Encyclopedic Entry

Europe: Physical Geography

For the complete encyclopedic entry with media resources, visit: http://education.nationalgeographic.com/encyclopedia/europe-physical-geography/

Europe is the second-smallest continent. Only Oceania has less landmass. Europe extends from the <u>island</u> nation of Iceland in the west to the Ural Mountains of Russia in the east. Europes northernmost point is the Svalbard <u>archipelago</u> of Norway, and it reaches as far south as the islands of Greece and Malta.

Europe is sometimes described as a peninsula of peninsulas. A peninsula is a piece of land surrounded by water on three sides. Europe is a peninsula of the Eurasian <u>supercontinent</u> and is bordered by the Arctic Ocean to the north, the Atlantic Ocean to the west, and the Mediterranean, Black, and Caspian Seas to the south.

Europes main peninsulas are the Iberian, Italian, and Balkan, located in southern Europe, and the Scandinavian and Jutland, located in northern Europe. The link between these peninsulas has made Europe a dominant economic, social, and cultural force throughout recorded history.

Europes physical geography, environment and resources, and human geography can be considered separately.

Europe can be divided into four major physical regions, running from north to south: Western Uplands, North European Plain, Central Uplands, and Alpine Mountains.

Western Uplands

The Western Uplands, also known as the Northern Highlands, curve up the western edge of Europe and define the physical landscape of <u>Scandinavia</u> (Norway, Sweden, and Denmark), Finland, Iceland, Scotland, Ireland, the Brittany region of France, Spain, and Portugal.

The Western Uplands is defined by hard, ancient rock that was shaped by glaciation. Glaciation is the process of land being transformed by glaciers or ice sheets. As glaciers receded from the area, they left a number of distinct physical features, including abundant marshlands, lakes, and fjords. A fjord is a long and narrow inlet of the sea that is surrounded by high, rugged cliffs. Many of Europes fjords are located in Iceland and Scandinavia.

North European Plain

The North European Plain extends from the southern United Kingdom east to Russia. It includes parts of France, Belgium, the Netherlands, Germany, Denmark, Poland, the Baltic states (Estonia, Latvia, and Lithuania), and Belarus.

Most of the Great European Plain lies below 152 meters (500 feet) in elevation. It is home to many <u>navigable</u> rivers, including the Rhine, Weser, Elbe, Oder, and Vistula. The <u>climate</u> supports a wide variety of seasonal crops.

These physical features allowed for early communication, travel, and agricultural development. The North European Plain remains the most densely populated region of Europe.

Central Uplands

The Central Uplands extend east-west across central Europe and include western France and Belgium, southern Germany, the Czech Republic, and parts of northern Switzerland and Austria.

The Central Uplands are lower in altitude and less rugged than the Alpine region and are heavily wooded. Important highlands in this region include the Massif Central and the Vosges in France, the Ardennes of Belgium, the Black Forest and the Taunus in Germany, and the Ore and Sudeten in the Czech Republic. This region is sparsely populated except in the Rhine, Rhne, Elbe, and Danube river valleys.

Alpine Mountains

The Alpine Mountains include ranges in the Italian and Balkan peninsulas, northern Spain, and southern France. The region includes the mountains of the Alps, Pyrenees, Apennines, Dinaric Alps, Balkans, and Carpathians.

High elevations, rugged plateaus, and steeply sloping land define the region. Europes highest peak, Mount Elbrus (5,642 meters/18,510 feet), is in the Caucasus mountains of Russia. The Alpine region also includes active volcanoes, such as Mount Etna and Mount Vesuvius in Italy.

Flora & Fauna

Much like its physical regions, Europes plant and animal communities follow a general north-south orientation. The tundra, found in Iceland and the northern reaches of Scandinavia and Russia, is a treeless region where small mosses, lichens, and ferns grow. Huge herds of reindeer feed on these tiny plants.

The taiga, which stretches across northern Europe just south of the tundra, is composed of coniferous forests, with trees such as pine, spruce, and fir. Moose, bear, and elk are native to the European taiga.

Just south of the taiga is a mixture of coniferous and <u>deciduous</u> trees, including beech, ash, poplar, and willow. Although this area remains heavily forested, the continents <u>forests</u> were drastically reduced as a result of intense <u>urbanization</u> throughout human history. Intense trade introduced many species, which often overtook native plants. The forests and grasslands of western and central Europe have been almost completely <u>domesticated</u>, with crops and <u>livestock</u> dominant.

Finally, small, <u>drought</u>-resistant plants border the Mediterranean Sea, Europes southern edge. Trees also grow in that southernmost region, including the Aleppo pine, cypress, and cork oak. The only <u>primate</u> native to Europe, the Barbary macaque, inhabits this Mediterranean basin. A small troop of Barbary macaques lives on the tiny island of Gibraltar, between Spain and the African country of Morocco.

The waters surrounding Europe are home to a number of organisms, including fish, seaweeds, marine mammals, and crustaceans. The cold water surrounding northern Britain and Scandinavia is home to unique species of coldwater corals. All of the major bodies of water in Europe have been fished for centuries. In many places, including the Mediterranean and North seas, waters have been overfished. About a quarter of marine mammals are threatened.

Today, around 15 percent of Europes animal species are threatened or endangered, mainly by habitat loss, pollution, overexploitation, and competition from invasive species. The European bison, the heaviest land animal on the continent, is one of the most threatened species.

Beginning in the 20th century, many governments and non-governmental organizations (NGOs) have worked to restore some of Europes rich biodiversity. Establishing fishing limits, protecting threatened habitats, and encouraging sustainable consumption habits are some efforts supported by European conservationists.

VOCABULARY

Term	Part of Speech	Definition
agricultural development	noun	modern farming methods that include mechanical, chemical, engineering and technological methods. Also called industrial agriculture.
alpine	adjective	having to do with mountains.
altitude	noun	the distance above sea level.
ancient	adjective	very old.
archipelago	noun	a group of closely scattered islands in a large body of water.
biodiversity	noun	all the different kinds of living organisms within a given area.
cliff	noun	steep wall of rock, earth, or ice.
climate	noun	all weather conditions for a given location over a period of time.
cold-water coral	noun	tiny marine animal that thrives in deep, cold water. Also called deep-water coral.
communication	noun	sharing of information and ideas.
coniferous forest	noun	land covered by trees with thin needles instead of flat leaves.
conservationist	noun	person who works to preserve natural habitats.
consumption	noun	process of using goods and services.
continent	noun	one of the seven main land masses on Earth.
crop	noun	agricultural produce.
crustacean	noun	type of animal (an arthropod) with a hard shell and segmented body that usually lives in the water.
deciduous	adjective	type of plant that sheds its leaves once a year.
dense	adjective	having parts or molecules that are packed closely together.
domesticate	verb	to tame or adapt for human use.
drought	noun	period of greatly reduced precipitation.
economic	adjective	having to do with money.
endanger	verb	to put at risk.
environment	noun	conditions that surround and influence an organism or community.
fjord	noun	long, narrow ocean inlet between steep slopes.
forest	noun	ecosystem filled with trees and underbrush.
glaciation	noun	process of a glacier carving out a landscape.
glacier	noun	mass of ice that moves slowly over land.
government	noun	system or order of a nation, state, or other political unit.

grassland	noun	ecosystem with large, flat areas of grasses.
habitat loss	noun	the reduction or destruction of an ecosystem, making it less able to support its native species.
human geography	noun	the study of the way human communities and systems interact with their environment.
ice sheet	noun	thick layer of glacial ice that covers a large area of land.
inlet	noun	small indentation in a shoreline.
invasive species	noun	type of plant or animal that is not indigenous to a particular area and causes economic or environmental harm.
island	noun	body of land surrounded by water.
lake	noun	body of water surrounded by land.
landscape	noun	the geographic features of a region.
livestock	noun, plural noun	animals raised for sale and profit.
marine mammal	noun	an animal that lives most of its life in the ocean but breathes air and gives birth to live young, such as whales and seals.
marsh	noun	wetland area usually covered by a shallow layer of seawater or freshwater.
mountain	noun	landmass that forms as tectonic plates interact with each other.
navigable	adjective	able for vessels to steer through.
NGO	noun	non-governmental organization.
overexploitation	noun	use or harvesting of a renewable resource to the point where the resource is threatened.
overfish	verb	to harvest aquatic life to the point where species become rare in the area.
peninsula	noun	piece of land jutting into a body of water.
physical geography	noun	study of the natural features and processes of the Earth.
plain	noun	flat, smooth area at a low elevation.
plateau	noun	large region that is higher than the surrounding area and relatively flat.
pollution	noun	introduction of harmful materials into the environment.
primate	noun	type of mammal, including humans, apes, and monkeys.
region	noun	any area on the Earth with one or more common characteristics. Regions are the basic units of geography.
resource	noun	available supply of materials, goods, or services. Resources can be natural or human.
river	noun	large stream of flowing fresh water.
Scandinavia	noun	region and name for some countries in Northern Europe: Iceland, Norway, Sweden, Finland, and Denmark.
seasonal	adjective	likely to change with the seasons.

seaweed	noun	marine algae. Seaweed can be composed of brown, green, or red algae, as well as "blue-green algae," which is actually bacteria.
sparse	adjective	scattered and few in number.
supercontinent	noun	ancient, giant landmass that split apart to form all the continents we know today.
sustainable	adjective	able to be continued at the same rate for a long period of time.
taiga	noun	evergreen forest in cool, northern latitudes. Also called boreal forest.
tundra	noun	cold, treeless region in Arctic and Antarctic climates.
urbanization	noun	process in which there is an increase in the number of people living and working in a city or metropolitan area.
valley	noun	depression in the Earth between hills.
volcano	noun	an opening in the Earth's crust, through which lava, ash, and gases erupt, and also the cone built by eruptions.

For Further Exploration

Articles & Profiles

- National Geographic News: New Fault Found in Europe—May 'Close Up' Adriatic Sea
- National Geographic News: Volcanic Ash Stops Europe Flights—Why Ash Is Dangerous

Maps

• European Environment Agency: European Land Cover

Worksheets & Handouts

• National Geographic Education: Mapping Europe—Land Mammal Range

Websites

• National Geographic Travel: Europe



© 1996–2015 National Geographic Society. All rights reserved.