

Kenai National Wildlife Refuge
P.O. Box 2139
Soldotna, AK 99669-2139
(907) 262-7021

COMPATIBILITY DETERMINATION

The National Wildlife Refuge System Administration Act of 1966, as amended (16 U.S.C. 668dd-668ee) states that “The Secretary is authorized, under regulations as [s]he may prescribe, to – (A) permit the use of any area within the [National Wildlife Refuge] System for any purpose, including but not limited to hunting, fishing, public recreation and accommodations, and access wherever [s]he determines that such uses are compatible’ and that “... the Secretary shall not initiate or permit a new use of a refuge or expand, renew, or extend an existing use of a refuge, unless the Secretary has determined that the use is a compatible use and that the use is not inconsistent with public safety.” A compatible use is defined as “A proposed or existing wildlife-dependent recreational use or any other use of a national wildlife refuge that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of the national wildlife refuge.” The compatibility determination is to be a written determination signed and dated by the Refuge Manager and Regional Chief of the National Wildlife Refuge System, signifying that a proposed or existing use of a national wildlife refuge is a compatible use or is not a compatible use.

Applicable compatibility regulations in 50 CFR Parts 25, 26, and 29 were published in the Federal Register October 18, 2000 (Vol. 65, No. 202, pp 62458 – 62483).

Use: Bear Baiting

Refuge: Kenai National Wildlife Refuge

Establishing and Acquisition Authorities: The Refuge was first established as the Kenai National Moose Range by Executive Order 8979 on December 16, 1941. The boundaries were modified, purposes expanded, and name changed to Kenai National Wildlife Refuge under the provisions of the Alaska National Interest Lands Conservation Act (ANILCA) on December 2, 1980 (Public Law 96-487 Stat. 2371).

Refuge Purposes: The Executive Order purpose was primarily to “... protect the natural breeding and feeding range of the giant Kenai moose on the Kenai Peninsula, Alaska...”. ANILCA purposes for the Refuge include: “(i) to conserve fish and wildlife populations and habitats in their natural diversity including, but not limited to moose, bear, mountain goats, Dall sheep, wolves and other furbearers, salmonids 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 with 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.” The Wilderness Act of 1964 (Public Law 88-577) purposes are to secure an enduring resource of wilderness, to protect and preserve the wilderness character of areas within the National Wilderness Preservation System,

and to administer this wilderness system for the use and enjoyment of the American people in a way that will leave them unimpaired for future use and enjoyment as wilderness.

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 complimentary 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.

Sec. 4(a) of the Wilderness Act provides that the purposes of the Act are to be within and supplemental to the purposes for which national wildlife refuges are established and administered. These purposes are applied to the approximately 1.3 million acres of Congressionally designated wilderness within the Refuge. While these purposes do not apply to the remaining approximately 700,000 acres of Refuge lands that are not designated as wilderness, we must consider the effects of uses on any Refuge lands that might affect the wilderness areas.

National Wildlife Refuge System Mission: The National Wildlife Refuge System Mission 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.

Description of Use: Bear baiting on Kenai National Wildlife Refuge is limited to the regulated placing of food or attractants to hunt black bears in the spring on portions of the Refuge. The use has not been included within the general description of “hunting” in the Refuge hunting compatibility determination, and is given this separate review primarily because of significant public interest associated with the practice. The use is a long-term permitted hunting practice on the Refuge, in Alaska as well as in other States and Canadian Provinces, but has been prohibited in some jurisdictions in recent years due to public concern and controversy. In 2004 a ballot initiative prohibiting bear baiting in Alaska was defeated by voters.

Bear baiting at Kenai NWR is regulated by both Federal and State regulations. Regulations at 50 CFR 32.2(h) inform that baiting is authorized in accordance with State regulations on national wildlife refuges in Alaska. State requirements include (2005-2006 season): 1) the season in GMU 15 runs from April 15 to June 15, 2) bait stations may only be established after obtaining a State permit, 3) bait station permittees must be at least 16 years old, 4) the bait station must be posted with a sign stating “Black Bear Bait Station” and displays the bear baiting permit number and hunting license numbers of those authorized to use the station, 5) attendance of an approved bear baiting clinic is required before a bait station may be registered, 6) bowhunters wishing to hunt over bait must first complete an IBEP (bowhunter education and proficiency test) or equivalent course, 7) only two stations may be baited at one time, 8) all bait must be biodegradable – scents or lures may be used, 9) only the heads, bones, guts, skin, or other parts not required to be salvaged from legally taken game may be used as bait, 10) fish or fish parts may not be used, 11) stations cannot be set up within ¼ mile of publicly maintained roads, trails, the Alaska Railroad, or shorelines of the Kenai, Kasilof, or Swanson Rivers, as well as within ¼ mile of a house, other dwelling, seasonally occupied cabin, or a developed recreational facility or campground, 12) hunters may not take money or bartered goods or services for allowing others to use their bait station except for licensed guides who personally accompany their clients, 13) no one can intentionally hinder a bait station registrant’s feasibility of taking game by using the station without the registrant’s written permission, and 14) all bait, litter, and equipment, including any contaminated soil, must be removed from the site when hunting is completed.

Additionally, general black bear hunting regulations allow that only one bear may be taken in the spring; the hide, skull, and meat must be salvaged during spring hunts; all hides and skulls must be sealed by the Alaska Department of Fish and Game within 30 days of the kill (leaving proof of sex on the hide); bear parts may not be sold or bartered, and cubs (bears within their first year of life) or sows accompanied by cubs may not be taken. Brown bear hunting over bait in GMU 15 is also illegal.

Refuge regulations (50 CFR 36.39 (i)(5)(ii)) require a Refuge special use permit for baiting black bear. The conditions of the permit include: 1) the permit does not authorize taking bears over numbers, time, places, or by methods not authorized by State regulations; 2) baiting is prohibited within ¼ mile of roads and trails, and within 1 mile from dwellings and campgrounds; 3) a harvest report form is due back to the Refuge by July 15 of the permit year (whether or not successful); 4) only biodegradable materials may be used for bait, including those parts of fish and game allowed under State of Alaska regulations; 5) bait stations must be clearly marked with a warning sign on which must be marked the permittee's Alaska hunting license number, Alaska bait station registration number, and Refuge bear baiting permit number. The sign must be within 20-feet of the bait station and between 6 and 10 feet above the ground; 6) Kenai NWR baiting permits are non-transferable and only permittees are allowed to hunt from a bait station (although permittees may list some individuals that are then authorized to utilize/maintain the station); 7) the use of nails, wire, screws, or bolts to attach a stand to a tree, or hunting from a tree into which a metal object has been driven to support a hunter is prohibited; 8) the signed permit must be in the hunter's possession while hunting; 9) all materials including stands, bait containers, signs, etc. must be removed from the Refuge by June 17; 10) green trees cannot be cut; 11) permittees may be required to show bait stations to Refuge officials during or at close of the baiting season; and 12) failure to abide by the conditions of the permit or other State or Federal regulations will result in the revocation of privileges and/or a citation.

Refuge bear baiting permits are issued for distinct one square mile areas depicted on maps on a first-come-first-served basis usually starting on a Monday morning approximately two weeks before the season starts. The season on the Refuge may start later than the State authorized season (i.e. May 1 vs. April 15). This is primarily out of concern for brown bears which may be more available in early spring and become attracted to bait causing potential conflict or even harm to the hunter or bear. Generally few black bears are harvested prior to May 1 in non-Refuge areas as well. On the first day of Refuge permit issuance it is not uncommon for hunters to wait in line many hours before the office opens so as to get a good area. This is not because of limited permits, because the majority of open areas are not taken each year, but is rather based on hunters wishing to get their favorite areas. Such areas may be known to them from past experience, or are more favorable because of more desirable terrain or easier access. The area of the Refuge open to baiting is roughly located in the lower Swanson River and Beaver Creek areas and comprises approximately 5 percent of the Refuge. The area is separated into 1 square mile sections following the section lines of a topographic map which yields between 150 and 200 distinct permit areas.

The hunting practice itself varies from hunter to hunter but generally entails the baiting of an area multiple time before the hunter will conceal themselves in a ground or tree blind and wait for extended periods of time for a bear to approach. Tree stands are preferred for visibility, safety, and scent control reasons. Baits can include a variety of things including pastries, old fruit, dog food soaked with bacon grease, inedible parts from game or domestic animals, honey, or a variety of other food items or scents. Often the bait will be placed in a container, such as a 55 gallon drum, which makes it more difficult for the animal to easily get to the bait and quickly consume it.

Not all hunters support bear baiting for their own personal or other reasons, but many do. The primary reasons hunters support the practice include the belief that it allows for better distinction between sows and boars (can look at bears longer and closer), provides for increased likelihood of a humane kill (able to take close shots and at generally undisturbed animals), provides better opportunity for bow hunters and young and older hunters to harvest bears, and provides an important level of harvest of bears that are difficult to take with other methods (i.e. have a desire to keep bear numbers in check because of predation on moose calves and/or potentially other concerns). Opponents to baiting often cite that the practice is not sporting by taking advantage of a major weakness of bears – their inherent need and desire for food, and that the activity makes it too easy. Additionally, some find it contradictory for managers to prohibit the feeding of wildlife on one hand (for example to photograph bears or moose up close) but allow the practice to shoot them over bait, even though many that come into the bait will not be killed. Several States have banned the practice in recent years because of citizen concerns for these and other issues. A ballot initiative proposing to ban bear baiting in Alaska failed to pass in 2004.

The following summarizes the black bear baiting permit and hunter success information for Kenai NWR from 1989 to 2005.

Year	No. Permits	No. Hunted	Success Rate	Males	Females	Harvest Total	Total Seen
1989	28	14	0.43	4	8	12	45
1990	44	21	0.29	3	7	10	51
1991	74	33	0.24	7	5	12	59
1992	63	22	0.18	1	5	6	29
1993	49	28	0.39	7	7	14	58
1994	32	25	0.28	7	2	9	66
1995	23	13	0.46	4	3	7	31
1996	28	16	0.38	5	1	6	32
1997	25	11	0.45	5	0	5	19
1998	31	21	0.33	5	4	9	52
1999	34	21	0.38	6	4	10	33
2000	49	34	0.44	15	5	20	85
2001	41	25	0.48	5	9	14	42
2002	43	23	0.39	9	2	11	54
2003	43	21	0.48	8	2	10	23
2004	37	21	0.38	4	4	8	35
2005	35	21	0.52	7	4	11	51

For the 17 years summarized above, an average of 40 permits were issued per year for black bear baiting on the Refuge with an average of 22 permittees actually hunting and taking an average of 10 bears per year. This contrasts to the entire Kenai Peninsula black bear management program (includes GMUs 7 and 15), on and off the Refuge, where an average of 271 bears are taken per year (1990 – 2001) of which an average of 53 are taken over bait (approximately 20 %).

The Kenai Peninsula black bear population is conservatively estimated to be approximately 3,000 animals. The Refuge contains a large proportion of the best habitat for bears on the Peninsula but does not have a discreet estimate of the number of bears found there any given year.

Availability of Resources: The Refuge largely depends upon the Alaska Department of Fish and Game and their resources to monitor the health of the black bear population which has been successfully achieved since statehood. The Department's Mission is to protect, maintain, and improve the fish, game, and aquatic plant resources of the state, and manage their use and development for the maximum benefit of the people of the state, consistent with the sustained yield principle. The Refuge could supplement the biological monitoring program in collaboration with the Department in the future if necessary, but current Refuge management responsibilities are limited to the administering of baiting permits, education, and enforcement. Current staffing and resources allow the Refuge to accomplish these tasks.

Anticipated Impacts of the Use: Miller (1990) estimated a 14.2 % exploitation rate in his study area which provided for a conservative estimate of allowable annual mortality while sustaining the population. With an estimate of 3,000 bears on the Kenai Peninsula (and some of the highest densities on Kenai Refuge) at total of 426 bear mortalities could be sustained Peninsula-wide each year. Swartz and Franzmann (1991) estimated that only about 59% of bear mortalities were attributed to hunting in their GMU 15 study area which when applied to the population estimate allows for a conservative harvest of 298 bears each year. The State of Alaska's management objectives are to "provide the opportunity to hunt black bears, using seasons and bag limits to regulate the take so we do not exceed an average of 40% females in the harvest, during the most recent three year period." These objectives have been met without any significant changes to the current liberal black bear hunting opportunities, including permitted baiting. There currently are no conservation concerns for Kenai area black bears and no reason to further restrict baiting or other practices to meet biological goals.

Most outdoor activities, including bear hunting, have a certain amount of inherent safety risk associated with them including risk from accidental discharge, being mistaken for game, cutting oneself on an arrow broadhead or sharp hunting knife, being injured or killed by a surprised or wounded animal, falling from a tree stand, and other such harm. Such safety concerns are not paramount, however, and there are no recorded serious injuries to humans while engaged in bear baiting activities on the Refuge since the activity was first allowed.

There also are risks from the bear baiting program to non-target animals, especially female black bears with cubs and all brown bears (which may not be legally taken over bait), that may come into close contact with a hunter at a bait station, and may be killed because of mistaken identity or in defense of life or property. There are, however, no records indicating that females with cubs have been taken over bait, and under most circumstances hunting over bait may decrease the likelihood of a hunter not seeing cubs of the year before harvesting an adult female bear. Brown bears do frequent bait stations with black bears but there are no recorded incidents of visiting bears necessitating their destruction due to fear for human life or safety. One large male brown bear was shot in self defense by a hunter in recent years on the Refuge when going to a baiting area; however, the hunter had not yet placed any bait and was only exploring his permit area prior to the baiting season when he walked up unknowingly close to a large male brown bear which charged. None of the other recorded 119 brown bear defense of life and property (DLP) shootings reported from 1964 through 2005 within GMU 15 have a known connection to a bait station.

Concern has been raised that bears (both brown and black) that travel to a bait station and are rewarded with food or scraps but are not harvested by a hunter, could become conditioned to human food or garbage, making them more likely to become a nuisance or problem bear in the future. If true, such a situation could result in safety risks to humans, and a potential increase in the number of bears that might be destroyed because of problems around developed areas.

Bears will seemingly always be attracted to food and food smells, whether in the wild or around developed sites. In other words, there is no evidence that a bear that is rewarded at a remote bait station is any more or less likely to become a “garbage bear”. This issue deserves additional attention, however, and the potential concern for human and non-target bear safety around the bait station itself is of interest.

Other impacts from bear baiting activity can include the increased likelihood of accidental wildfire (twice in recent years a bear baiting permittee allowed his burning honey pot to ignite nearby fuels necessitating suppression action). Illegal activities can result in litter being left on-site or damage to live trees from ignoring the rules on using spikes or screws in the trees when constructing stands. A young brown bear was also found dead in recent years at an abandoned illegal bait site where a barrel of bait had been left and the animal's head became stuck in the barrel and could not remove it. Because of the remoteness of the Refuge, illegal sites may never be found, but these are law enforcement issues, not compatibility issues associated with the approved and regulated activity.

Literature Cited

- Miller, S.D. 1990. Population management of bears in North America. International Conference on Bear Research and Management 8:357-373.
- Schwartz, C.C. and A.W. Franzmann. 1991. Interrelationship of black bears to moose and forest Succession in the northern coniferous forest. Wildlife Monographs. 113. 58pp.

Public Review and Comment: This compatibility determination has been prepared while revising the Refuge’s Comprehensive Conservation Plan and Environmental Impact Statement. Future revisions can be accomplished outside of this planning process if deemed necessary and would be completed with public notice and involvement. Legal notice of the draft compatibility determinations was published in the Anchorage Daily News and the Kenai Peninsula Clarion on February 25, 2007 which initiated a 45-day public comment period. The notice was also posted on a bulletin board at the Refuge headquarters for the same time period, made available starting February 28, 2007 on a list server fws-akrefugecompatibility@lists.fws.gov to 137 addresses, and made available on the Regional Refuge Planning web site at <http://alaska.fws.gov/nwr/planning/completed.htm>.

Comments on some or all of the (15) compatibility determinations were received from: The State of Alaska, The Wilderness Society, The National Wildlife Refuge Association, Friends of Kenai National Wildlife Refuge, Alaska Trappers Association, Defenders of Wildlife, Kenai Field Office (FWS), and The Humane Society of the United States.

The State of Alaska agreed with the proposed draft determination but had several suggested wording changes to the text. The Friends of Kenai National Wildlife Refuge did not support bear baiting “regardless of insignificant population impact” due to ethics concerns; Defenders of Wildlife wrote that they felt that bear baiting should be prohibited from the refuge entirely; and The Wilderness Society and The Humane Society of the United States commented that bear baiting should be found incompatible. We have heard the concerns expressed by people regarding bear baiting that don’t believe that it is a sporting practice. This is a value-based judgment and we do not try to defend it or denigrate the activity in this regard. We agree with the Friends of Kenai NWR that there is insignificant population impact on both black and brown bears on the refuge from baiting, and in part because of this, impacts associated with the activity do not cross the threshold of compatibility.

Defenders wrote that it is contradictory for managers to prohibit the feeding of wildlife on one hand (for example to photograph bears or moose up close) but allow the practice to shoot them over bait. This contradiction is often touted and can be debated both in terms of real issues and perceptions, but again does not approach the threshold of compatibility. The Wilderness Society also expressed concern that baiting may habituate both brown and black bears to human foods and expressed concern for the status of brown bears on the Kenai Peninsula. Brown bear populations are currently believed to be stable to increasing and there is only one documented case of a brown bear being killed at a black bear baiting station (in 2007) on the Refuge (in defense of life and property). This is an issue that Kenai NWR will pay close attention to, however, and the Refuge does regulate bear baiting more stringently than State of Alaska regulations currently to ensure compatibility, but with an overall goal to make such regulations as consistent as possible. The Alaska Board of Game has addressed the issue of baiting frequently in recent years and has also worked to minimize conflicts by instituting mandatory education of those wishing to use bait, and restrictions on time, place, and kind of bait that can be used.

The Humane Society of the United States also felt the compatibility determination downplayed the risk habituated bears pose to visitors and stated that baiting has the potential to artificially increase bear populations (linking age of first production, litter size, and cub survival to food availability) resulting in a disruption of natural diversity, a Refuge purpose. We disagree. The risk to both people and the bears themselves from becoming habituated to human food are well documented and understood; however, there is no evidence that a bear that is attracted to bait left at a temporary bait station in a remote location will change its natural habits and seek out humans and their foods in the future. A more likely scenario is that bears will continue to get food wherever they can whenever they can – natural or human provided. The scale of baiting in both time and place is also so insignificant as to have no measurable impact on the nutrition and survivability of bears throughout the Refuge and in a manner that measurably disrupts natural diversity. Finally, the Humane Society reiterated many issues and concerns discussed in the draft compatibility determination but often placed higher significance on the concerns and/or suggested different outcomes or desired management actions. Based on these comments we again reviewed the determination but found it to be accurate without substantive change.

Determination (check one below):

Use is Not Compatible

Use is Compatible With Following Stipulations

Stipulations Necessary to Ensure Compatibility: The program elements discussed above, including Federal and State regulations and permit requirements, are all important in managing the black bear baiting program on Kenai NWR to ensure compatibility. While some people have expressed concern that the activity should not be allowed, and others have asked for additional baiting opportunity, the program in place today has largely proven itself as acceptable and is the result of implementing numerous stipulations to address past problems. Currently there are few problems noted for approved bait stations. This may be because of the required training and permit requirement. It is important to keep the program limited in area to avoid potential conflicts around public use cabins, trails, campgrounds, or other high public use areas. The program is tightly controlled currently to ensure compatibility. Attention will be given to the

program in the future as well to determine if additional changes are warranted, in particular to any developing human safety concerns or noticeable impacts to the area's brown bear population.

Justification: Black bear baiting is a controversial practice that is well established as a hunting means in the local area and results in approximately 20 percent of the annual black bear harvest. The controversy stems from both philosophical concerns and issues associated with human safety and potential unnecessary take of brown bears that might frequent bait stations. The philosophical concerns are understood, but are not to be taken into consideration when determining whether a use is compatible. The practice does not raise any obvious biological or resource damage concerns of known significance. Current State and Refuge regulations significantly control the use and mitigate known impacts acceptably. Approximately 5% of the Refuge is open to the practice and it is employed by a relatively small number of people. Compliance to permit conditions has been good in recent years. Additionally, both the National Wildlife Refuge System Administration Act of 1966, as amended, and the Congressionally mandated purposes for the Refuge include strong language to provide for wildlife-oriented recreational activities, including hunting. Bear baiting is a hunting method that has been used traditionally in the area for many years. While the use could be curtailed for cause, such cause should be based on strong evidence of a resource management concern and not social preferences.

Signature (Refuge Manager): /s/ Robin L. West 6/13/07
Signature and Date

Concurrence (Regional Chief): /s/ Todd J. Logan 8/14/07
Signature and Date

Mandatory 15-year Re-evaluation Date: 8/14/22