

Draft Compatibility Determination

Title

Draft Compatibility Determination for Natural Resource Gathering (noncommercial), Kenai National Wildlife Refuge.

Refuge Use Category

Natural Resource Collection

Refuge Use Types

Plant gathering (noncommercial), Non-edible animal parts gathering (noncommercial), Rock collecting (noncommercial), Mineral collecting (noncommercial)

Refuge

Kenai National Wildlife Refuge

Refuge Purposes and Establishing and Acquisition Authorities

Franklin D. Roosevelt established the Kenai National Moose Range (Moose Range) on December 16, 1941, for the purpose of “. . . protecting the natural breeding and feeding range of the giant Kenai moose on the Kenai Peninsula, Alaska, which in this area presents a unique wildlife feature and an unusual opportunity for the study, in its natural environment, of the practical management of a big-game species that has considerable local economic value...” (Executive Order 8979).

The Alaska National Interest Lands Conservation Act (ANILCA) substantially affected the Moose Range by modifying its boundaries and broadening its purposes to include conservation of a broad array of fish, wildlife, and habitats in their natural diversity, meeting international treaty obligations, protection of water quality and quantity, and providing opportunities for scientific research, land management training, and educational and recreational activities. ANILCA also redesignated the Moose Range as the Kenai National Wildlife Refuge (Refuge), added nearly a quarter of a million acres of land, and established the 1.32-million acre (534,349 hectare) Kenai Wilderness.

ANILCA sets out purposes for each refuge in Alaska. The ANILCA purposes of the Refuge are described in Section 303(4)(B) of the Act. The purposes identify some of the reasons why Congress established the Refuge and set the management priorities for it.

ANILCA purposes for the Refuge are as follows:

- (i) to conserve fish and wildlife populations and habitats in their natural diversity, including but not limited to moose, bears, mountain goats, Dall sheep, wolves and other furbearers, salmonoids and other fish, waterfowl and other migratory and nonmigratory birds;
- (ii) to fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats;
- (iii) to ensure, to the maximum extent practicable and in a manner consistent with the purposes set forth in paragraph (i), water quality and necessary water quantity within the Refuge;
- (iv) to provide, in a manner consistent with subparagraphs (i) and (ii), opportunities for scientific research, interpretation, environmental education, and land management training; and
- (v) to provide, in a manner compatible with these purposes, opportunities for fish and wildlife-oriented recreation.

Policy (FWS 603 2.8) directs that pre-ANILCA purposes remain in force and effect, except to the extent that they may be inconsistent with ANILCA or the Alaska Native Claims Settlement Act, and that such purposes only apply to those areas of the Refuge in existence prior to ANILCA. The Executive Order purpose to protect Kenai moose, however, is treated as complementary to the broader ANILCA purpose of conserving fish and wildlife populations; therefore, no special attention is given the Executive Order purpose in this compatibility review process.

ANILCA designated approximately 1,350,000 acres of the Refuge as wilderness. Except as otherwise expressly provided for in ANILCA, designated wilderness is to be administered in accordance with applicable provisions of the Wilderness Act of 1964 (Public Law 88-577). Section 4.(3)(b) of the Wilderness Act provides, “Except as otherwise provided in this chapter, each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character. Except as otherwise noted in this Act, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.”

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System 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 (Pub. L. 105-57, 111 Stat. 1252).

Description of Use

Is this an existing use?

Yes

This compatibility determination reviews and supersedes the 2007 compatibility determination for Natural Resource Gathering.

What is the use?

We propose allowing noncommercial gathering of natural resources as described in this compatibility determination. Activities included in this review are personal, noncommercial collection of berries, mushrooms, edible plants as authorized under 50 CFR 36.39(i)(9)(vii); antler collecting as authorized under 50 CFR 36.39(i)(9)(ix); collection by hand (including by handheld gold pans), for personal recreational use only, of rocks and minerals (except the collection of silver, platinum, gemstones and fossils) as authorized under 50 CFR 36.31(b). This compatibility determination does not cover the collection of natural resources for subsistence uses as defined and described in 50 CFR 36.

Public or private economic use of natural resources are also not included in this compatibility determination and will not be authorized unless found to be compatible under a separate review, are covered under the conditions of a Special Use Permit, and meet the “must contribute” standard of 50 CFR 29.1 (where the use of natural resources for public or private economic use must not only be found to not materially interfere with or detract from meeting Refuge purposes, but also must be found to contribute to meeting Refuge purposes).

The removal of objects of antiquity and search and removal of other objects of value without a permit is prohibited (50 CFR 27.62 and 50 CFR 27.63). It is also illegal to remove any plant or animal (including parts) from a national wildlife refuge without a special use permit (50 CFR 27.51) except as authorized under refuge-specific (50 CFR 36.39(i)) or general refuge regulations (50 CFR 36).

Noncommercial gathering of natural resources may be a standalone activity or may be done in conjunction with a variety of other public uses (e.g. hunting, camping, hiking, trapping, etc.). The collection of firewood and timber for personal, noncommercial use and the collection of Christmas trees is covered within the compatibility determination addressing forest products use. This compatibility

determination does not evaluate the commercial gathering of natural resources for re-sale or the guiding of individuals for the purpose of gathering natural resources (which would be a commercial activity of the person guiding regardless of the intent of the individual collecting the resource.)

Is the use a priority public use?

No

Where would the use be conducted?

This compatibility determination covers personal, noncommercial natural resource gathering that most commonly occurs on the refuge. Personal, noncommercial natural resource gathering consists primarily of the harvest of edible mushrooms, plants and berries and the collection of shed antlers from moose or caribou. These uses normally occur in proximity to a public access road or trail and participation in this activity decreases as the distance from this public access point increases.

The Refuge lies on the western Kenai Peninsula (Peninsula). This 10,039-square-mile (26,000-square-kilometer) Peninsula is connected to mainland Alaska by a 10-mile (16-kilometer) wide isthmus and is flanked by Prince William Sound to the east, Cook Inlet to the north and west, and the Gulf of Alaska to the south.

Flora and fauna on the Refuge are unusually diverse for this latitude because of the juxtaposition of two biomes on the Peninsula: the northern fringe of the Sitka spruce-dominated coastal rainforest on the eastern side of the Kenai Mountains and the westernmost reach of boreal forest in North America on the western side of the Kenai Mountains. The forests on the Refuge are dominated by white and black spruce with an admixture of aspen and birch. Extensive peatlands are interspersed among spruce in the Kenai Lowlands on the northern part of the Refuge. Lichen-dominated tundra replaces hemlock and subalpine shrub above tree line in the Kenai Mountains and Caribou Hills.

The eastern one-third of the Refuge lies within the Kenai Mountains, which range in elevation from 3,000–6,600 feet (900–1,800 meters). The mountains are heavily glaciated, and many of the high valleys are buried beneath the vast Harding Icefield, which covers approximately 720 square miles (1,865 square kilometers) at elevations of 4,000–5,300 feet (1,200–1,600 meters). The remaining two-thirds of the Refuge lie in the Kenai Lowlands, which is part of the Cook Inlet–Susitna Lowlands. These lowlands consist of ground moraine and stagnant ice terrain with low ridges, hills, and muskeg.

The Kenai River flows through the Refuge and drains much of it. Other primary watersheds include those of the Swanson River, Chickaloon River, and Kasilof River. There are thousands of lakes on the Kenai Peninsula—nearly all of them are on the Refuge. The largest are two glacial lakes, Tustumena Lake (73,000 acres or 29,500

hectares) and Skilak Lake (25,000 acres or 10,110 hectares). More than 4,600 smaller lakes dot the Refuge, mostly in the Moose, Swanson, and Chickaloon river drainages.

The Refuge has documented 1,086 species of flora and fauna: 151 birds, 20 fish, 30 mammals, 164 arthropods, 484 vascular plants, 97 fungi, 35 lichens, 14 liverworts, 90 mosses, and 1,139 other terrestrial and aquatic invertebrates. Eighteen formations have been classified on the Refuge under the National Vegetation Classification System.

The Refuge now hosts more than 1 million annual visitor use days, and an estimated 300,000 visitors spend extended periods of time on the Refuge enjoying a variety of outdoor activities, including fishing, camping, hunting, hiking, wildlife viewing and photography, skiing, canoeing and river floating. Refuge environmental education and interpretive programs provide education and outreach to over 12,000 students and/or visitors annually.

A more detailed description of the Refuge environment is found in the 2010 Revised Comprehensive Conservation Plan (USFWS 2010).

When would the use be conducted?

The noncommercial natural resource gathering could occur at any time. Mushrooms, berries and plant materials are usually only seasonally available although gathering of chaga mushrooms is a fairly popular activity that could occur year-round. While antler collection normally occurs in Spring following snow melt, this activity also could occur year-round.

How would the use be conducted?

It is illegal to remove any plant or animal (including parts) from a national wildlife refuge without a permit (50 CFR 27.51) except as authorized under refuge-specific or general refuge regulations. The Refuge has developed refuge-specific regulations that govern these activities. These regulations can be found in 50 CFR 36.39(i). Regulations regarding collection by hand (including by handheld gold pans) of rocks and minerals (except the collection of silver, platinum, gemstones and fossils) are authorized under 50 CFR 36.31(b)(1). Methods of collecting rocks and minerals that may result in ground disturbance, such as shovels, pickaxes, sluice boxes and dredges; are prohibited (50 CFR 36.31(b)(2)).

Why is this use being proposed or reevaluated?

Noncommercial gathering of natural resources is an existing use that is being reevaluated subject to 603 FW 2.11 (H). A Refuge Manager may reevaluate the compatibility of existing uses at any time. Non-wildlife-dependent recreational

uses should be reevaluated at least every 10 years. The compatibility of this use is being reviewed to comply with the minimum reevaluation requirement.

Availability of Resources

One-time costs

There are no one-time costs associated with noncommercial gathering of natural resources.

Annual/recurring expenses

Administrative costs associated with noncommercial gathering of natural resources are limited. Current regulations regarding the collection of natural resources for personal use preclude the need to issue special use permits for these activities. This reduces the administrative burden on the Refuge to a manageable level where funding levels should adequately cover costs of management.

Additional enforcement may be warranted in some cases, particularly if there is poor compliance with the collection of antlers for profit or, following large wildfire events when mushroom populations are high, when commercial collection may become an issue. Current levels of law enforcement cannot be expected to reasonably patrol the 2 million acres of the Refuge for this use; however, targeted spot checks should be adequate to reasonably address the concern.

Off-setting Revenue

No offsetting revenue has been identified.

Table 1. Costs to Administer and Manage Noncommercial Gathering of natural resources

Category and Itemization	One-time Cost	Recurring Annual Expenses
Develop Plan/NEPA document/opening package	--	--
Construct facilities	--	--
Develop signage and brochures	--	--

Category and Itemization	One-time Cost	Recurring Annual Expenses
Staff time (LE, administration and management)	--	\$7,500
Maintenance	--	--
Monitoring	--	\$500
Total one-time expenses	--	--
Total recurring annual expenses	--	\$8,000
Offsetting revenues	--	--
Total expenses	--	\$8,000

Anticipated Impacts of the Use

The effects and impacts of the proposed use to refuge resources, whether adverse or beneficial, are those that are reasonably foreseeable and have a reasonably close causal relationship to the proposed use. This compatibility determination includes a brief synopsis of the anticipated impacts. Generally, we will not consider resources that would not be affected or only negligibly affected by the proposed action. Those resources that are not likely to be affected or negligibly affected include; water quality, threatened and endangered species, geology and soils, air quality, floodplains, cultural resources and socioeconomics and refuge management operations.

Wildlife, Aquatic Resources and Habitats

Noncommercial gathering of natural resources may be done opportunistically in conjunction with another activity such as hiking or camping or can be a primary reason for visiting the refuge. If areas become popular for natural resource gathering (e.g. berry picking) they may become trampled resulting in reduced productivity.

The activities covered under this use group most frequently occurs in and along developed areas of the refuge near roads, campgrounds and trails. Noncommercial gathering of natural resources can result in localized disturbance of wildlife and can affect both wildlife movements and/or distributions. Wildlife species near developed areas of the Refuge may be habituated to human presence or wildlife in

those areas are transient and do not spend any great amount of time in the area.

For natural resources that provide a direct food or mineral source for wildlife, collection of these resources may result in the loss of this food or mineral source to wildlife. During certain periods of the year, berries can comprise a large percentage of bird and mammal diets. Antlers can be a source of mineral nutrients to mammals.

Plant species may also depend on dispersal of seeds consumed by birds and mammals to occupy/establish new sites and for genetic exchange. Collection of these resources by the public may result in a local reduction of these populations along trails and roadsides and other areas that are easily accessible.

Wilderness

Leave-no-trace practices are promoted by the Refuge, improper management of human waste and littering with toilet paper are recurrent impacts associated with backcountry use of the refuge regardless of the activity. Deposition of solid human waste within 100 feet of the annual mean high water level of any wetland, lake, pond, spring, river or stream and within 100 feet of a campsite or trail is prohibited. In the Swan Lake and Swanson River Canoe Systems, solid human waste must be buried at least six inches. The noncommercial gathering of natural resources may occur within Wilderness. Given the distance of most Wilderness areas from access points, it is likely that this gathering is done opportunistically in conjunction with another recreational activity.

Visitor Use and experience

Noncommercial gathering of natural resources may enhance a visitors experience when hiking or camping and would be a positive impact on visitor use and experience. Being able to harvest berries as you hike or camp or to take home an antler found while engaging in other activities on the Refuge would likely enhance the positive feelings of the participant.

It is unlikely that the harvesting of berries by a visitor would detract from another visitor's experience. The collection of antlers may lead to a negative impact on another visitor's experience should the presence of an antler contribute to the satisfaction or excitement a visitor might experience had it not been removed. Shed antlers may also present a nice backdrop for both amateur and professional photographers that might be lost if collected.

Potential impacts of a proposed use on the refuge's purposes and the Refuge System mission

The noncommercial gathering of natural resources by the public support the purposes of the refuge and do not conflict with the mission of the National Wildlife

Refuge System.

Short-term impacts

Wildlife and Habitats - Impacts to most wildlife from the noncommercial gathering of natural resources would be considered short-term impacts given the limited number of days of use by the public at any one given location per year. Wildlife at most use areas would not likely change their movements or behavior with only minimal disturbance from the public utilizing these areas for the noncommercial gathering of natural resources. During periods of high use (e.g. seasonal mushroom gathering following a fire), monitoring will be necessary to insure that disturbance from high levels of participation does not lead to habitat damage or the establishment of invasive species.

Visitor use and experience - Noncommercial gathering of natural resources continues to be confined to harvestable periods for those species of berries, mushrooms and edible plants sought by visitors. Impacts would be short-term and minor even in popular visitor areas. Any areas trampled by visitors would likely recover in one to two growing seasons.

Wilderness - The noncommercial gathering of natural resources within Congressionally Designated Wilderness is primarily limited to opportunistic gathering of berries, mushrooms, plant materials and antlers while participating in another Wilderness-based activity such as hiking, hunting and camping. Impacts would be considered short-term and are unlikely to have a long-term impact on Wilderness character.

Subsistence - The noncommercial gathering of natural resources by the general public is unlikely to materially interfere with subsistence users of this same resource given the large expanse (1.9 million acres) of the Refuge. Any impacts are likely to be short-term.

Long-term impacts

Visitor use and experience - The loss of interpretive and photographic value from collection of antlers would be considered long term impacts as antlers would likely persist in the area for years if not decades if undisturbed. Given the 1.9 million acres of the Refuge, these impacts are considered insignificant albeit long-term.

Public Review and Comment

Legal notice of the draft renewal compatibility determination is planned to be published in the Anchorage Daily News and the Kenai Peninsula Clarion which will

initiate a 30-day public comment period. A notice is also planned for the Refuge's website <<https://www.fws.gov/refuge/kenai>> and on the refuge Facebook page. A press release will be prepared and sent to our standard mailing list during the same time period. Concerns expressed during the public comment period will be addressed in the final Compatibility Determination.

Proposed Determination

Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility

The following stipulations are to be included in the implementation of the noncommercial gathering of natural resources by the public.

- 1) You may collect and keep up to eight (8) naturally shed moose and/or caribou antlers annually for personal, noncommercial use. You may collect no more than two (2) shed antlers per day (50 CFR 36.39(i)(9)(ix)).
- 2) Collection of silver, platinum, gemstones and fossils is prohibited (50 CFR 36.31(b)).
- 3) Collection methods which may result in disturbance of ground surface are prohibited (50 CFR 36.31(b)).

Justification

The stipulations outlined above would help ensure that the use is compatible at Kenai National Wildlife Refuge. The noncommercial gathering of natural resources by the public, as outlined in this compatibility determination, would not conflict with the National Wildlife Refuge System Administration Act, as amended, to maintain the biological integrity, diversity, and environmental health of the refuge. Based on available science and best professional judgement, the Service has determined that the noncommercial gathering of natural resources by the public at Kenai National Wildlife Refuge, in accordance with the stipulations provided here, would not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purpose of Kenai National Wildlife Refuge and the Wilderness Act.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director Signature and Date

Mandatory Reevaluation Date

Ten years from date of signing.

Literature Cited/References

Executive Order 8979. 1941. 6 Federal Register 6471. Enacted Alaska (Kenai National Moose Range)

USFWS. 2010. Revised Comprehensive Conservation Plan and Environmental Impact Statement (2 volumes): Kenai National Wildlife Refuge. USFWS, Region 7, Division of Conservation Planning & Policy, Anchorage, AK.