



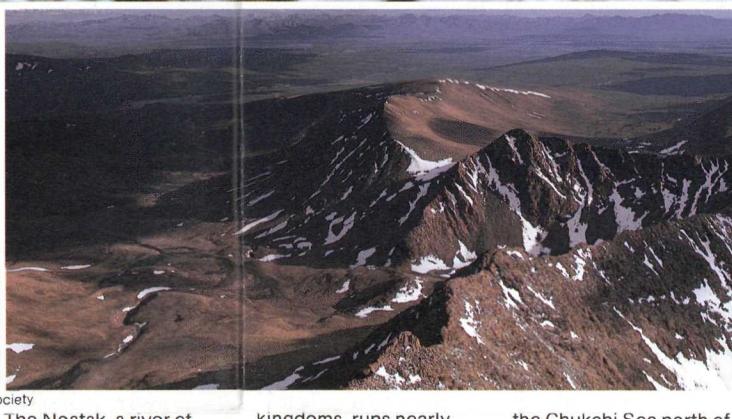
Seal hunting remains economically important for Native Alaskans along coastal parklands.



Annual salmon runs provide oceanic food—a sudden burst of animal protein—to inland Alaska.



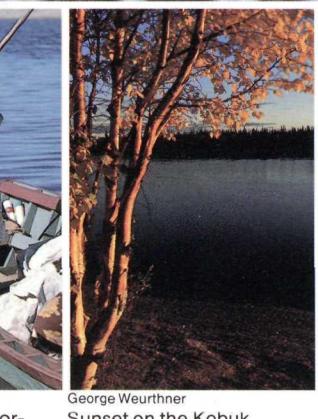
Cottongrass blossoms brighten summer tundra.



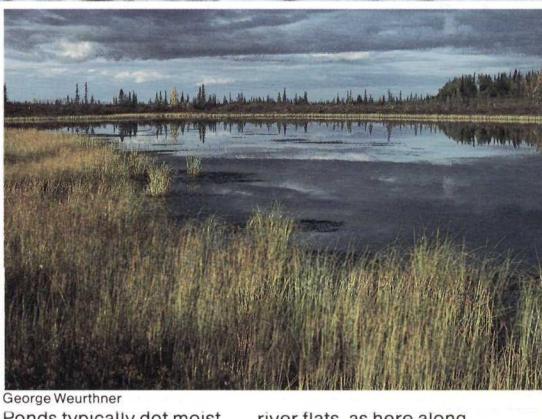
The Noatak, a river of multitudinous mountain



Rivers provide transportation as well as food.



George Weurthner
Sunset on the Kobuk River mirrors golden aspen leaves.



George Weurthner
Ponds typically dot moist river flats, as here along the Kobuk River.

Expansive Arctic and Subarctic Wildlands

Cover: Herds of caribou roam the parklands in northwest Alaska. Photo by William Boehm

Known simply as the Northwest Alaska Areas, three units of the National Park System stretch eastward from the Chukchi Sea for some 290 miles to the upper Noatak River. Cape Krusenstern National Monument, Kobuk Valley National Park, and Noatak National Preserve together protect some 9½ million acres of subarctic and arctic wildlands. They also offer, on the Noatak and Kobuk Rivers, some of North America's finest waters for wilderness expeditions. West to east, these parklands encompass the Brooks Range, northernmost extension of the Rocky Mountain Range, north of the Arctic Circle. They trace the treeline or northern limit of tree growth as the boreal forest gives way to the tundra that stretches northward to Point Barrow on

the Beaufort Sea. The Northwest Alaska Areas protect the archeologically significant beach ridges of Cape Krusenstern, the Great Kobuk Sand Dunes, and most of the expansive watershed of the Noatak River. With Gates of the Arctic National Park they extend 350 miles inland and encompass 16.8 million acres. Linked to this expansive topography is the wide-ranging, nomadic western arctic herd of barren ground caribou. Its aggregate numbers exceed 300,000 animals today. The tundra offers a thin veneer of life across which caribou must move to forage for adequate food. In summer the land is covered with a profusion of low-growing plants, including dwarfed ground willows, saxifrage, lupines, reindeer moss, and lichens. The caribou

has a strong presence in native stories of this region. Native peoples here were often semi-nomadic, following the caribou migrations. Even the coastal peoples of Cape Krusenstern ranged inland to hunt caribou and to hunt and trap other land mammals when the sea mammals so important to their lives were scarce. Throughout these parklands, local residents still pursue caribou hunting, fishing, trapping, and other subsistence activities. Special provisions of the legislation establishing these Alaska parklands allow local people to continue these activities. Many residents rely significantly on locally harvested animals, fish, and plants for satisfying basic food needs. The Inupiat people traditionally valued the land so that, through wise use over thousands

of years, its resources and productivity were carefully preserved for the benefit of future generations. The National Park Service has a compatible mission—of stewardship of this vast reach of northwest Alaska for the use and enjoyment of this and coming generations. From the visitor center in Kotzebue it is difficult to imagine the extent of the Noatak River—which name means “passage to the interior”—or the expanse of the annual caribou migrations throughout the immense area that these parks encompass.

Cape Krusenstern

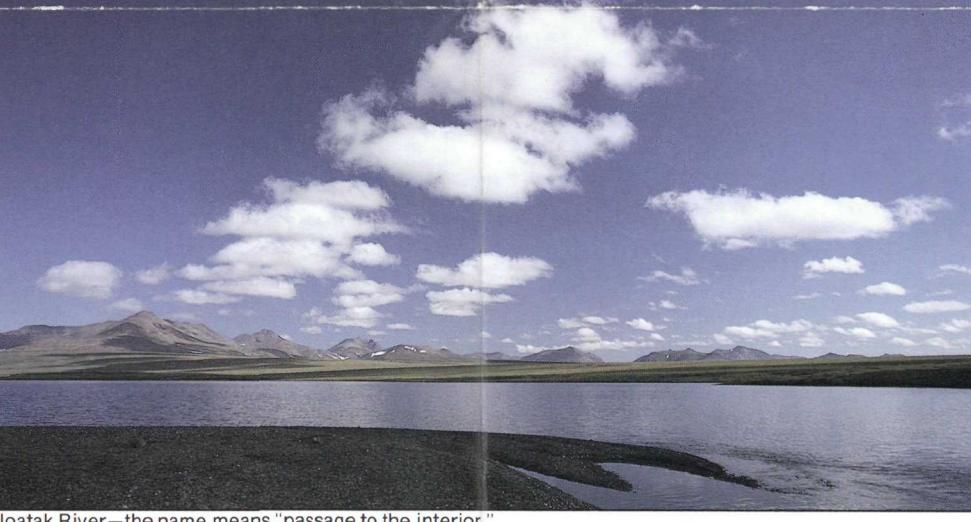


Beach ridges at Cape Krusenstern.

Cape Krusenstern National Monument is a coastal plain dotted with sizable lagoons and backed by gently rolling limestone hills. Treeless, the cape gives you the feeling of being able to see forever. Cape Krusenstern's bluffs and its series of 114 beach ridges record changing shorelines of the Chukchi Sea (see map). They also record in time sequence an estimated 6,000 years of prehistoric human use of this coastline. In summer a tremendous show of wildflowers colors the beach ridges and nearby hills. Huge numbers of birds come to the coastal area for nesting. Some archeological resources here are older than well-known remains of ancient Greek civilizations on the Mediterranean Sea. Shifting sea ice, ocean currents, and waves have formed—and continue to form—spits and lagoons possessing important scientific, cultural, and scenic values. In fall, migrating waterfowl use the lagoons as feeding and staging areas. The broad plain between the hills of the cape and those in the northern section of the monument is the tundra-covered bed of a huge glacier formed 250,000 years ago—and the former course of the Noatak River. Activities: Kayaking along the coast and through the lagoons is possible. Camping, hiking, backpacking, wildlife watching, and photo opportunities abound.

Caribou are the only members of the deer family in which both male and female have antlers. Bull caribou may extend four to five feet from the head and have a similar spread.

Noatak



Noatak River—the name means "passage to the interior."

As one of North America's largest mountain-ringed river basins with an intact, unaltered ecosystem, the Noatak River environs feature some of the Arctic's finest arrays of plants and animals. The river offers equally superlative wilderness float-trip opportunities—from deep in the Brooks Range to tidewater of the Chukchi Sea. Noatak National Preserve lies almost completely enclosed by the Baird and De Long mountains of the Brooks Range. In this transition zone, the northern coniferous forest thins out and gradually gives way to the tundra that stretches northward to the Beaufort Sea. The Noatak basin is internationally recognized as a

Biosphere Reserve. Under this United Nations scientific program the area's ecological and genetic components are monitored to establish baseline data for measuring changes in other ecosystems worldwide. Information can also be gathered here on sustainable uses of natural resources by humans, as exemplified by the Inupiat and other native peoples who have lived off the land of northwest Alaska for many thousands of years. The Noatak River is classified as a national wild and scenic river from its headwaters to the Kelly River. Activities: Gentle and slow moving except in its distant headwaters, the Noatak offers fine canoeing, kayaking, and rafting. Aircraft landing on gravel bars or rivers and lakes provide access for fishing, hiking, backpacking, hunting, and other recreational pursuits.

Kobuk Valley



Great Kobuk Sand Dunes, largest of the park's dune areas.

Kobuk Valley National Park is also mountain-enclosed—by the Baird and Waring mountains (see map). Major natural features that the park protects include the central section of the Kobuk River, the 25-square-mile Great Kobuk Sand Dunes, and the Little Kobuk and Hunt River dunes. Additional dunes that have been stabilized by vegetation now cover much of the southern portion of the Kobuk Valley. Sand created by the grinding action of ancient glaciers has been carried to the Kobuk Valley by winds—westerly in summer and easterly the rest of the year—and by water. River bluffs, composed of sand and standing as much as 150 feet high, hold permafrost ice wedges and the fossils of Ice Age mammals. Up to 1,500 feet wide, the placid Kobuk River falls a mere 2 to 3 inches per mile. Its valley provides important fall and winter range for the western arctic caribou herd. Bands of bulls and cows may be seen here from late August through October as they migrate across the Kobuk River on their extensive annual migrations. Native people have lived along the Kobuk for at least 12,000 years. Their history is best recorded at the Onion Portage archeological site. The Salmon River, within Kobuk Valley National Park, is classified as a national wild and scenic river. Activities: Motorboats, kayaks, canoes, and rafts are used on the river for a variety of floating experiences. The Great Kobuk Sand Dunes can be reached at their northern tip—once you have floated the river into hiking range, that is—an easy crosscountry hike from the Kobuk River, following the uplands near Kavet Creek.

Caribou, Nomads of the North

Caribou migrations are one of the wonders of the subarctic and arctic realms. Traditionally, caribou have been among this region's chief food sources for humans, predators, and scavengers. The populations of some other animal species may even fluctuate with that of the caribou. Native peoples have depended on caribou for food, clothing, shelter, and tools, using the entire animal. For food: meat, greens from the stomach, and fat. For clothing: hides for coats called parkies, trousers, boots called mukluks, and mittens, plus sinew to sew them. For shelter: hides for tents. For tools: antler and bone for needles, sleigh brakes, fish spears, knife handles, arrowheads, hide scrapers, and snow shovels.

Illustration by Robert Hynes



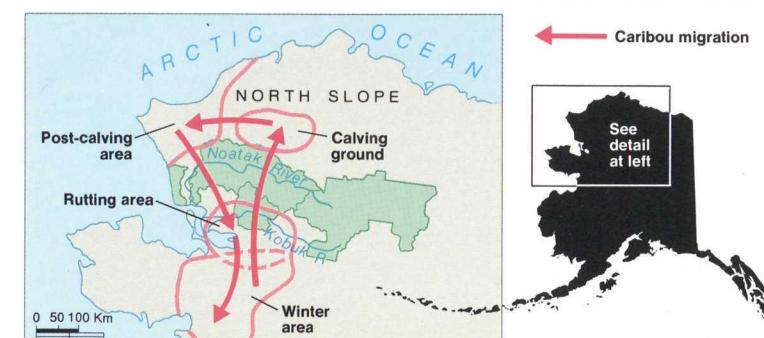
Range and Migrations

Known as "nomads of the north," caribou have lived in most of Alaska except its southeastern panhandle. In their yearly wanderings, caribou of the western arctic herd range

over 140,000 square miles, including the entire three parks that make up the Northwest Alaska Areas. The herd—North America's largest—is more than 300,000 at this writing.

Spring migration begins in March: the herd's main body crosses the Kobuk and Noatak rivers moving northward to calving grounds on the

Arctic Coastal Plain. Many of the caribou begin to cross the Noatak southward in late August and the Kobuk in September. The range lies south of Kobuk Valley National Park and the Selawik National Wildlife Refuge.

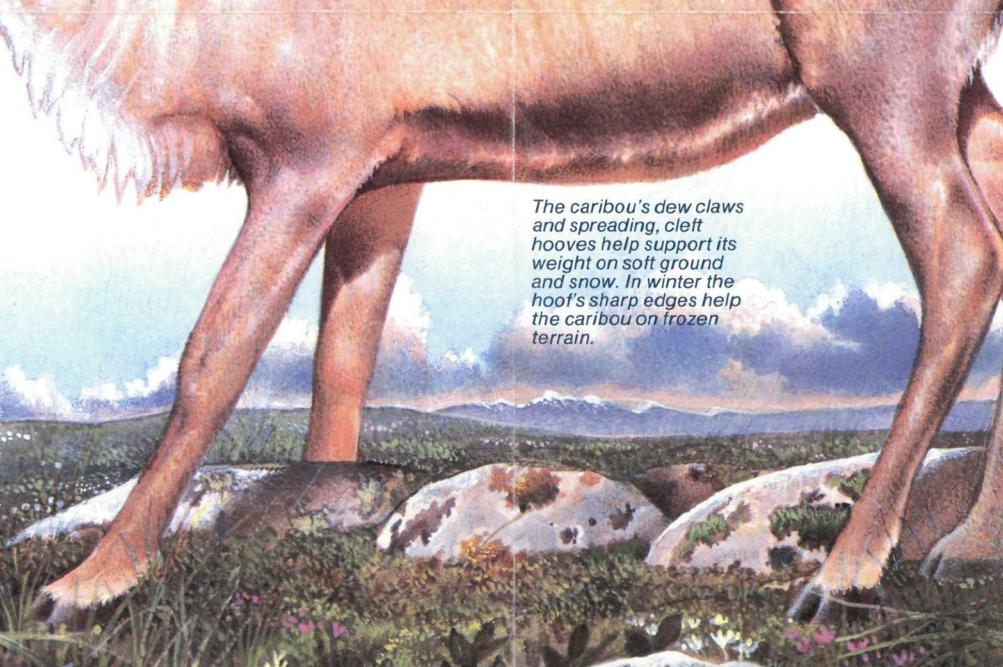


Life on the Tundra

Truly migratory, caribou move about the tundra in constant search of plant foods to support their body weight: 150 to 300 pounds for bulls. Tundra is a mat of mostly prostrate vegetation that can grow in short clumps and other conditions preclude tree growth. Wet, moist, and alpine tundra are illustrated below. Tundra is often underlain by permanently frozen ground called permafrost. The ground surfaces of wet tundra and moist tundra

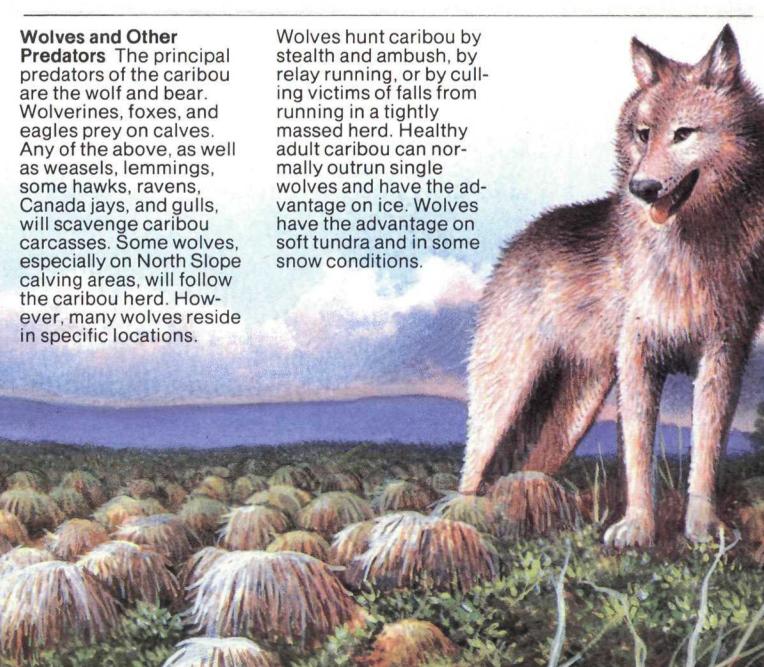
thaw in summer and stay waterlogged because permafrost prevents ready drainage. Alpine tundra often grows on rocky ground that drains very rapidly; the ground thaws in summer, but may not dry out. Caribou feed on grasses and grass-like sedges; small shrubs and their berries; and twigs and bark. In winter, when these are not as available, they eat significant amounts of lichen, called reindeer moss. Caribou can dig through snow to find food unless

the crust is too hard, in which case they may suffer malnutrition and even starve. Besides the predators described at right, chief antagonists of caribou in summer are the caribou warble fly, caribou tick, and mosquito. Caribou may even stop eating while trying to avoid the Arctic's summer hordes of biting insects. Mosquitoes, however, are an important food source—consuming the energy available of plants into protein that sustains abundant bird and fish life of the north.



The caribou's dew claws and spreading, cleft hooves help support its weight on soft ground and snow. In winter the hoof's sharp edges help the caribou on frozen terrain.

Adult bulls can accumulate fat deposits—mostly on the back and rump—that weigh 60 pounds or more in early fall. They lose the fat during the rutting, or mating, season.



Wolves and Other Predators: The principal predators of the caribou are the wolf and bear. Wolverines, foxes, and eagles prey on calves. Any of the above, as well as foxes, coyotes, some hawks, ravens, Canada jays, and quills, will scavenge caribou carcasses. Some wolves, especially on North Slope calving areas, will follow the caribou herd. However, many wolves reside in specific locations.

