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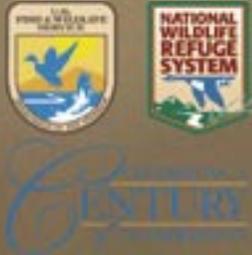
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March 2003



*Lesser golden-plover* ©Corbis Images

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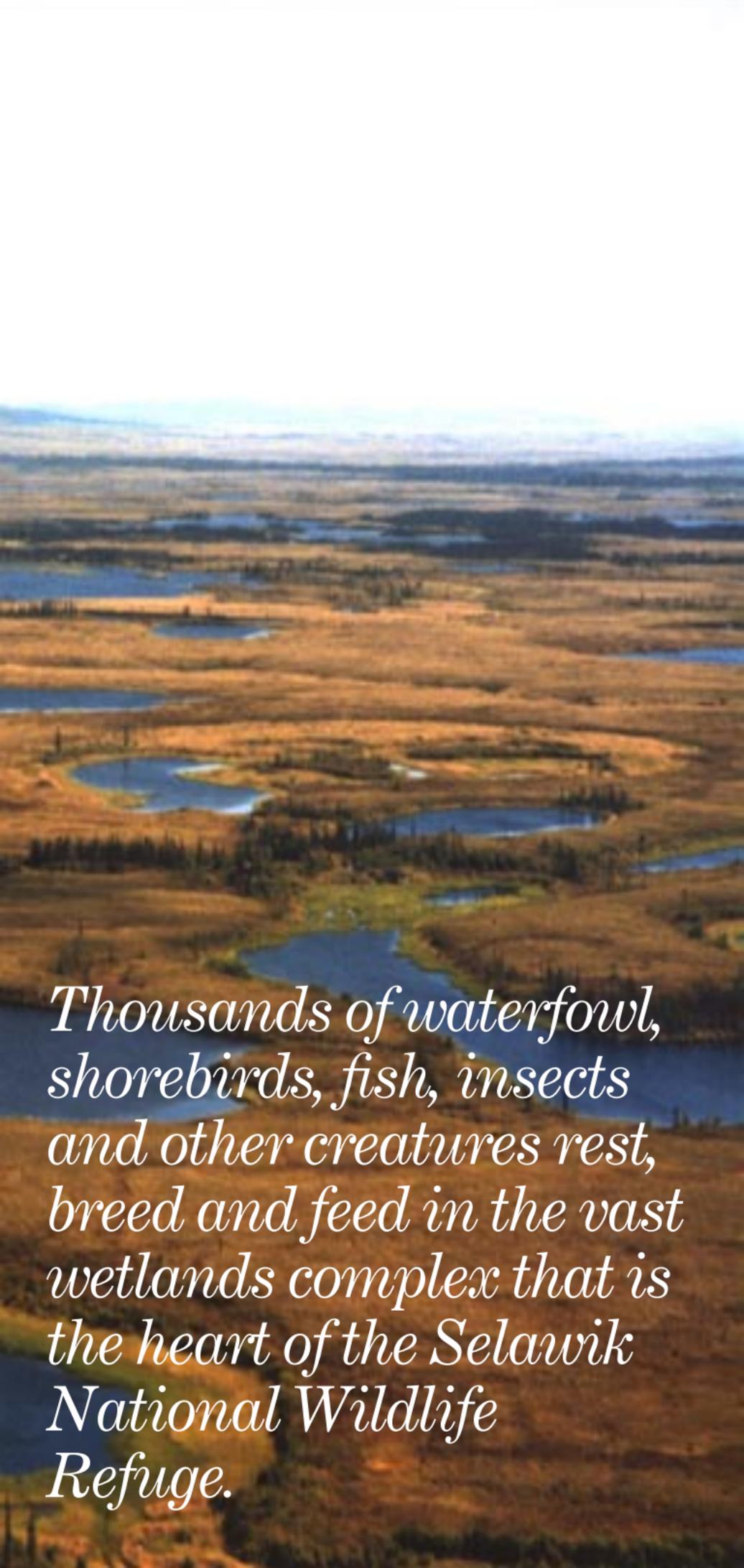
# Selawik

## National Wildlife Refuge



*Unnamed lake on Selawik Refuge.*





*Thousands of waterfowl, shorebirds, fish, insects and other creatures rest, breed and feed in the vast wetlands complex that is the heart of the Selawik National Wildlife Refuge.*

## Welcome to Selawik National Wildlife Refuge

In a remote, northwestern corner of Alaska, Selawik National Wildlife Refuge straddles the Arctic Circle. Created by the Alaska National Interest Lands Conservation Act in 1980, this 2.15 million acre refuge was established to conserve the Western Arctic Caribou Herd; waterfowl, shorebirds and other migratory birds; and salmon and sheefish.



*Mountains are visible on the horizon from nearly everywhere within the Refuge.*

The purposes of the refuge are to conserve fish and wildlife populations and habitats in their natural diversity, to fulfill international treaty obligations, to provide the opportunity for continued subsistence uses by local residents, and to ensure water quality and necessary water quantity within the refuge.

This is a land of vast tundra, spruce, birch and alder-covered foothills with numerous waterways lined by dense willows and alders. This is where the boreal forest of Interior Alaska fades away and meets the arctic tundra.



*This flying "Blue Goose" (a stylized Canada goose) was designed by renowned cartoonist and conservationist J.N. "Ding" Darling in 1935. It has become the symbol of the National Wildlife Refuge System.*



*Frost crystals cling to surfaces at Selawik Hot Springs.*

## **A land of climatic extremes**

Welcome to the arctic! Persistent winter winds scour the white landscape. Wind-driven snow doesn't compress—it squeaks when you walk on it. Although temperatures have been recorded as low as  $-70^{\circ}\text{F}$ , they usually don't remain that low for more than a day or two at a time but even the more common winter temperatures of  $0$  to  $-30^{\circ}\text{F}$  produce extreme chill factors when accompanied by strong winds. As if to compensate, the setting sun's alpenglow and the northern lights routinely provide striking colors.

By late March the sun dominates this world. Snow persists until late May but daylight exists around the clock by early May. Spring is vibrant! Wildlife and people emerge and travel across the still-frozen land and water.

Summers are moderate to warm, and typically last from mid-June until early September. Summer temperatures average  $60^{\circ}\text{F}$ , but sometimes reach nearly  $90^{\circ}\text{F}$  on inland areas of the refuge. Fall is beautiful, and short.

*Freshly fallen snow creates beautiful sculpted patterns along riverways.*



### **Water is prevalent in the landscape**

The refuge is named for the Selawik River, which meanders through the heart of the refuge, creating a succession of rich habitats. The upper 155-mile reach of Selawik River—which is entirely within the refuge boundary—has been designated by Congress as a National Wild River. The huge wetlands complex associated with the lower Selawik River watershed is the only arctic tundra wetland complex of its size within the National Wildlife Refuge System. The numerous channels of the Kobuk River delta and the tidal waters of Hotham Inlet form the western boundary of the refuge.

*Wetlands extend for miles across the refuge.*



These tundra wetlands dominate the refuge landscape, while spruce and willows trace the river drainages. More than 24,000 lakes dot the land, providing excellent habitat for waterfowl, shorebirds, fish, beaver, muskrats, moose and other creatures.

Much of the land under the refuge is frozen year-round. An impermeable layer of “permafrost” causes water to pool atop it, so many areas remain wet throughout the short, but productive summer. Plants grow very quickly under 24 hours of daylight in the summer. The growing season is not long, however, as winter returns to the arctic north quickly!





*The refuge provides unspoiled habitat for more than 180 recorded bird species, including these long-tailed ducks.*

### **Birds breed, rest and feed on the refuge**

Selawik Refuge is a breeding and resting area for a multitude of migratory birds returning from North and South America, Asia, Africa and Australia. Several bird species from Eurasia, like the yellow wagtail, migrate to and breed on the refuge, presenting visitors with unique opportunities to view birds that don't migrate through any of the four North American flyways.

At least ten species, including northern hawk owls, willow ptarmigan and hoary redpolls, are year-round residents of the refuge, enduring low temperatures and strong winter winds.

Refuge wetlands and lakes are among the last stopping areas for hundreds and thousands of shorebirds and waterfowl awaiting spring breakup in the northern arctic. Tundra swans, white-fronted geese and sandhill cranes herald the arrival of spring as the rapidly returning sunlight bathes Selawik Refuge and warms it to vibrant life. For the next four months, a remarkable diversity of ducks, geese and shorebirds stage and breed on the refuge.

*Winter plumage hides willow ptarmigan from predators.*



Among the ducks utilizing the extensive refuge wetlands are American wigeon, northern pintail, mallard, green-winged teal, greater scaup, long-tailed ducks, and black scoters. Red-breasted mergansers



are found along major river systems within the refuge. Large numbers of geese, including greater white-fronted and lesser Canada geese use the refuge in spring, summer and fall for staging and nesting. Tundra swans also nest in large numbers

*Greater white-fronted goslings are a sign that spring has returned to the arctic.*



on the refuge. Pacific loons are the most abundant loons nesting on the refuge, although arctic, common, red-throated and yellow-billed loons also nest here.

Large numbers of shorebirds are present on the wetland, lake and river habitats of the refuge, primarily during spring and fall migrations. Common species include black turnstones, red knots, least sandpipers, American golden plovers, red-necked phalaropes, bar-tailed godwits and mew gulls.

## **A variety of mammals make the refuge their home**

Selawik Refuge provides habitat for more than 30 mammal species. These animals occupy an array of refuge habitats, including spruce forests, spruce/willow communities, paper birch/lichen communities, riparian zones, grass and sedge meadows, dwarf birch/open tundra, aspen groves and wetland edges.



*Caribou cross the Selawik River during fall migration.*

Twice a year, the Western Arctic Caribou Herd, currently the largest herd in Alaska, migrates across the refuge. Groups of up to 10,000 animals have been observed moving across refuge lands during their fall migration. In the spring, groups of nearly 27,000 animals have been observed concentrating in the Selawik Hills near the Tagagawik River prior to their northward migration. Traditionally, portions of Selawik Refuge were the heart of this magnificent caribou herd's wintering grounds, though in recent years most animals have moved on south through the refuge to the Seward Peninsula. In mild winters, small bands of caribou still forage on Selawik's lichen-covered foothills.

Moose are present year round and are commonly found in upper river valleys, foothills and the Kobuk River delta. Muskox are occasionally sighted on the refuge. Black and grizzly bears range and den throughout the refuge. Wolves, wolverine, red fox and marten are full-time residents, as are lynx, whose numbers fluctuate in response to



*An arctic ground squirrel scans for predators from the safety of its burrow.*

snowshoe hare population cycles. Muskrat, beaver, mink, short-tailed and least weasels, and river otters use the extensive rivers, lakes and streams of the Selawik and Kobuk River drainages. Spotted seals swim up the rivers following fish, and even beluga whales have ventured well up the Selawik in pursuit of fish. Small mammals, including shrews, voles, lemmings and arctic ground squirrels occur throughout the entire refuge in large numbers, providing an important link in the food chain.

*A bull moose rests in dense vegetation.*

Lightning-caused wildland fires help create a mosaic of habitats in the boreal forest. Grasses, herbs, flowers and deciduous trees grow where fire has removed mature spruce and mosses. Then small mammals—and their predators—thrive.



*Both Selawik River and the refuge take their name from the Inupiat Eskimo word “siilivik”, which means “place where sheefish (sii) spawn (li-vik).”*

### **Fish swim in rivers, lakes and streams**

The refuge’s many rivers, sloughs and lakes support both freshwater and anadromous fisheries, and provide spawning grounds for sheefish, whitefish, northern pike, burbot, and arctic grayling. Chum salmon and Dolly Varden also spawn within refuge boundaries, while herring spawn in the coastal waters of Kotzebue Sound, adjacent to the refuge. Twenty-seven species of fish have been found within Selawik Refuge or in nearby waters.



Sheefish, which can weigh more than 50 pounds, are large predatory whitefish found only in the vast arctic and subarctic drainages of North America and northwestern Asia, and in the drainages of the Caspian Sea.

Sheefish are present in large numbers in the Selawik and Kobuk rivers,

*Local residents still fish for burbot, herring, sheefish and other whitefish using traditional methods.*

Selawik Lake and Hotham Inlet. The Selawik population represents the slowest growing and longest-lived sheefish population in Alaska. These fish are highly prized for their great taste and are an important subsistence resource for local residents. It is the whitefish in the rivers, the ducks and geese on the wetlands, and the caribou on the tundra that best describe the fauna of the region and provide the base for human survival.



*Ancient sand dunes form part of the Selawik Wilderness area.*

### **Wilderness encompasses foothills and mountains**

The 240,000-acre Selawik Wilderness includes the Waring Mountains and vegetated sand dune fields that have persisted since the Pleistocene Era. The grinding action of ancient glaciers created sand, which was carried to the refuge by wind and water, producing the Selawik sand dunes. These dunes are the remnant of a much larger system, which at one time included the Great Kobuk Sand Dunes in the Kobuk Valley National Park, 24 miles to the north.

In contrast to the long, broad Selawik valley, the Waring Mountains rise gradually from rolling foothills of alpine tundra to a bare spine of low ridges that arc across the northern boundary of the refuge.

*Fall colors are spectacular in the Selawik sand dunes.*



These mountains and dunes provide some of the best summer hiking terrain in the region, and spectacular summer and winter scenery. In fall, the vivid changing colors of the low, shrub-dominated vegetation contrast with the dark green spruce forests to enhance the beauty of the refuge.

The refuge's Wilderness is contiguous with the park's 190,000 acre Kobuk Valley Wilderness.

**Past and present cultures are connected to the land—indigenous people still make the refuge their home**

Many thousands of years ago, the Selawik Refuge was part of the Bering Land Bridge between Asia and North America. Animals and humans migrated east across the huge landscape, which then connected the two continents.

The last people to cross from Asia to North America were the Inupiaq, a maritime people who came by sea in skin boats—kayaks and the much larger umiaqs—5500 to 6000 years ago. These hardy men and women thrived in the arctic. Since that time, the Inupiaq have hunted, fished, and gathered berries in and around the area now known as Selawik Refuge. The refuge is still part of the Inupiaq homeland and many Inupiaq still live in villages within the refuge boundaries, continuing their traditional activities.



*Subsistence users gather labrador tea and other plants for food and medicinal use.*

The Selawik River corridor is one of the most archeologically significant areas in the region. Hundreds of historical and traditional sites have been identified, several of which are thought to be 10,000 years old. The area is especially important archeologically because it is a historic travel and trading route between the upper river Inupiaq and the interior Athabascans. Over the pass to the south of the Selawik headwaters is the Koyukuk National Wildlife Refuge, land of the Koyukon Athabaskan Indians.

Today, the residents of eleven Inupiaq villages regularly use the refuge for recreational and subsistence purposes. Of those, Selawik and Noorvik are located within the refuge boundary. Ambler, Buckland, Shungnak, Kiana, Kobuk and Kotzebue are less than 30 miles away—short distances in this vast open



Susan Georgette/ADF & G

*In Selawik and other local villages, fish are dried in summer for use throughout the year.*

region. Residents of the Athabascan village of Huslia also use the refuge. Subsistence use by local residents accounts for the majority of public use on the refuge. On a per pound basis, fish are the most widely harvested subsistence food, followed by caribou, moose, bear and waterfowl. Salmon berries, blueberries, cranberries, sourdock and many other plants are also gathered for food. Spruce and alder are cut for firewood. Birchbark is collected for basket making.

*It is illegal to remove paleontological remains, such as mammoth tusks.*

Laws prevent disturbing archaeological sites and removing artifacts. If you come upon such a site, please leave it undisturbed for others to discover and enjoy. If an archaeological site is disturbed, most of the historic information is lost forever.



## **Management ensures healthy ecosystems**

The Selawik Refuge is managed to maintain a diversity of wildlife, habitats, and wilderness. Management efforts focus on wildlife surveys, censuses and population monitoring, research studies, environmental education, management of public use, and law enforcement. Refuge employees survey fish, wildlife and plants to determine their abundance and productivity. This ensures the long-term health of fish and wildlife populations and their habitats while allowing public use.

*Local students sometimes assist refuge biologists during field projects.*



*Wildflowers are abundant throughout the summer.*



## **Public use opportunities exist year-round**

National wildlife refuges in Alaska are open without fee to hunting, fishing, wildlife viewing, wildlife photography, hiking, and camping. Special use permits are required for commercial operations.

Sport hunters in pursuit of moose, caribou and grizzly bear account for most of the recreational use of the



*A hiker enjoys a spectacular view over the Selawik River.*

refuge. Occasional river floaters enjoy wildlife viewing, fishing and solitude on the remote upper reaches of Selawik Wild River. Hunting and fishing are allowed in accordance with state and federal regulations. Regulations are available from the refuge headquarters and the Alaska Department of Fish and Game. Sport hunting and fishing licenses and tags are available in Kotzebue and on the State's web site, but may be difficult to obtain in small villages.

Selawik Refuge headquarters, where you can obtain more information about recreational opportunities, is located in the Inupiaq community

*Selawik Wild River provides opportunities to recreate in solitude.*



of Kotzebue, 26 miles north of the Arctic Circle. The office is open Monday through Friday from 8:00 a.m. to 4:30 p.m. In Kotzebue there is an interagency education and information center, primarily staffed by the National Park Service. In addition to providing interpretation of cultural and wildlife resources, the center provides a place for staff, visitors and local residents to share knowledge about the national parks, the Selawik Refuge and other public lands in Northwest Alaska.

### **Hot springs are a favorite winter destination**

Hot springs flow from the ground at two locations near the headwaters of Selawik River. Use of the hot springs dates back to a time when the Selawik headwaters and other nearby mountain passes served as trade and communication routes between Inupiaq and Athabascan societies in the northwest region of Alaska.

*People enjoy the rich history and warm temperatures of Selawik Hot Springs.*

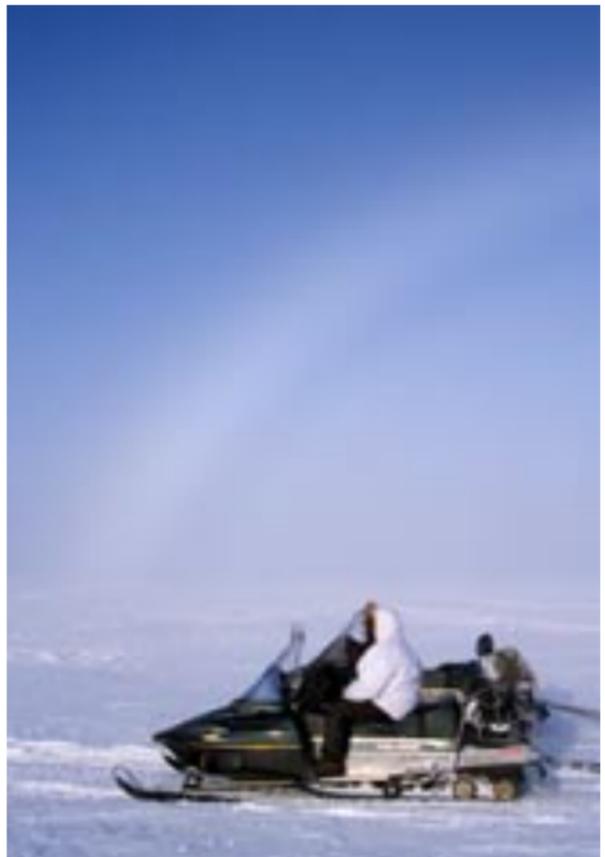
Selawik Hot Springs are now the single most popular destination on the refuge for local residents, who use them for relaxation, visiting and traditional medicinal healing. Accessible only in winter, these



springs can be reached by way of snowmobile trails, which are usually in good condition through the end of April. Route-finding may, however, be difficult if the snowmobile tracks on the trail are blown away by the wind.

Facilities are primitive, but include two cabins, a bathhouse and an outhouse. Although use of the hot springs is available to all, the structures are managed through a refuge special use permit issued to the Upper Kobuk Elders Council, Maniilaq Association and the City of Huslia.

*Snowmachines  
are used to access  
the refuge in  
winter.*



### **Planning and special preparation help ensure a successful trip**

Selawik Refuge is vast, remote and inaccessible by road. However, depending on the season and the weather, it can be reached by boat, airplane equipped with large tires, floats, or skis, snowmobile (when conditions allow), and dog team. The Wilderness Act prohibits motorized equipment on wilderness lands, but ANILCA makes exceptions for snow machines, motorboats and airplanes



*Small aircraft can often land in otherwise inaccessible areas of the refuge.*

for traditional use and access. Scheduled commercial air service is available to Kotzebue from Anchorage, and to Selawik, Noorvik, Kiana and upper river villages from Kotzebue. Flights to lakes, gravel bars and other suitable landing sites within the refuge can be chartered from Kotzebue, Ambler, and Galena. Flights can be delayed due to unpredictable weather, so it is wise to plan accordingly and take extra food.

The traditional and still most commonly used travel routes are the rivers. These are heavily used by boats during the short summer and by snowmobiles and dog teams in late winter and early spring. In winter, snowmobile trails cross the refuge connecting the villages and Selawik Hot Springs. Stakes mark most village trails.

Weather in the Selawik Refuge area changes quickly and temperatures can be extreme. In late fall, especially after a strong wind, rivers and the sea can freeze in a matter of hours. Proper planning and good equipment will increase the chances of a safe and enjoyable trip. Good field gear and emergency supplies are essential for all trips, and insect repellent and head nets are highly recommended for early and mid-summer trips. The use of life jackets in any boat is strongly encouraged. These waters are cold!

*Windblown snow drifts, causing winter travel to be challenging.*

In bear and moose habitat, especially along the rivers, make noise to give



these large animals a chance to get out of your way. Cow moose with calves, like bear sows with cubs, can be dangerous – and fast! Never get near mother and young. Maintain a clean camp and store food out of reach. Pack out trash and garbage. Bears dig up garbage, then know to



*Tracks indicate a grizzly bear was in the area recently, and may still be nearby.*

return to that campsite. Respect private land, cabins and tent camps by not using them. Cabins and tent camps are usually located along rivers and may appear to be abandoned, but are often used seasonally by their owners. Regional and village Native corporations and individuals own approximately 363,000 acres of land within the refuge boundary. These lands were conveyed under provisions of the Alaska Native Claims Settlement Act and the Alaska Native Allotment Act before the refuge was established. Land status maps are available from refuge headquarters.



*Vibrant colors paint the refuge each fall, creating unforgettable scenes.*

### **Celebrate the wonders of Selawik Refuge**

Few places on earth can be experienced in a condition unchanged from that of 50, 100, or even 1,000 years ago. Walk in the footsteps of the Inupiaq hunters and gatherers when you visit Selawik Refuge. Step softly while here, so those that follow can experience the same enduring Alaskan wildlife and wilderness.



*Blueberries and cranberries are a nutritious and tasty food source for birds, mammals and people.*



**Selawik Refuge is part of a nationwide system**

Selawik National Wildlife Refuge is one of 16 refuges in Alaska and more than 540 refuges in the National Wildlife Refuge System. This system is administered by the U.S. Fish and Wildlife Service.

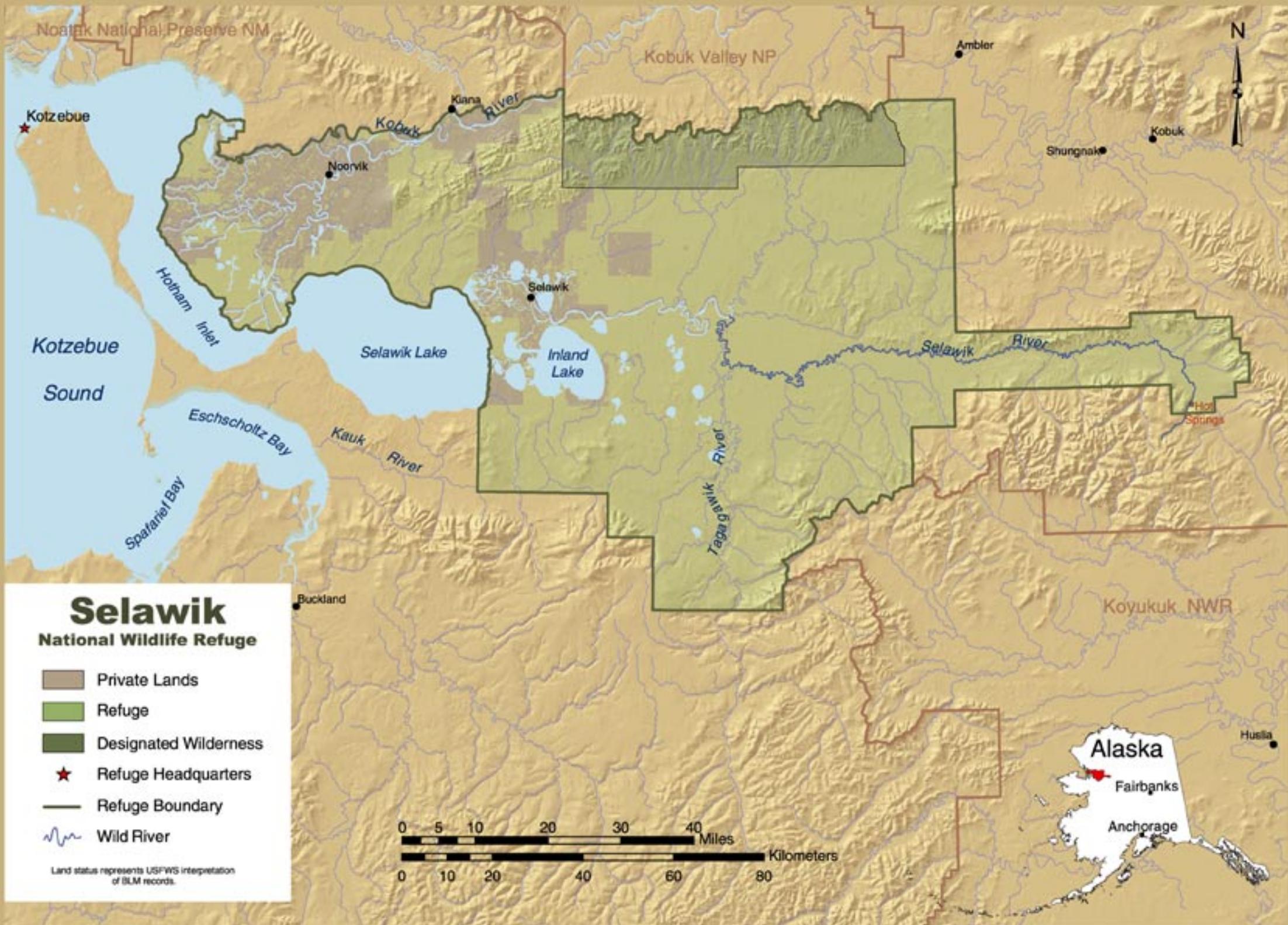
*The mission of the National Wildlife Refuge is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.*



*"I was born and raised here....where they [my ancestors] settled down to subsist—live off the land—in the fall, in the winter, in the spring, and in the summer."*

*Ralph Ramoth, Sr.  
Inupiaq elder and retired  
Selawik Refuge employee*





# Selawik

## National Wildlife Refuge

- Private Lands
- Refuge
- Designated Wilderness
- ★ Refuge Headquarters
- Refuge Boundary
- ~ Wild River

Land status represents USFWS interpretation of BLM records.

