arabian*	Asia	Saudi Arabia, Kuwait, Qatar, the United Arab Emirates, Oman, Yemen, Jordan, Syria, Iraq	900,000	2,330,000
3	Gobi	Asia	China, Mongolia	500,000	1,300,000
4	Kalahari	Africa	Botswana, Namibia, South Africa	360,000	930,000
5	Great Victoria	Australia	Australia	134,652	348,750
6	Taklimakan (Takla Makan)	Asia	China	125,000	320,000
7	Sonoran	North America	United States of America, Mexico	120,000	310,000
8	Kara-Kum	Asia	Kazakhstan, Turkmenistan	115,830	300,000
9	Kyzyl Kum	Asia	Kazakhstan, Uzbekistan	115,000	297,850
10	Namib	Africa	Namibia, South Africa	110,000	285,000
11	Great Sandy	Australia	Australia	103,185	267,250
12	Somali	Africa	Somalia	100,000	260,000
13	Thar	Asia	India, Pakistan	90,000	233,000
14	Tanami	Australia	Australia	71,235	184,500
15	Atacama	South America	Chile, Peru	70,000	180,000
16	Simpson	Australia	Australia	68,150	176,500
17	Gibson	Australia	Australia	60,230	156,000
18	Little Sandy	Australia	Australia	43,050	111,500

* Two deserts are commonly referred to by this name. This entry refers to the deserts of the Arabian Peninsula and not the Arabian Desert of Egypt, which is part of the Sahara.

APPENDIX H

H HIGHEST MOUNTAIN PEAKS, BY CONTINENT

All measurements are approximate.
Note that many mountains have multiple peaks, which will appear separately in the table.

AFRICA

RANK	NAME	COUNTRY	ELEVATION (FT)	ELEVATION (M)
1	Kibo (Mt. Kilimanjaro)	Tanzania	19,341	5,895
2	Mawensi (Mt. Kilimanjaro)	Tanzania	17,100	5,210
3	Batian (Mt. Kenya)	Kenya	17,058	5,203
4	Nelion (Mt. Kenya)	Kenya	17,020	5,190
5	Margherita Peak (Mt. Stanley)	Dem. Rep. of the Congo, Uganda	16,756	5,110
6	Alexandra Peak (Mt. Stanley)	Dem. Rep. of the Congo, Uganda	16,700	5,094
7	Albert Peak (Mt. Stanley)	Dem. Rep. of the Congo	16,690	5,090
8	Savoia Peak (Mt. Stanley)	Uganda	16,330	4,981
9	Elena Peak (Mt. Stanley)	Uganda	16,300	4,972
10	Elizabeth Peak (Mt. Stanley)	Uganda	16,170	4,932
11	Phillip Peak (Mt. Stanley)	Uganda	16,140	4,923
12	Moebius Peak (Mt. Stanley)	Uganda	16,130	4,920
13	Vittorio Emanuele (Mt. Speke)	Uganda	16,040	4,892
14	Ensonga (Mt. Speke)	Uganda	15,960	4,868
15	Johnston (Mt. Speke)	Uganda	15,860	4,834
16	Edward (Mt. Baker)	Uganda	15,890	4,846
17	Umberto (Mt. Emin)	Dem. Rep. of the Congo	15,740	4,798
18	Semper (Mt. Baker)	Uganda	15,730	4,795
19	Kraepelin (Mt. Emin)	Dem. Rep. of the Congo	15,720	4,791
20	Iolanda (Mt. Gessi)	Dem. Rep. of the Congo	15,470	4,751
21	Bottego (Mt. Gesi)	Dem. Rep. of the Congo	15,418	4,699
22	Sella (Mt. Luigi)	Dem. Rep. of the Congo	15,178	4,626
23	Ras Deshen	Ethiopia	15,157	4,620
24	Weismann (Mt. Luigi)	Dem. Rep. of the Congo	15,157	4,620
25	Okusoma (Mt. Luigi)	Dem. Rep. of the Congo	15,020	4,578

ANTARCTICA

RANK	NAME	COUNTRY	ELEVATION (FT)	ELEVATION (M)
1	Vinson	Antarctica	16,860	5,142
2	Tyree	Antarctica	16,290	4,968
3	Shinn	Antarctica	15,750	4,800
4	Gardner	Antarctica	15,370	4,690
5	Epperly	Antarctica	15,100	4,600

APPENDIX H

H HIGHEST MOUNTAIN PEAKS, BY CONTINENT *(continued)*

ASIA

RANK	NAME	COUNTRY	ELEVATION (FT)	ELEVATION (M)
1	Everest (Zhumulangma Feng)	Nepal, China	29,030	8,850
2	K2	China, Pakistan	28,251	8,611
3	Kanchenjunga	India, Nepal	28,169	8,586
4	Lhotse	China, Nepal	27,890	8,500
5	Makalu	China, Nepal	27,824	8,481
6	Kanchenjunga, south peak	India, Nepal	27,800	8,479
7	Kanchenjunga, west peak	India, Nepal	27,620	8,424
8	Lhotse Shar	China, Nepal	27,500	8,388
9	Dhaulagiri	Nepal	26,813	8,172
10	Man slu	Nepal	26,775	8,155
11	Cho Oyu	China, Nepal	26,750	8,150
12	Nanga Parbat I	Pakistan	26,660	8,130
13	Masherbrum I	Pakistan	26,610	7,810
14	Annapurna I	Nepal	26,500	8,080
15	Gasherbrum I	Pakistan	26,470	8,070
16	Broad, highest peak	Pakistan	26,400	8,050
17	Gasherbrum II	Pakistan	26,360	8,030
18	Gosainthan	China	26,290	8,010
19	Broad, middle peak	Pakistan	26,250	8,000
20	Gasherbrum III	Pakistan	26,090	7,950
21	Annapurna II	Nepal	26,040	7,940
22	Gasherbrum IV	Pakistan	26,000	7,930
23	Gyachung Kang	China, Nepal	25,990	7,927
24	Nanga Parbat II	Pakistan	25,950	7,910
25	Kangbachen	India, Nepal	25,930	7,909
26	Man slu, east pinnacle	Nepal	25,900	7,900
27	Distaghil Sar	Pakistan	25,870	7,890
28	Nuptse	Nepal	25,850	7,880
29	Himachuh	Nepal	25,800	7,860
30	Khiangyang Kish	Pakistan	25,760	7,850

APPENDIX H

H HIGHEST MOUNTAIN PEAKS, BY CONTINENT *(continued)*

ASIA *(continued)*

RANK	NAME	COUNTRY	ELEVATION (FT)	ELEVATION (M)
31	Ngojumba Ri	China, Nepal	25,720	7,847
32	Dakura	Nepal	25,710	7,842
33	Masherbrum II	Pakistan	25,660	7,826
34	Nanda Devi, west peak	India	25,650	7,823
35	Nanga Parbat III	Pakistan	25,650	7,823
36	Rakaposhi	Pakistan	25,550	7,793
37	Batura Mustagh I	Pakistan	25,540	7,790
38	GasherbrumV	Pakistan	25,500	7,770
39	Kamet	China, India	25,440	7,760

EUROPE

RANK	NAME	COUNTRY	ELEVATION (FT)	ELEVATION (M)
1	El'brus (Elborus), west peak	Russia	18,481	5,633
2	El'brus (Elborus), east peak	Russia	18,360	5,590
3	Shkhara	Georgia, Russia	17,064	5,205
4	Dykh, west peak	Russia	17,050	5,200
5	Dykh, east peak	Russia	16,900	5,150
6	Koshtan	Russia	16,880	5,148
7	Pushkina	Russia	16,730	5,100
8	Kazbek, east peak	Georgia	16,526	5,040
9	Dzhangi	Georgia	16,520	5,039
10	Katyn	Georgia, Russia	16,310	4,975
11	Shota Rustaveli	Georgia, Russia	16,270	4,962
12	Mizhirgi, west peak	Russia	16,170	4,932
13	Mizhirgi, east peak	Russia	16,140	4,923
14	Kundyum-Mizhirgi	Russia	16,010	4,880
15	Gestola	Georgia, Russia	15,930	4,860
16	Tetnuld	Georgia, Russia	15,920	4,850
17	Mont Blanc, main peak	France, Italy	15,772	4,810
18	Dzhimariy	Georgia	15,680	4,780
19	Adish	Georgia, Russia	15,570	4,749
20	Courmayer (Mont Blanc)	France, Italy	15,577	4,748
21	Ushba	Georgia	15,450	4,710

APPENDIX H

H HIGHEST MOUNTAIN PEAKS, BY CONTINENT *(continued)*

NORTH AMERICA

RANK	NAME	COUNTRY	ELEVATION (FT)	ELEVATION (M)
1	McKinley (Denali), south peak	U.S.A.	20,323	6,194
2	Logan, central peak	Canada	19,550	5,959
3	Logan, west peak	Canada	19,470	5,930
4	McKinley (Denali), north peak	U.S.A.	19,470	5,930
5	Logan, east peak	Canada	19,420	5,920
6	Pico de Orizaba	Mexico	18,701	5,700
7	Logan, north peak	Canada	18,270	5,570
8	Saint Elias	U.S.A., Canada	18,010	5,490
9	Popocatepetl	Mexico	17,887	5,452
10	Foraker	U.S.A.	17,400	5,300
11	Ixtacihuatl	Mexico	17,342	5,286
12	Queen	Canada	17,300	5,270
13	Lucania	Canada	17,150	5,230
14	King	Canada	16,970	5,170
15	Steele	Canada	16,640	5,070
16	Bona	U.S.A.	16,500	5,033
17	Blackburn, highest peak	U.S.A.	16,390	5,000
18	Blackburn, southeast peak	U.S.A.	16,290	4,968
19	Sanford	U.S.A.	16,240	4,950
20	Wood	Canada	15,880	4,840

OCEANIA

RANK	NAME	COUNTRY	ELEVATION (FT)	ELEVATION (M)
1	Puncak Jaya	Indonesia	16,503	5,033
2	Daam	Indonesia	16,150	4,926
3	Pilimsit	Indonesia	15,750	4,800
4	Trikora	Indonesia	15,580	4,752
5	Mandala	Indonesia	15,420	4,700

APPENDIX H

H HIGHEST MOUNTAIN PEAKS, BY CONTINENT *(continued)*

OCEANIA *(continued)*

RANK	NAME	COUNTRY	ELEVATION (FT)	ELEVATION (M)
6	Wisnumurti	Indonesia	15,080	4,590
7	Yamin	Indonesia	14,860	4,530
8	Wilhelm	Papua New Guinea	14,793	4,509
9	Kubor	Papua New Guinea	14,300	4,360
10	Herbert	Papua New Guinea	14,000	4,270

SOUTH AMERICA

RANK	NAME	COUNTRY	ELEVATION (FT)	ELEVATION (M)
1	Aconcagua	Argentina	22,835	6,960
2	Ojos del Salado, southeast peak	Argentina, Chile	22,573	6,880
3	Bonete	Argentina	22,550	6,870
4	Tupungato	Argentina, Chile	22,310	6,800
5	Pissis	Argentina	22,240	6,780
6	Mercedario	Argentina	22,210	6,770
7	Huascarán, south peak	Peru	22,204	6,768
8	Llullaillaco	Argentina, Chile	22,100	6,730
9	Libertador	Argentina	22,050	6,720
10	Ojos del Salado, northwest peak	Argentina, Chile	22,050	6,720
11	Gonzalez, highest peak	Argentina, Chile	21,850	6,664
12	Huascarán, north peak	Peru	21,840	6,661
13	Muerto	Argentina, Chile	21,820	6,655
14	Yerupaja, north peak	Peru	21,760	6,630
15	Incahuasi	Argentina, Chile	21,700	6,610
16	Galan	Argentina	21,650	6,600
17	Tres Cruces	Argentina, Chile	21,540	6,560
18	Gonzalez, north peak	Argentina, Chile	21,490	6,550
19	Sajama	Bolivia	21,463	6,542
20	Yerupaja, south peak	Peru	21,380	6,510
21	Chimborazo	Ecuador	20,681	6,267

APPENDIX I

I HIGHEST VOLCANOES OF THE WORLD, BY HEIGHT

All measurements are approximate.

RANK	NAME	CONTINENT	COUNTRY	ELEVATION (FT)	ELEVATION (M)
1	Tupungato	South America	Chile	22,310	6,800
2	Tipas	South America	Argentina	21,845	6,660
3	Cerro el Condor	South America	Argentina	21,425	6,532
4	Antofalfo	South America	Argentina	20,008	6,100
5	Guallatiri	South America	Chile	19,882	6,060
6	Lascar	South America	Chile	19,652	5,990
7	Cotopaxi	South America	Ecuador	19,344	5,896
8	Kilimanjaro	Africa	Tanzania	19,341	5,895
9	El Misti	South America	Peru	19,031	5,801
10	Pico de Orizaba	North America	Mexico	18,701	5,700
11	Tolima	South America	Colombia	18,425	5,616
12	Popocatepetl	North America	Mexico	17,887	5,452
13	Yucamani	South America	Peru	17,860	5,444
14	Sangay	South America	Ecuador	17,159	5,230
15	Tungurahua	South America	Ecuador	16,684	5,085
16	Cotacachi	South America	Ecuador	16,250	4,939
17	Purace	South America	Colombia	15,604	4,756
18	Klyuchevskaya	Asia	Russia	15,584	4,750
19	Kronotskaya	Asia	Russia	15,580	4,749
20	Shiveluch	Asia	Russia	15,580	4,749
21	Pichincha	South America	Ecuador	15,173	4,625
22	Karasimbi	Africa	Dem. Rep. of the Congo	14,873	4,507
23	Rainier	North America	USA	14,410	4,395
24	Wrangell	North America	USA (Alaska)	14,163	4,317
25	Colima	North America	Mexico	13,993	4,265
26	Tajumulco	North America	Guatemala	13,845	4,220
27	Mauna Kea	North America	USA (Hawaii)	13,796	4,205
28	Mauna Loa	North America	USA (Hawaii)	13,680	4,170
29	Cameroon	Africa	Cameroon	13,353	4,070
30	Tacana	North America	Guatemala	13,300	4,053
31	Kerintji	Asia	Indonesia	12,483	3,805
32	Erebus	Antarctica	Antarctica	12,448	3,794
33	Fuji	Asia	Japan	12,388	3,776
34	Fuego	North America	Guatemala	12,346	3,763

APPENDIX I

I HIGHEST VOLCANOES OF THE WORLD, BY HEIGHT *(continued)*

All measurements are approximate.

RANK	NAME	CONTINENT	COUNTRY	ELEVATION (FT)	ELEVATION (M)
35	Agua	North America	Guatemala	12,307	3,751
36	Rindjani	Asia	Indonesia	12,224	3,726
37	Pico de Teide	Africa	Spain (Canary Is.)	12,198	3,718
38	Tolbachik	Asia	Russia	12,077	3,682
39	Semeru	Asia	Indonesia	12,060	3,676
40	Ichinskaya	Asia	Russia	11,800	3,621
41	Atitlan	North America	Guatemala	11,650	3,551
42	Torbert	North America	USA (Alaska)	11,450	3,480
43	Nyirangongo	Africa	Dem. Rep. of the Congo	11,365	3,465
44	Kroyaks kaya	Asia	Russia	11,336	3,456
45	Irazu	South America	Costa Rica	11,260	3,432
46	Slamet	Asia	Indonesia	11,247	3,428
47	Spurr	North America	USA (Alaska)	11,137	3,385
48	Lautaro	South America	Chile	11,120	3,380
49	Sumbing	Asia	Indonesia	11,060	3,371
50	Raung	Asia	Indonesia	10,932	3,332
51	Etna	Europe	Italy	10,902	3,323
52	Baker	North America	USA	10,778	3,285
53	Lassen	North America	USA	10,492	3,187
54	Dempo	Asia	Indonesia	10,390	3,158
55	Sundoro	Asia	Indonesia	10,367	3,151
56	Agung	Asia	Indonesia	10,337	3,142
57	Prahu	Asia	Indonesia	10,285	3,137
58	Llaima	South America	Chile	10,245	3,125
59	Redoubt	North America	USA (Alaska)	10,197	3,108
60	Tjiremai	Asia	Indonesia	10,098	3,078
61	One-Take	Asia	Japan	10,056	3,067
62	Nyamulagira	Africa	Dem. Rep. of the Congo	10,026	3,056
63	Iliamna	North America	USA (Alaska)	10,016	3,053
64	Ardjuno-Welirang	Asia	Indonesia	9,968	3,038
65	San Pedro	North America	Guatemala	9,902	3,020
66	Gede	Asia	Indonesia	9,705	2,958
67	Zhupanovsky	Asia	Russia	9,705	2,958
68	Apo	Asia	Philippines	9,692	2,954

APPENDIX I

I HIGHEST VOLCANOES OF THE WORLD, BY HEIGHT *(continued)*

All measurements are approximate.

RANK	NAME	CONTINENT	COUNTRY	ELEVATION (FT)	ELEVATION (M)
69	Merapi	Asia	Indonesia	9,551	2,911
70	Marapi	Asia	Indonesia	9,479	2,891
71	Geureudong	Asia	Indonesia	9,459	2,885
72	Bezymianny	Asia	Russia	9,449	2,882
73	Shishaldin	North America	USA (Alaska)	9,372	2,856
74	Tambora	Asia	Indonesia	9,350	2,850
75	Villarrica	South America	Chile	9,318	2,840
76	Fogo	Africa	Cape Verde	9,281	2,829
77	Ruapehu	Oceania	New Zealand	9,175	2,796
78	Peuetsagoe	Asia	Indonesia	9,115	2,780
79	Paricutin	North America	Mexico	9,100	2,775
80	Big Ben	Antarctica	Heard Island (dependency of Australia)	9,006	2,745
81	Balbi	Oceania	Papua New Guinea	8,999	2,743
82	Avachinskaya	Asia	Russia	8,987	2,741
83	Melbourne	Antarctica	Antarctica	8,957	2,732
84	Poas	North America	Costa Rica	8,872	2,704
85	Papandajan	Asia	Indonesia	8,744	2,665
86	Piton de la Faournaise	Africa	Reunion (dependency of France)	8,626	2,631
87	Pacaya	North America	Guatemala	8,367	2,552
88	Mt. St. Helens	North America	USA	8,366	2,550
89	Asama	Asia	Japan	8,300	2,530
90	Pavlof	North America	USA (Alaska)	8,261	2,518
91	Veniaminof	North America	USA (Alaska)	8,220	2,507
92	Mayon	Asia	Philippines	8,077	2,462
93	Sinabung	Asia	Indonesia	8,066	2,460
94	Yake Dake	Asia	Japan	8,049	2,455
95	Tandikat	Asia	Indonesia	7,993	2,438
96	Canalaon	Asia	Philippines	7,984	2,435
97	Shoshuenco	South America	Chile	7,941	2,422
98	Idjen	Asia	Indonesia	7,823	2,386
99	Izalco	North America	El Salvador	7,828	2,386
100	Karthala	Africa	Comoros	7,746	2,361

APPENDIX J

J RIVERS OF THE WORLD 1,000 MILES (1,600 KILOMETERS) OR LONGER

All measurements are approximate.

RANK	NAME	CONTINENT	COUNTRY	LENGTH (MI)	LENGTH (KM)
1	Nile	Africa	Egypt, Sudan, Uganda	4,160	6,693
2	Amazon	South America	Brazil, Colombia, Peru, Venezuela	3,900	6,280
3	Mississippi-Missouri	North America	U.S.A.	3,860	6,211
4	Chang Jiang (Yangtze or Yangtse)	Asia	China	3,434	5,525
5	Ob'-Irtysh	Asia	Kazakhstan, Russia	3,335	5,380
6	Paraná	South America	Argentina, Brazil, Paraguay	3,030	4,870
7	Huang He (Huang-ho or Yellow)	Asia	China	2,903	4,671
8	Irtysh	Asia	Kazakhstan, Russia	2,760	4,441
9	Lena	Asia	Russia	2,734	4,400
10	Amur	Asia	China, Russia	2,719	4,350
11	Congo (Zaire)	Africa	Angola, Dem. Rep. of the Congo, Rep. of the Congo	2,700	4,344
12	Mackenzie	North America	Canada	2,635	4,290
13	Mekong River (Lan ts'ang chiang or Lancang Jiang)	Asia	Cambodia, China, Laos, Myanmar, Thailand, Vietnam	2,600	4,200
14	Niger	Africa	Benin, Guinea, Mali, Niger, Nigeria	2,594	4,184
15	Yenisey	Asia	Russia	2,566	4,129
16	Missouri	North America	U.S.A.	2,466	3,968
17	Mississippi	North America	U.S.A.	2,348	3,787
18	Volga	Europe	Russia	2,293	3,689
19	Ob'	Asia	Russia	2,270	3,650
20	Euphrates	Asia	Iraq, Syria, Turkey	2,235	3,596
21	Purus	South America	Brazil, Peru	2,100	3,380
22	Madeira	South America	Brazil	2,013	3,241
23	Lower Tunguska	Asia	Russia	2,000	3,220
24	Indus	Asia	Pakistan	1,988	3,200
25	São Francisco	South America	Brazil	1,988	3,199
26	Yukon	North America	Canada, U.S.A.	1,980	3,180
27	Rio Grande	North America	Mexico, U.S.A.	1,885	3,034

APPENDIX J

J RIVERS OF THE WORLD 1,000 MILES (1,600 KILOMETERS) OR LONGER *(continued)*

All measurements are approximate.

RANK	NAME	CONTINENT	COUNTRY	LENGTH (MI)	LENGTH (KM)
28	Brahmaputra (Jamuna)	Asia	Bangladesh, China, India	1,800	2,900
29	Danube	Europe	Austria, Bulgaria, Croatia, Germany, Hungary, Romania, Ukraine, Slovakia, Serbia-Montenegro	1,775	2,857
30	Salween	Asia	China, Myanmar	1,770	2,849
31	Darling	Australia	Australia	1,702	2,739
32	Tocantins	South America	Brazil	1,677	2,698
33	Nelson	North America	Canada	1,660	2,671
34	Vilyuy	Asia	Russia	1,650	2,650
35	Zambezi	Africa	Angola, Mozambique, Namibia, Zambia, Zimbabwe	1,650	2,650
36	Murray	Australia	Australia	1,609	2,589
37	Paraguay	South America	Argentina, Brazil, Paraguay	1,584	2,549
38	Amu Dar'ya	Asia	Afghanistan, Tajikistan, Turkmenistan, Uzbekistan	1,580	2,540
39	Kolyma	Asia	Russia	1,562	2,513
40	Ganges	Asia	Bangladesh, India	1,560	2,510
41	Ishim	Asia	Kazakhstan, Russia	1,520	2,450
42	Ural	Asia	Kazakhstan, Russia	1,510	2,430
43	Japurá	South America	Brazil, Colombia	1,500	2,414
44	Arkansas	North America	U.S.A.	1,460	2,350
45	Colorado	North America	U.S.A.	1,450	2,330
46	Dnieper	Europe	Belarus, Russia, Ukraine	1,420	2,290
47	Negro	South America	Brazil, Colombia, Venezuela	1,400	2,250
48	Ubangi	Africa	Central African Rep., Dem. Rep. of the Congo, Rep. of the Congo	1,400	2,253
49	Aldan	Asia	Russia	1,390	2,240
50	Columbia-Snake	North America	Canada, U.S.A.	1,390	2,240
51	Syr Dar'ya	Asia	Kazakhstan, Kyrgyzstan, Uzbekistan	1,370	2,200

APPENDIX J

J RIVERS OF THE WORLD 1,000 MILES (1,600 KILOMETERS) OR LONGER *(continued)*

All measurements are approximate.

RANK	NAME	CONTINENT	COUNTRY	LENGTH (MI)	LENGTH (KM)
52	Araguaia	South America	Brazil	1,366	2,198
53	Olenek	Asia	Russia	1,350	2,170
54	Irrawaddy	Asia	Myanmar	1,350	2,170
55	Kasai	Africa	Angola, Dem. Rep of the Congo	1,338	2,153
56	Ohio-Allegheny	North America	U.S.A.	1,310	2,109
57	Tarim	Asia	China	1,300	2,090
58	Orange	Africa	Lesotho, Namibia, South Africa	1,300	2,090
59	Orinoco	South America	Venezuela	1,281	2,061
60	Shabeelle	Africa	Ethiopia, Somalia	1,250	2,011
61	Xingu	South America	Brazil	1,230	1,979
62	Columbia	North America	Canada, U.S.A.	1,214	1,953
63	Mamoré	South America	Bolivia	1,200	1,931
64	Tigris	Asia	Iraq, Turkey	1,180	1,900
65	Northern Dvina	Europe	Russia	1,160	1,870
66	Don	Europe	Russia	1,153	1,860
67	Angara	Asia	Russia	1,151	1,852
68	Kama	Europe	Russia	1,120	1,800
69	Indigirka	Asia	Russia	1,112	1,789
70	Pechora	Europe	Russia	1,112	1,789
71	Limpopo	Africa	Botswana, South Africa, Mozambique	1,100	1,770
72	Sénégal	Africa	Guinea, Mali, Mauritania, Senegal	1,015	1,663
73	Salado	South America	Argentina	1,110	1,770
74	Guaporé	South America	Bolivia, Brazil	1,087	1,749
75	Tobol	Asia	Kazakhstan, Russia	1,042	1,677
76	Snake	North America	U.S.A.	1,038	1,670
77	Red	North America	U.S.A.	1,018	1,638
78	Churchill	North America	Canada	1,000	1,613
79	Jubba	Africa	Ethiopia, Somalia	1,000	1,613
80	Okavango	Africa	Angola, Botswana	1,000	1,613
81	Pilcomayo	South America	Argentina, Bolivia, Paraguay	1,000	1,613
82	Uruguay	South America	Uruguay	1,000	1,613

APPENDIX K

K WATERFALLS OF THE WORLD, BY HEIGHT

All measurements are approximate. If a waterfall has multiple cascades they are listed separately.

RANK	NAME	CONTINENT	COUNTRY	HEIGHT (FT)	HEIGHT (M)
1	Angel (upper falls)	South America	Venezuela	2,648	807
2	Utigord	Europe	Norway	2,625	800
3	Monge	Europe	Norway	2,539	774
4	Mtarazi (Mutarazi)	Africa	Mozambique, Zimbabwe	2,500	760
5	Itatinga	South America	Brazil	2,060	628
6	Cuquenán (Kukenaam)	South America	Guyana, Venezuela	2,000	610
7	Kahiwa	North America	U.S.A. (Hawaii)	1,750	533
8	Tysse (Tusse)	Europe	Norway	1,749	533
9	Maradalsfos	Europe	Norway	1,696	517
10	Ribbon	North America	U.S.A.	1,612	491
11	Roraima	South America	Guyana	1,500	457
12	Della	North America	Canada	1,445	440
13	Yosemite, Upper	North America	U.S.A.	1,430	436
14	Gavarnie	Europe	France	1,385	422
15	Tugela (highest falls in chain)	Africa	South Africa	1,350	411
16	Krimml	Europe	Austria	1,250	380
17	Silver Strand	North America	U.S.A.	1,170	357
18	Basaseachic	North America	Mexico	1,020	311
19	Staubbach	Europe	Switzerland	980	299
20	Vettis	Europe	Norway	902	275
21	King George VI	South America	Guyana	850	260
22	Wallaman	Oceania	Australia	850	260
23	Takakkaw	North America	Canada	838	254
24	Hunlen	North America	Canada	830	253
25	Jog (Gersoppa)	Asia	India	830	253

APPENDIX K

K WATERFALLS OF THE WORLD, BY HEIGHT *(continued)*

All measurements are approximate. If a waterfall has multiple cascades they are listed separately.

RANK	NAME	CONTINENT	COUNTRY	HEIGHT (FT)	HEIGHT (M)
26	Skykje	Europe	Norway	820	250
27	Sutherland, Upper	Oceania	New Zealand	815	248
28	Sutherland, Middle	Oceania	New Zealand	751	229
29	Kaieteur	South America	Guyana	741	226
30	Wollomombi	Oceania	Australia	726	220
31	Kalambo	Africa	Tanzania, Zambia	704	215
32	Fairy	North America	U.S.A.	700	213
33	Feather	North America	U.S.A.	640	195
34	Maletsunyane	Africa	Lesotho	630	192
35	Bridalveil	North America	U.S.A.	620	189
36	Multnomah	North America	U.S.A.	620	189
37	Panther	North America	Canada	600	183
38	Voringfoss	Europe	Norway	597	182
39	Nevada	North America	U.S.A.	594	181
40	Angel, Lower	South America	Venezuela	564	172
41	Augrabies (Aughrabies)	Africa	South Africa	480	146
42	Tully	Oceania	Australia	450	137
43	Helmcken	North America	Canada	450	137
44	Nachi	Asia	Japan	430	131
45	Tequendama	South America	Colombia	427	130
46	Bridal Veil	North America	U.S.A.	400	122
47	Illilouette	North America	U.S.A.	370	113
48	Yosemite, Lower	North America	U.S.A.	320	98
49	Twin	North America	Canada	260	80

APPENDIX L

L LAKES OF THE WORLD, BY AREA

All measurements are approximate.

RANK	NAME	CONTINENT	COUNTRY	AREA (sq mi)	AREA (sq km)
1	Caspian Sea	Asia	Azerbaijan, Iran, Kazakhstan, Russia, Turkmenistan	143,000	371,000
2	Superior	North America	Canada, U.S.A.	31,820	82,732
3	Victoria	Africa	Uganda, Tanzania, Kenya	26,828	69,484
4	Aral Sea	Asia	Kazakhstan, Uzbekistan	24,900	64,500
5	Huron	North America	Canada, U.S.A.	23,000	59,570
6	Michigan	North America	U.S.A.	22,400	58,020
7	Tanganyika	Africa	Burundi, Dem. Republic of the Congo, Tanzania, Zambia	12,700	32,020
8	Baikal	Asia	Russia	12,160	31,500
9	Great Bear	North America	Canada	12,095	31,328
10	Great Slave	North America	Canada	11,030	28,570
11	Erie	North America	Canada, U.S.A.	9,920	25,690
12	Winnipeg	North America	Canada	9,420	24,390
13	Malawi	Africa	Malawi, Mozambique, Tanzania,	8,680	22,490
14	Ontario	North America	Canada, U.S.A.	7,440	19,240
15	Balkhash	Asia	Kazakhstan	7,030	18,200
16	Ladoga	Russia	Russia	7,000	18,130
17	Maracaibo	South America	Venezuela	5,020	13,010
18	Chad	Africa	Cameroon, Chad, Niger, Nigeria	4,000–10,000	10,360–25,900
19	Embalse del Río Negro	South America	Uruguay	4,000	10,360
20	Patos	South America	Brazil	3,920	10,153
21	Onega	Europe	Russia	3,750	9,720
22	Eyre	Australia	Australia	3,668	9,500
23	Volta	Africa	Ghana	3,276	8,485
24	Titicaca	South America	Bolivia, Peru	3,200	8,288
25	Nicaragua	South America	Nicaragua	3,150	8,160
26	Athabasca	North America	Canada	3,060	7,940
27	Reindeer	North America	Canada	2,570	6,650

APPENDIX L

L LAKES OF THE WORLD, BY AREA *(continued)*

All measurements are approximate.

RANK	NAME	CONTINENT	COUNTRY	AREA (sq mi)	AREA (sq km)
28	Smallwood Reservoir	North America	Canada	2,500	6,460
29	Turkana (Rudolf)	Africa	Ethiopia, Kenya	2,473	6,405
30	Issyk Kul	Asia	Kyrgyzstan	2,360	6,100
31	Torrens	Australia	Australia	2,230	5,780
32	Albert	Africa	Dem. Republic of the Congo, Uganda	2,160	5,590
33	Vanern	Europe	Sweden	2,160	5,580
34	Netilling	North America	Canada	2,140	5,540
35	Winnipegosis	North America	Canada	2,070	5,370
36	Nasser	Africa	Egypt, Sudan	2,026	5,248
37	Bangweulu	Africa	Zambia	1,930	5,000
38	Chott el Djerid	Africa	Tunisia	1,930	5,000
39	Urmia	Asia	Iran	1,879	4,868
40	Nipigon	North America	Canada	1,870	4,850
41	Gairdner	Australia	Australia	1,840	4,770
42	Manitoba	North America	Canada	1,800	4,660
43	Kyoga	Africa	Uganda	1,710	4,430
44	Khanka	Asia	China, Russia	1,700	4,400
45	Saimaa	Europe	Finland	1,700	4,403
46	Mweru	Africa	Dem. Republic of the Congo	1,680	4,350
47	Great Salt	North America	U.S.A.	1,680	4,350
48	Qinghai (Koko)	Asia	China	1,625	4,209
49	Woods	North America	Canada	1,580	4,100
50	Taymyr	Asia	Russia	1,540	3,990
51	Nasser	Africa	Egypt	1,522	3,942
52	Orumiyeh	Asia	Iran	1,500	3,880
53	Dubawnt	North America	Canada	1,480	3,830
54	Van	Asia	Turkey	1,430	3,710
55	Tana	Africa	Ethiopia	1,390	3,600
56	Peipus	Europe	Estonia, Russia	1,386	3,555
57	Uvs	Asia	Mongolia	1,300	3,366

APPENDIX M

M LAKES OF THE WORLD, BY DEPTH

All measurements are approximate.

RANK	LAKE	CONTINENT	COUNTRY	DEPTH (FT)	DEPTH (M)
1	Baikal	Asia	Russia	5,315	1,621
2	Tanganyika	Africa	Burundi, Tanzania, Dem. Congo (ROC), Zambia	4,825	1,471
3	Caspian Sea	Asia	Azerbaijan, Iran, Kazakhstan, Russia, Turkmenistan	3,363	1,025
4	Malawi	Africa	Malawi, Tanzania, Mozambique	2,316	706
5	Issyk Kul	Asia	Kyrgyzstan	2,303	702
6	Great Slave	North America	Canada	2,015	614
7	Matana	Asia	Indonesia	1,936	590
8	Crater	North America	U.S.A.	1,932	589
9	Toba	Asia	Indonesia	1,736	529
10	Hornindals	Europe	Norway	1,686	514
11	Sarez	Asia	Tajikistan	1,657	505
12	Tahoe	North America	U.S.A.	1,645	501
13	Chelan	North America	U.S.A.	1,605	489
14	Kivu	Africa	Rwanda, Congo (DROC)	1,575	480
15	Quesnel	North America	Canada	1,560	475
16	Sals	Europe	Norway	1,522	464
17	Adams	North America	Canada	1,500	457
18	Mjøsa	Europe	Norway	1,473	449
19	Manapuri	Oceania	New Zealand	1,453	443
20	Poso	Asia	Indonesia	1,444	440
21	Nahuel Huapi	South America	Argentina	1,437	438
22	Dead Sea	Asia	Israel, Jordan	1,421	433
23	Tazawa	Asia	Japan	1,394	425
24	Great Bear	North America	Canada	1,356	413
25	Como	Europe	Italy	1,352	412
26	Superior	North America	Canada, U.S.A.	1,333	406
27	Hawea	Asia	New Zealand	1,286	392
28	Wakatipu	Asia	New Zealand	1,240	378

APPENDIX M

M LAKES OF THE WORLD, BY DEPTH *(continued)*

All measurements are approximate.

RANK	LAKE	CONTINENT	COUNTRY	DEPTH (FT)	DEPTH (M)
29	Suldals	Europe	Norway	1,234	376
30	Maggiore	Europe	Italy, Switzerland	1,221	372
31	Fyres	Europe	Norway	1,211	369
32	Chilko	North America	Canada	1,200	366
33	Pend Oreille	North America	U.S.A.	1,200	366
34	Shikotsu	Asia	Japan	1,191	363
35	Powell	North America	Canada	1,174	358
36	Llanquihue	South America	Chile	1,148	350
37	Garda	Europe	Italy	1,135	346
38	Towada	Asia	Japan	1,096	334
39	Wanaka	Asia	New Zealand	1,086	325
40	Bandak	Europe	Norway	1,066	325
41	Telestskoya	Asia	Russia	1,066	325
42	Eutsuk	North America	Canada	1,060	323
43	Atitlan	North America	Guatemala	1,050	320
44	Lunde	Europe	Norway	1,030	314
45	Geneva	Europe	France, Switzerland	1,017	310
46	Morar	Europe	Scotland	1,017	310
47	Kurile	Asia	Russia	1,004	306
48	Walker	North America	U.S.A.	1,000	305
49	Titicaca	South America	Bolivia, Peru	997	304
50	Argentino	South America	Argentina	984	300
51	Iliamna	North America	U.S.A.	980	299
52	Tyrifjorden	Europe	Norway	968	295
53	Lugano	Europe	Italy, Switzerland	945	288
54	Takla	North America	Canada	941	287
55	Ohrid	Europe	Albania, Serbia-Montenegro	938	286
56	Atlin	North America	Canada	930	283
57	Nuyakuk	North America	U.S.A.	930	283
58	Michigan	North America	U.S.A.	923	285
59	Harrison	North America	Canada	916	279
60	Te Anau	Oceania	New Zealand	906	276

Seven Wonders of the Ancient World

1 **The pyramids of Egypt**

Constructed between 2700 and 2500 B.C., the pyramids are the last surviving structures of the Seven Wonders of the Ancient World. The largest of the pyramids, which rises over 137 meters (450 feet), was built as a tomb to house the body of Pharaoh Khufu. Historians believe that it must have taken over twenty years to build with over 100,000 slave laborers.

2 **The gardens of Semiramis at Babylon**

The existence of these gardens is reputed, but according to fable they existed around 600 B.C. They are said to have been outside on a brick terrace 23 meters (75 feet) above the ground, encompassing an area of 37 square meters (400 square feet).

3 **The statue of Zeus at Olympia**

Constructed around 450 B.C. by the sculptor Phidias, this 12-meter (40-foot) high statue is of an ivory Zeus wearing a robe of gold, seated atop a throne. In his right hand was Nike, his messenger and a symbol of victory, in his left hand was the scepter signifying his rule over the gods and humankind, and atop his head was a wreathed crown.

4 **The temple of Artemis at Ephesus**

Built around 550 B.C. to celebrate the goddess of the hunt, this temple was one of the largest in ancient times. Beneath its tile-covered roof were rows of columns believed to be more than 12 meters (40 feet) high, leading to a marble sanctuary. The original temple was destroyed by fire in 356 B.C., but another temple was built on the same foundation. This temple was also burned, but the foundation still remains. Remnants of the second temple can be found at London's British Museum.

5 **The mausoleum at Halicarnassus**

Located in southwestern Turkey, this enormous white marble tomb was constructed to house the body of Mausolus, a king of Persian Empire. It was constructed around 350 B.C. by the Greek architects Satyrus and Pythius and became so well known that the term mausoleum was created to signify any large tomb. An earthquake in the 15th century caused significant damage to the tomb, which was eventually disassembled. Several of its exterior sculptures can be seen in London's British Museum.

6 **The Colossus at Rhodes**

Constructed around 200 B.C. by the Greek sculptor Chares, this 36-meter (120-foot) bronze statue was meant to honor the sun god Helios and celebrate the unity of the city-states of Rhodes. The statue was hollow, supported by stone blocks and iron bars inside its frame. It was destroyed by an earthquake only fifty-six years after its completion.

7 **The Pharos (lighthouse) of Alexandria or the Walls of Babylon**

This lighthouse, completed near 270 B.C., was, at the time, one of the tallest buildings in the known world. Standing over 122 meters (400 feet) high, it guided sailors to the shores of Alexandria, then ruled by King Ptolemy II.

Seven Wonders of the Natural World

1 **Grand Canyon**

Created after millions of years of erosion from the Colorado River and its tributaries, this Arizona landmark is visited by millions of tourists each year.

2 **Paricutin Volcano**

Although it is not one of the largest volcanoes in Mexico, Paricutin has taken a place on the list of natural wonders following its birth in 1943. The eruption spanned ten years and covered about 2.6 square meters (10 square miles). No one was killed from the lava and ash, but it destroyed agricultural land and seriously affected the lives of those living nearby.

3 **The Harbor at Rio de Janeiro**

Located on the east coast of Brazil, the harbor overlooks the Guanabara Bay and the Atlantic Ocean on one side, and mountains on the other. Discovered by Portuguese navigators in 1502, this area houses a huge carnival each year.

4 **Northern Lights**

The northern lights, or aurora borealis, have fascinated people for centuries. Seen as souls, heavenly signs, or even messages from the dead, these shimmering light displays are caused by the interaction of solar winds with Earth's magnetic field. A similar phenomenon occurs in the southern hemisphere as well, but only the northern lights are classified as a natural wonder.

5 **Mt. Everest**

Formed from the collision of Asia and India over 60 million years ago, the Himalayas house Everest, the tallest mountain on Earth. Located in Nepal near the Tibetan border, this snowy peak has fascinated and challenged many climbers and non-climbers alike.

6 **Victoria Falls**

The largest waterfalls in the world, Victoria Falls has a drop of more than 99 meters (325 feet). Flowing from the Zambezi River, the falls were named for Queen Victoria by David Livingstone in 1855, when he became the first European to gaze upon them.

7 **The Great Barrier Reef**

The Great Barrier Reef extends over 1,998 kilometers (1,242 miles) on the northeast coast of Australia. The reef is quite delicate, being comprised of the skeletons of generations of marine life that lived just under the water's surface. The area is home to exotic coral, which is greatly affected by any human or natural interference, and a wide variety of marine life

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