

Bering Land Bridge

Official Map and Guide

Bering Land Bridge National Preserve
Alaska
National Park Service
U.S. Department of the Interior

Bering Land Bridge is as much a part of America's cultural heritage as Yellowstone or Yosemite, if not more so. The distance across the Bering Strait from Siberia to Alaska's Seward Peninsula is approximately 55 miles, and for several periods during the Pleistocene Ice Ages the trip could be made entirely on land instead of water. During additional periods the passage from Siberia to North America could also have been made by small watercraft bumping along coastlines. Bering Land Bridge National Preserve commemorates this prehistoric peopling of the Americas from Asia some 13,000 or more years ago. It also preserves important future clues in this great detective story regarding human presence in the Americas. During the late Wisconsin glacial episode (see painting below left), so much of the Earth's water supply was locked up in huge ice masses

that the sea level fell 280 to 350 feet *below* today's level, exposing vast areas of land formerly under water. The result here was a continuous land bridge that stretched between Siberia and Alaska. Most archeologists agree that it was across this Bering Land Bridge, also called Beringia, that humans first passed from Asia to populate the Americas.

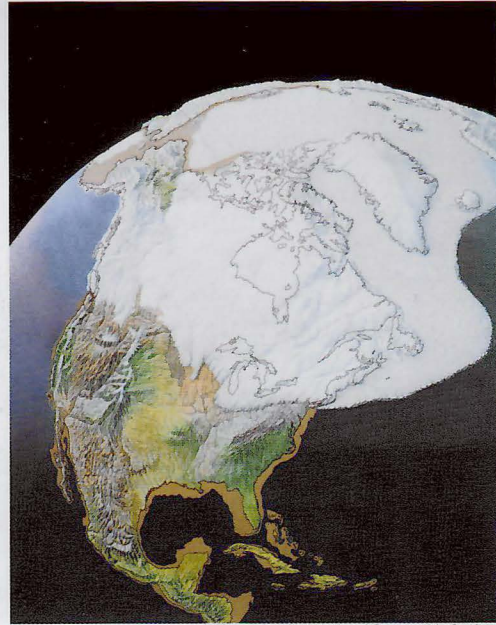
"Bridge" is really a misnomer, for the land mass ranged up to 1,000 miles wide. Just *when* humans first traversed Beringia is subject to less agreement. The Pleistocene epoch began 1.6 million years ago and ended only 10,000 years ago after a final onslaught of ice known as the late Wisconsin glacial. It is theoretically possible for people to have entered North America from Asia at repeated intervals between 40,000 and 13,000 years

ago. Artifacts suggest that people lived in both North and South America by some 12,000 years ago; by that time waters of the Bering Strait had become a significant barrier again. However, similarities between peoples of coastal Siberia and coastal Alaska show that the Bering Strait did not prevent contact between their cultures. Similar languages, shared spiritual practices, hunting tool and traditional dwelling similarities, distinctive fish cleaning methods, and meat preservation by fermentation are but a few examples ethnologists cite.

The Bering Sea has a long history of stable, although seasonal, animal populations productively supporting human life despite otherwise harsh environments. Pleistocene Beringia was not—contrary to popular notions—glaciated; it may have had grass-

lands. Cold much of the year, the park today is a primitive landscape into which, paradoxically, flocks of migratory birds may descend so profusely in summer as to look like snowstorms. And migrating sea mammals seasonally funnel through the Bering Strait in concentrations unknown elsewhere. Native subsistence use links past and present here in a paradise for geologists, archeologists, paleoecologists, and other students of Earth and human pasts. Difficult for the average traveler to reach, the park nevertheless is host to sport hunting, fishing, skiing, and hot springs bathing besides the subsistence activities protected by law.

Eskimo hunters and bowhead whales by Nancy Lange Simmerman.



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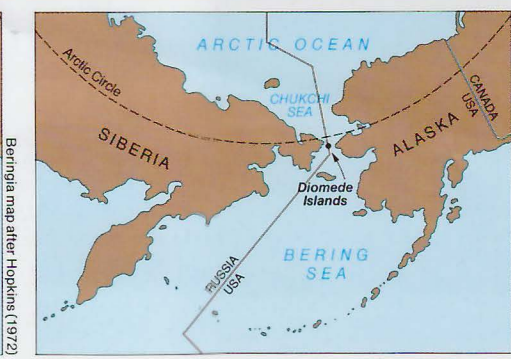
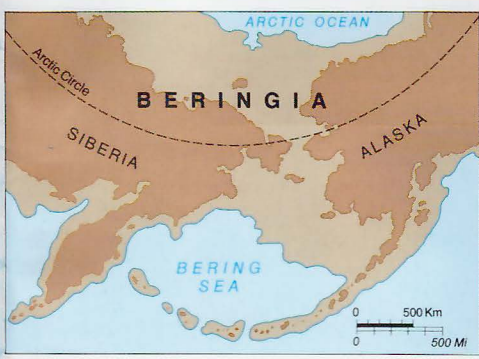
Continental Glaciation

Grasping the magnitude of Ice Age glaciation is possible today only on Earth's two extant polar ice sheets in Greenland and Antarctica. During the final Ice Age push—the Wisconsin glacial period illustrated at left—vast ice sheets up to nearly two miles thick burdened much of North America. Because the amount of water in Earth's hydrosphere is constant, the great ice sheets hoarding of global waters caused sea levels to fall significantly. As a result, land masses grew dramatically where continental shelves slope gradually, as they do here in the Bering Strait.

Continental shelves are the shallow submarine plains that border many continents and typically end in steep slopes to an oceanic abyss. Where a wide continental shelf slopes gradually, a small drop in sea level can increase shoreline areas greatly. At Beringia, a sea level drop of approximately 300 feet during the Wisconsin glacial period revealed a relatively flat, low-lying stretch of continental plain linking North America to Asia. Today's 55-mile stretch

of sea waters that separates Alaska and Siberia was once dry land. Although popularly known as a land bridge, this land mass linking Asia and North America was in fact up to 1,000 miles wide, as shown in the map at right.

Sea level now rises an average of one foot per century because global warming is melting the great polar ice masses of the Arctic and Antarctica. The greenhouse effect and loss of stratospheric ozone may have increased the rate of global warming recently. Many clues to this intriguing puzzle about how and when humans first peopled the Americas undoubtedly lie under water now.



20,000 years ago. In the four Wisconsin stages of the Pleistocene Ice Age, Beringia joined Asia and North America. Most of the Aleutian island chain became a peninsula and with its islands also nearly linked the continents. As glaciers

fluctuated, much of Beringia—even inland of today's Alaska coast—often stood free of ice and would have been habitable by humans.

Today. Some 150 U.S. citizens live just 3 miles from Russia. They are the mostly Inupiat Eskimo residents of Little Diomed Island in the Bering Strait. From Alaska's Seward Peninsula it is just 25 miles to Little Diomed and from there



Peopling the Americas

Arising in tropical Africa, the human species stayed in Earth's middle latitudes until liberated by the conquest of fire. Captive fire brought climate control—and migrations northward around the Mediterranean Sea. Using hides for warm clothing and developing insulating shelters, humans eventually inhabited far northern climates. Crossing the Bering Land Bridge, humans spread rapidly eastward and southward over the Americas. Constantly sorting out new clues in this fascinating story, scientists generally agree about its broad themes while arguing many of its details.

Many plants and other animals also moved between continents via Beringia. Today's park remains a landscape of migrations although most are now seasonal. In summer the park is host to birdlife from six continents; some birds migrate 20,000 miles yearly. While linking two continents, the Bering Land Bridge blocked passage between the Bering and Chukchi seas for some marine mammals and fish.



The First Americans. Whether on land, along Bering Sea coasts, or across seasonal ice, humans crossed Beringia from Asia to enter North America about 13,000 or more years ago.

Humans were latecomers to this magnificent land mass so widely separated from other continents by vast oceans

except near Earth's poles. Africa, Europe, the Middle East, Asia, the Indonesian Archipelago, and Australia already hosted humans. Well-dated finds in both the southwestern United States and South America suggest that humans

were in these locations about 12,000 years ago. Much closer to the Bering Land Bridge, the arctic coastline was not peopled year-round until about 4,500 years ago.

Marine Mammals. When Asia and Alaska were joined, marine mammals could not travel between the Bering and Chukchi seas. Neither could they range between the Atlantic and Pacific via arctic waters. Various seals, bowhead whales,

walrus, and beluga whales were historically important to Inupiat Eskimos of the Seward Peninsula, and today they remain so for subsistence lifeways. Walrus are a food mainstay for residents of the Diomedes and St. Lawrence Island. Polar bears

may range the park and often ride ice floes through the Canadian Arctic to the Bering Strait. Marine mammals, still of immense importance along the Bering Strait, are not often sighted along the park coast.

Terrestrial mammals. Beringia also served as a crossing point for animals other than humans during the Pleistocene. Making the journey with their hunters were musk ox, lemmings, and some of the big Pleistocene animals, including the mam-

moth. Lemmings have remained. Musk ox are back after an absence. Mammoths have been extinct since 11,000 years ago. The painting above shows many of the Ice Age mammals that fed on the grasslands of Beringia. Humans living 17,000

years ago in southern France painted many of these same mammals on the walls of Lascaux Cave.

Greg Harlin/Stanbury, Ronsaville, Wood, Inc.

Survival



Skin-covered kayak boats with light wood frames were preferred over wooden boats in icy waters.



A sealskin float rests behind this hunter set to hurl his harpoon with a throwing board. Larger, open-decked umiaks and the kayaks were moved over ice on sleds. SI



This Eskimo hunter used both harpoons and a rifle for hunting marine mammals. SI

Ice fishing, mostly by women, elders, and children, provided important food in late winter and

early spring when food was scarce. AMNH



These 19th-century north Alaskan Eskimos (above) wear labrets or lip plugs like those reported as far back as 1655 from the Diomed Islands in the Bering Strait. SI The Lamut group (above right) wear traditional decorated garb. AMNH



A Malamute team sets up a chorus of howlings. They pull with a tandem harness as developed in Russia. The sled modeled at left may have been pulled with each dog attached directly to it, a less efficient method early used in Siberia and Alaska. UA



Skin-covered kayak model MAE



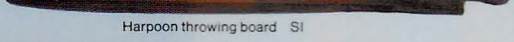
Kayak paddle NMNH



Hunting hat, bird motif SI



Ivory harpoon foreshaft SI



Harpoon throwing board SI



Ivory harpoon heads SI



Walrus harpoon NMNH



Boot creepers, seal net, weight, and ice scratcher SI/MAE/NMNH



Man's ground squirrel parka SI



Snow goggles AMNH



Tungshak spirit mask for hunting ritual MNH

Black bear mask with semihuman figure in right eye NMNH

Credits key: SI Smithsonian Institution; AMNH American Museum of Natural History, New York; MAE Museum of Anthropology and Ethnography, St. Petersburg, Russia; NMNH National Museum of Natural History, UA University of Alaska.

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Low sunlight casts long shadows toward the distant finish line as Libby Riddles mushes her win-



Traditional subsistence lifestyles are recognized in National Park Service management policies for



Reindeer, close relatives of caribou, forage the expansive tundra. They convert its diminutive,



Holding a puppy, Crystal Milligrock projects an important partnership of people and dogs.



Granite tors stand as craggy testimony to past volcanism at Serpentine Hot Springs. Today's hot

springs reveal the continuing presence of substantial geothermal energy in this area.

Access and Information

Access Bering Land Bridge National Preserve is one of the most remote and least-visited national park areas. It sprawls across 2.7 million acres of the northern Seward Peninsula in northwest Alaska. Its western boundary lies 42 miles from the Bering Strait and the United States-Russia fishing boundary. No roads connect northwestern Alaska with other regions. From the towns of Nome and Kotzebue, served daily by jets from Anchorage, bush planes and small boats provide most summer access into the preserve. Winter access is mostly by small planes on skis, snowmachines, or dog sleds.

Information Park offices in Nome are open weekdays from 8 a.m. to 5 p.m. For information or to plan a trip, write or call the Superintendent, Bering Land Bridge National Preserve, P.O. Box 220, Nome, AK 99762; telephone (907) 443-2522.

Climate and Weather Weather is a central concern in visiting the park.

Summer temperatures on the coast are usually in the low 50s°F, with mid 60s to 70s and an occasional 80 or 90 in the interior. Average January lows are -15 on the coast and -50 in the interior. Winds average 8 to 12 mph, but 50 to 70 mph winds commonly accompany storms and produce extremely low and dangerous chill factors. And averages can be meaningless: summer can see snow, near freezing temperatures, and long periods of clouds, wind, and rain. **Exposure and hypothermia are real threats.** Summer days are long, almost without darkness; winter days are short, with only a few hours of light.

Things to See and Do

Activities Camping, hiking, backpacking, exploration, nature observation, photography, and coastal boating are among many possible activities. Winter offers opportunities for snowmobiling, dog sledding, and some crosscountry skiing. Hunting and fishing are permitted under state regulations; Alaska hunting and fishing licenses are required. You can explore remains of the gold rush era and evidence of ancient Eskimo life. The park and surroundings, including Native villages, offer opportunities to observe and learn about traditional subsistence lifestyles and historic reindeer herding.

Scenery The park contains extensive lava flows and ash/steam explosion craters now turned to lakes called maars. It also offers dynamic coast and beach environments of barrier islands and low sand dunes. Tundra plant communities range from wet tundra on the coast to alpine tundra on mountains in and near the park. Serpentine Hot Springs nestles in a haunting valley marked by imposing granite spires called tors.

Plants and Animals More than 400 species of plants have been listed at the preserve. Many evolved in ancient Beringia and spread into Asia or northern Canada and the United States. The Seward Peninsula boasts a rich and diverse **birdlife**. More than 170

known species include such seabirds as gulls, murrelets, and Kittiwakes, such migrating and nesting waterfowl as ducks, swans, and geese; such birds of prey as hawks, eagles, falcons, and owls; and many songbirds of tundra and uplands. At the crossroads of the Asiatic-North American flyway, this area offers rare opportunities to observe several Old World species. **Mammals** include the musk ox, grizzly bear, moose, reindeer, wolf, wolverine, foxes, and smaller species. Once extinct from the Seward Peninsula, musk oxen were reintroduced in 1970 and today are thriving. Reindeer from

Siberia were introduced here in 1891 as a meat source to replace native caribou that seem to have disappeared earlier in the century. Reindeer herding and husbandry is a small but thriving industry for Eskimo herders. In winter, polar bears frequent the coastline and may come ashore. **Marine mammals** occasionally seen along the coast include several species of seals, walrus, and beluga and bowhead whales. **Fish** in area rivers, streams, and lakes include several species of salmon, grayling, char, whitefish, and pike.

Facilities

Facilities in this wildlands park are extremely limited and there are few trails. Six shelter cabins are widely scattered in the preserve are primarily for emergency winter use. A bunkhouse-style cabin at Serpentine Hot Springs sleeps 15 to 20 people in two sections. A wooden tub for bathing there is enclosed in a small bathroom. All cabins are unreserved and bush etiquette may require sharing space with strangers. Camping is relatively unrestricted, with no formal campsites and no developed water, power, or sanitation facilities.

In Nome and Kotzebue Park headquarters in Nome offers information and limited displays on park themes. Nome and Kotzebue provide ser-

vices expected in small towns—hospital, restaurants, hotels, and grocery and hardware stores. Camping gear and sporting goods are often limited for variety, quantity, or availability. Air taxi services provide scheduled flights to neighboring villages or charter flights into the preserve.

In Neighboring Villages In nearby villages small stores offer limited clothing, food, or supplies. As tourism develops some villages also offer meals, lodging, and village tours.

Precautions and Safety

Insects Mosquitos and other biting insects are common in the summer. Headnets and repellent are recommended.

Self Reliance Very often you are absolutely on your own in the preserve, with few if any links to the outside world. Hiking can be difficult and strenuous, especially across tussock tundra. You **must** be prepared for varied and changing weather conditions. Use only durable tested equipment and be experienced in its use before you set out.

Subsistence Subsistence hunting, fishing, trapping, and collecting

of wild plants sustain village cultures and are protected by law. Do not disturb cabins, camps, drying racks, wood supplies, boats, fish nets, or other equipment, even if they look abandoned.

Archaeological Resources Artifacts, sites, structures, and other archaeological and historical resources are protected by federal law. Do not disturb them. Please report such finds to a park ranger.

Wildlife Encounters Bears, moose, and other wildlife can prove deadly, especially if surprised or if their young seem threatened. Respect these animals and keep a safe distance. Try not to surprise bears. Make noise—talk loud, use bells, or shake

stones in a can to announce your presence. If you meet a bear, yield the right-of-way by moving slowly away. Do not run. Clean camps are essential to reduce bear problems. Food and its odors attract bears. Keep cooking and sleeping areas of your camp separate. Store food in airtight containers. It is legal to carry a firearm for protection.

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