

Kodiak National Wildlife Refuge

Annual Work Plan/Accomplishment Report FY-2009

Purposes of Kodiak National Wildlife Refuge

On August 14, 1941, President Franklin D. Roosevelt signed Executive Order 8857 establishing Kodiak National Wildlife Refuge . . . for the purpose of protecting the natural feeding and breeding ranges of the brown bears and other wildlife on Uganik and Kodiak Islands . . .

Under the Alaska National Interests Lands Conservation Act, the purpose of Kodiak Refuge was expanded beyond that identified in the original establishing order. Section 303(5)(B) of ANILCA states: The purposes for which the Kodiak National Wildlife Refuge is established and shall be managed include:

- (i) to conserve fish and wildlife populations (and) habitats in their natural diversity including, but not limited to, Kodiak brown bears, salmonids, sea otters, sea lions and other marine mammals and migratory birds;
- (ii) to fulfill the international treaty obligations of the United States with respect to fish and wildlife and other habitats;
- (iii) to provide, in a manner consistent with the purposes set forth in subparagraphs (i) and (ii), the opportunity for continued subsistence uses by local residents; and
- (iv) 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.

Refuge Vision Statement

The Kodiak Refuge staff has developed the following statement about what they believe the Refuge will be in the future given the mission of the Refuge System, the specific purposes of Kodiak Refuge, and other relevant Service mandates:

Brown bear, fish, and other wildlife populations will continue to thrive on the Kodiak National Wildlife Refuge in their natural diversity, living in pristine habitats. Refuge management will blend public and private partners in a dynamic alliance that fulfills the purposes and goals of Kodiak Refuge. The Refuge will provide a long and lasting legacy of resource stewardship for the enjoyment of current and future generations.

Refuge Goals, Objectives, and Accomplishments

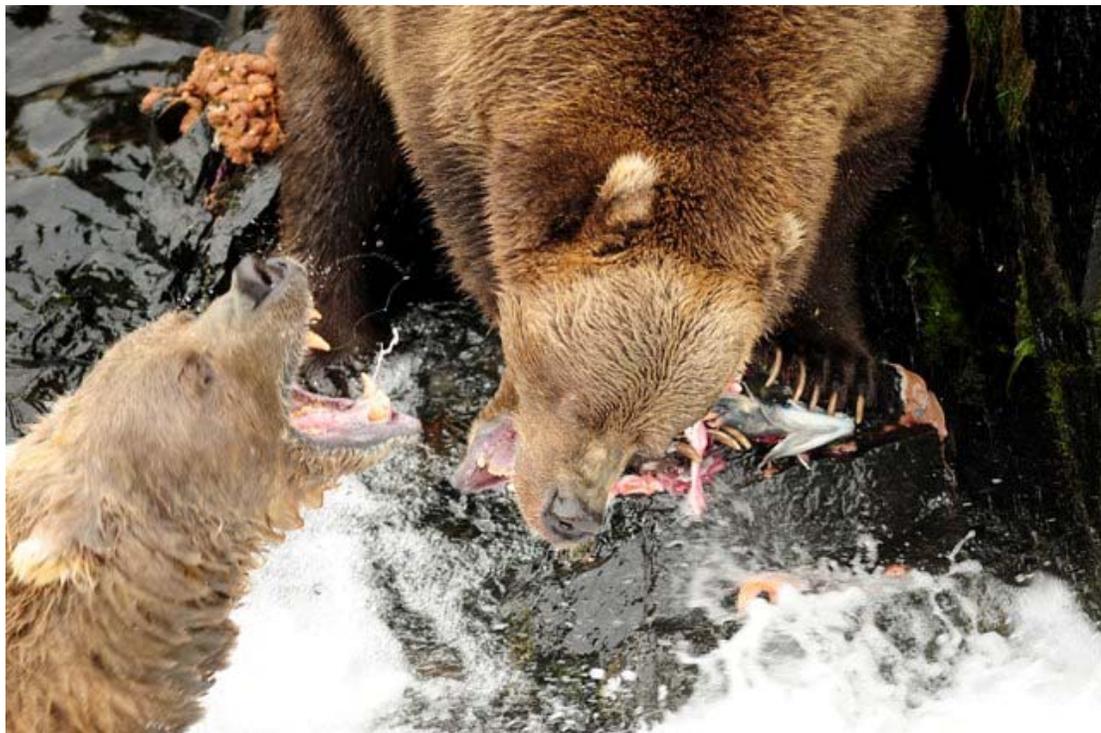
The Refuge vision statement and the Refuge purposes provide the framework for developing goals and objectives for managing the Refuge. Goals are broad statements of desired future conditions. Objectives are concise statements of what the Refuge wants to accomplish.

Objectives identified for one goal are often applicable to other goals. To avoid unnecessary duplication, each objective is listed only under the goal that represents the clearest connection. Objectives are numbered and organized in priority order under each goal.

GOAL 1: Increase our knowledge of fish and wildlife populations, their habitats, and their interrelationships. Subsequently, update the inventory and monitoring plan annually with a regional review and sign off by the Alaska Refuge Chief every five years.

1.1 Within two years of approval of this plan, complete a step-down plan to integrate and direct inventory and monitoring of plants, fish, and wildlife. **[BIOLOGICAL STAFF]**

1.1.a. Draft wildlife protocols. [Protocol development was initiated for the Intensive Area Survey of brown bear. Joel Reynolds, Biometrician with the Region 7 Natural Resources Division, continued evaluation of winter marine bird survey and bald eagle survey experimental design and analysis methods. Peer-review was completed in February 2009 of draft reports addressing Joel Reynold's evaluation of these surveys.](#) **[PYLE]**



Brown bears fighting over fishing location at Frazer fish pass. Chad Cook/USFWS Photo

1.1.b. Complete introduction section. The Service's Washington Office, in consultation with a team of biologists from various regions, is presently overhauling the policy pertaining to Inventory and Monitoring Plans. This revision is not expected to substantially differ in guidance on monitoring protocols from current Region 7 policy. However, it is expected to differ regarding non-protocol guidance. Consequently, development of the introduction section of the Refuge's revised plan will occur following completion and issuance of the revised national policy. [PYLE]

1.2 Collaborate with the Alaska Department of Fish & Game (ADF&G) when monitoring and conducting research on State of Alaska trust species within the Refuge. [BIOLOGICAL STAFF]

Cooperation has continued with ADF&G through collaborative work with the Brown Bear Working Group of the Northern Forum, Washington State University, and monitoring bear populations in the Refuge –Stream Surveys, Intensive Area Survey, the pilot study at Karluk Lake, the Old Harbor Bear Project (collaring bears to determine home range), and planning for the Karluk Basin Bear Resource Utilization Project. The University of Idaho has taken an active role in planning for this project. We have recruited a graduate student and have applied for funding. [LEACOCK]

1.3 Curate wildlife study records using professional database-management standards and methods so data and reports may be readily accessed and understood by future Refuge biologists and others.

1.3.a. Create Portable Document Files (pdf) of biological publications and final reports and archive these electronic documents on the refuge's network.

Supervisory biologist has actively made pdf's of biological publications and progress reports.



Wildlife Biologist Robin Corcoran trapping seaducks. David Sinnett/USDA

1.4 In cooperation with ADF&G, monitor for fish, wildlife, and avian diseases that may affect the Kodiak ecosystem, including chronic wasting disease and West Nile virus.

In cooperation with David Sinnett (USDA-Wildlife Services), 42 harlequin ducks were captured in Uyak and Uganik Bays in August 2009 were sampled for Avian Influenza (H5N1). All birds tested negative. [CORCORAN]

- 1.5 In cooperation with ADF&G, other external partners, and other programs within the Service, monitor for aquatic invasive species such as green crab, mitten crab, Atlantic salmon, New Zealand mudsnails, crayfish, amphibians, and aquatic weeds. With these same partners, participate in the development and distribution of effective education and outreach materials.

No funding or time allowed in 2009.

- 1.6 Strive to publish results from Refuge-sponsored research in peer-reviewed journals. Report routine fish and wildlife survey results regularly in publicly accessible reports.

Biological work was published in annual update reports or peer-reviewed journals.

- 1.7 Contribute to implementation of the Service's strategic plan for responding to accelerated climate change.

1.7.a. Participate in meetings and conferences pertaining to climate change involving Refuge interests.

We participated in November 2008 and April 2009 workshops jointly operated by the Natural Resources Division and USGS Alaska Science Center regarding ecological monitoring status and needs. As requested, we prepared and presented a conceptual model of the Kodiak ecosystem describing ecological processes, components, and drivers. [PYLE, WHEELER]

1.7.b. Evaluate information needs pertaining to climate change assessment on the Refuge.

The USGS Alaska Science Center approved a Quick Response Partnership (QRP) proposal to host a workshop geared to assess information needs pertaining to monitoring and research of climate change in the Karluk River watershed. [PYLE]

GOAL 2: Ensure that Kodiak brown bears continue to flourish throughout the Refuge and congregate at traditional concentration areas and that this unique population continues into the foreseeable future.

To complement ADF&G objectives for brown bear populations, Refuge objectives include the following:

- 2.1 In cooperation with ADF&G, continue to use all available knowledge to monitor and evaluate trends in bear population size, composition, and mortality associated with recreation, subsistence, research, defense-of-life-or-property (DLP), and illegal kills. [LEACOCK]
- 2.2 In cooperation with ADF&G, maintain surveyed bear densities no lower than 10 percent below the lowest number within the following ranges: southeastern Kodiak and southwestern

Kodiak 0.69–0.76 bears per square mile; northwestern Kodiak 0.64–0.72 bears per square mile. [LEACOCK]

Bear densities remain within specified parameters.



The USGS Alaska Science Center approved Dr. Erik Beever’s proposal to assess information needs pertaining to climate change in the Karluk River watershed. B. Pyle/USFWS

2.3 Increase frequency of bear density estimates to improve bear population trend monitoring in areas of high public use or special management concern (e.g., Karluk Lake vicinity). [LEACOCK]

2.3.a. Monitor trend in bear population size.

The IAS was successfully completed for the Aliulik survey area. Survey data indicated that the bear density has substantially increased since 2002 when the last survey was conducted.

2.3.b. Monitor trend in use and composition of bears that utilize salmon-spawning streams of southwest Kodiak Island.

Sixteen surveys were conducted between July 1-August 26 on the SW network of six streams, primary tributaries of Karluk Lake, upper Dog Salmon, and two rivers on the Aliulik Peninsula. The number of bears counted per survey on the SW river network

declined slightly in 2009 (58 bears/survey) compared to the long-term average (83 bears/survey). Composition assessment revealed that maternal females comprised 11% of bear groups in 2009 compared to the long-term average of 17%.

- 2.4 Monitor and evaluate bear use, human use, and bear–human interactions at bear concentration areas that have established public use. Specifically study bear use, bear movements, and bear–human interactions in the O’Malley River area. Apply results to guide adaptive management in these bear concentration areas using an open planning process with ample opportunities for stakeholder involvement.

2.4.a. Analyze data, interpret results, and report finding from study of bear use of the upper Karluk River during September-October of 2006-08.

2008 data entered into database and GIS. Draft report for 2008 written and under revision. [LEACOCK]



Dead bear on spring deer mortality survey. Meg Inokuma/USFWS

- 2.5 Evaluate the management utility of the bear stream surveys using appropriate cross-comparisons with bear density survey data, climatic data, fish escapement data, and biological modeling efforts. Complete evaluation with assistance of Alaska Biological Science Center, U.S. Geological Survey, by 2007.

USGS evaluation in progress. [PYLE]

- 2.6 Investigate population size, movements, and habitat use of bears on Afognak Island. Develop a method for indexing trends in population size by 2008 and complete research on movements and habitat use four years after funding is obtained.

Proposal submitted to SCI by Larry VanDaele of ADF&G. [LEACOCK]

- 2.7 By 2006, complete assessment of the genetic diversity of the Kodiak brown bear so as to understand gene flow between the southern and northern Archipelago, the vulnerability of Kodiak brown bears to wildlife diseases, environmental stresses, and parameters of population viability.

Report completed in 2006. [LEACOCK]

- 2.8 By 2010, develop and implement a method of monitoring the supply of berries suspected of being essential to the welfare of the Refuge's brown bear population.

No funding or time allowed in 2009.

GOAL 3: Manage nonnative species to minimize impacts on native resources, while continuing to provide opportunities for harvest. [PYLE, SAITO]

- 3.1 To facilitate population and habitat management, monitor—in collaboration with ADF&G—trends in summer distribution, size, and productivity of the mountain goat population on the Refuge. By 2008, initiate monitoring of trends in winter distribution of the mountain goat population.

- 3.1.a. Continue collaboration with ADF&G on assessment of trend in summer mountain goat population distribution, size, and productivity.

As requested by ADF&G, we surveyed two goat management units (GMUs 474 & 476) encompassing central Kodiak Island and northeastern region of Refuge. In GMU 474, surveyed on August 4, we observed 271 goats and a ratio of 16 kids per 100 adults. In GMU 476, surveyed on August 6, we observed 104 goats and a ratio of 17 kids per 100 adults. Productivity did not substantially differ between 2008 and 2009. Number of goats counted in both units collectively increased 77% between 2008 and 2009. Most of this difference is attributed to probable movement of animals from areas adjacent to these two units. [SAITO]

- 3.1.b. Monitor trend in management of hunter harvest of mountain goats.

The Alaska Board of Game adopted a proposal for regulation change submitted by the Kodiak Fish and Game Advisory Committee. The new regulation, which goes into effect in November 2009, replaced the draw permit hunt with a registration permit hunt in goat management units 475 and 477. In short, the goal of the regulation change was to increase hunter harvest of mountain goats and thereby reduce potential for adverse impacts to habitat and herd productivity. The proposal for regulation change was prompted by two factors. Results of surveys conducted by the Refuge in 2007 and 2008 revealed high densities of goats in GMUs 475 and 477, and results of ADF&G harvest

surveys revealed that hunter harvest quotas were unfulfilled under the draw permit regulation. [PYLE, WHEELER]

- 3.2 By 2008, design and implement studies to evaluate habitat use and preference of deer on Kodiak Island to facilitate understanding of deer influence on the condition of winter range habitat.

No funding or time allowed in 2009.

- 3.3 By 2008, develop methods, in partnership with ADF&G, to monitor deer population trends on Kodiak Island to facilitate harvest and habitat management. [SAITO, PYLE]

3.3.a. Monitor trend deer harvest via cooperation with ADF&G on its hunter harvest survey.

Previous season deer harvest, representing combined subsistence and recreational sport hunter efforts, is assessed annually by ADF&G via a questionnaire distributed to a large subsample of people who acquired deer harvest tickets for Kodiak Island. Since 2006, the Refuge has cooperated with ADF&G on harvest assessment and added a question regarding harvest on federal land in Unit 8. Results indicated that approximately 1,576 of 3,644 (43%) deer harvested between August 2008 and January 2009 were taken on the Refuge. This harvest total is about 58% lower than the five-year average total harvest (8,630) reported for 1994-98. Following the last peak of deer harvest in 2005-06 (6,469), harvest declined in apparent response to increased over-winter mortality of deer and reduction in supply of deer available to hunters.

3.3.b. Continue to survey trend in deer overwinter mortality until the method is replaced with another a more direct, accurate, and informative method of population trend assessment.

In cooperation with the ADF&G, deer mortality surveys on Kodiak Refuge were completed in April. A total distance of 37 kilometers was surveyed at three sites distributed in different regions of Kodiak Island. Results suggested a pattern of moderate over-winter deer mortality at Chief Cove, low mortality at Sitkalidak Strait, and negligible mortality at Olga Bay. Assessment of carcass condition indicated that most dead deer encountered probably died during January. Of the 30 carcasses with sufficient remains to be age-classed, 87% were classed as fawns. Cause of death was attributed to starvation as assessed via sampling of femur marrow condition. [SAITO, PYLE]

- 3.4 By 2010, evaluate and report habitat use and preference of mountain goats to improve understanding of goat influence on habitat conditions.

No funding or time allowed in 2009.

- 3.5 In cooperation with ADF&G, annually monitor trends in distribution, size, and composition of the elk population on Afognak Island. Maintain the sample of marked animals to enable this population monitoring by assisting with funding and logistics related to animal-capture operations.

Assist with elk capture and collaring. [SAITO]

- 3.6 By 2012, develop an objective understanding of the effect of deer on supply of berry-producing shrubs of primary importance to brown bears of Kodiak Island.

No funding or time allowed in 2009.

GOAL 4: Continue to improve understanding and management of furbearing and nongame mammals that use Kodiak Refuge.

- 4.1 By 2007, in cooperation with the Region 7 (Alaska) Marine Mammals Management Office, develop and implement a sea otter survey to annually index population trends. Provide staff support for periodic, Archipelago-wide surveys conducted by Marine Mammals Management Office staff.

No funding or time allowed in 2009.

- 4.2 In cooperation with the Region 7 Marine Mammals Management Office, expand communication on sea otters with the Alaska Sea Otter Commission, village councils, and others.

No funding or time allowed in 2009.



Sea Otter in coastal waters around Kodiak. David Sinnett/USDA

- 4.3 In cooperation with ADF&G, develop a method for monitoring trends in river otter populations, modify the existing ADF&G trapper questionnaire to capture information on

refuge-specific furbearer harvest, and document estimated furbearer harvest and population trends in the annual refuge narrative report.

No funding or time allowed in 2009.

- 4.4 Initiate study of habitat ecology of snowshoe hares by 2012.

No funding or time allowed in 2009.

- 4.5 During cabin maintenance and management of derelict structures, take precautions to minimize damage to native bat populations.

Ensured that bat populations were protected during cabin maintenance.



Tufted Puffin common in waters around Kodiak. David Sinnett/USDA

GOAL 5: Monitor populations of resident and migratory birds as indicators of ecosystem health.

In May Robin Corcoran assumed duties of the Refuge's Ornithologist. Before Kodiak, Robin served as Wildlife Biologist at Sonny Bono Salton Sea NWR, California, and Innoko NWR, west-central Alaska. Her graduate research dealt with nest and duckling survival of Lesser Scaup on Yukon Flats NWR north of Fairbanks.

- 5.1 Continue to monitor coastal populations of environmentally sensitive resident birds in winter, spring, and summer for general information on species composition, distribution, and population trends to use as indices of marine and coastal resource health.

5.1.a. Conclude the evaluation of the winter seabird and waterfowl procedure.

A survey was not conducted in winter 2009 due to a lack of staff. In February, peer-review was completed of the report "Population Trends and Annual Density Estimated for Select Wintering Seabird Species on Kodiak Island, Alaska" co-authored by Denny Zwiefelhofer, former survey lead and staff Ornithologist, Joel Reynolds, Regional Refuge Biometrician, and Michael Keim, contracted Biometrician. A final report will be issued by Joel following revision in response to reviewer comments. [PYLE]

- 5.1.b. In collaboration with Migratory Bird Management and Alaska Maritime NWR, census seabird nesting colonies along the East side of Kodiak Island.

Eighty-eight seabird nesting colony sites were visited and re-censused between Chiniak and Olga Bays in June 2009. The survey was conducted by Refuge biologist Robin Corcoran and two volunteers, Rich MacIntosh and Meg Inokuma. Field operations were supported by Jeff Lewis, who piloted the M/V Ursa Major II and acted as primary skiff operator. Survey data will be submitted to the North Pacific Seabird Data Portal at seabirds.net. [CORCORAN]

5.1.c. Evaluate and prescribe survey design and analysis methods for estimating trends of selected bird and mammal species from data collected on the summer coastal survey.

The evaluation is being directed by Joel Reynolds, Region 7 biometrician. Presently, Joel is collaborating on the evaluation with Alice Shelly a contracted biometrician. Results will be subjected to peer-review and a final report will be delivered to the Refuge in 2011. Surveys continued under new Refuge biologist Robin Corcoran in August 2009 in Uyak and Uganik Bays to monitor localized declines in harlequin duck populations. Only 227 harlequin ducks were counted in Uyak Bay compared to 383 observed in 2007, and substantially lower than the 1994-97 mean count of 1,245. Harlequin duck counts were slightly lower in Uganik Bay in 2009 down to 1,393 compared to 1,599 in 2007. Field operations were supported by Jeff Lewis, who piloted the M/V Ursa Major II, David Sinnett of USDA-Wildlife Services, Frank Simms of Pocosin Lakes National Wildlife Refuge, and volunteer Jennifer Simms. [CORCORAN, PYLE]



Refuge biologist Robin Corcoran surveying a seabird colony. Rich MacIntosh/USFWS

- 5.2 Continue to monitor populations of wintering waterfowl to provide information to the State of Alaska and the Alaska Migratory Bird Co-management Council in support of sound management of recreation and subsistence harvest of waterfowl. Monitoring should emphasize species such as black scoter, harlequin duck, and Barrow's goldeneye, which make up much of the waterfowl harvest in the Archipelago.

[Data from the seabird coastal surveys \(5.1.a-c\) and molting harlequin duck banding \(5.4\) are regularly presented. \[CORCORAN\]](#)

- 5.3 Continue periodic monitoring of trends in distribution wintering, size, and reproductive success of the Refuge's population of nesting bald eagles. By 2007, determine appropriate frequency and sample sizes for long-term monitoring.

[In January 2009, peer-review was completed of the report "Study Design Assessment for Surveys of Bald Eagle Nesting and Productivity on Kodiak NWR" co-authored by Joel Reynolds, Regional Refuge Biometrician, and Alice Shelly, contracted Biometrician. A final report will be issued by Joel following revision in response to reviewer comments. \[PYLE\]](#)

- 5.4 By 2007, develop a banding program to monitor trends in survival and productivity with a focus on sea duck species (black scoter, harlequin ducks, Barrow's goldeneye) that make up much of the local waterfowl harvest. Areas along the Kodiak road system and adjacent to the villages would be given priority for the program.

A total of 42 molting harlequin ducks were captured and banded in Uyak and Uganik Bays during August. Two of the harlequin ducks were recaptures, originally banded at the recapture locations in 2005 and 2007. [CORCORAN]



Flightless molting harlequin ducks being “herded” toward the capture net for banding.
Jennifer Simms/USFWS

- 5.5 Identify important habitat areas on the Refuge for bird species of conservation concern, including bald eagles, Steller’s eiders, harlequin ducks, emperor geese, marbled and Kittlitz’s murrelets, red-throated loons, gray-cheeked thrush, orange-crowned warblers, and yellow warblers. Develop habitat maps by 2010.

Identified important habitat areas for most bird species of conservation concern, but have not developed habitat maps. [CORCORAN]

- 5.5. a. Study nesting ecology of Kittlitz's murrelet.

This summer was the second year of a multi-year field study of Kittlitz’s murrelet (KIMU) breeding ecology on Kodiak National Wildlife Refuge. Cost-share funds were matched with 1,418 hours of in-kind services contributed by two volunteers, Cory Shake and Christina Wells, who assisted wildlife science technician James Lawonn with KIMU field research during May 11-August 4, 2009. Having built on the knowledge gained about this elusive and poorly-studied species during last year’s study, the field research team expanded the study area in 2009 from two to four sites. Between early-June and mid-August, the team successfully located 13 active nests. Of those 13 nests, five made it to the chick stage, and one successfully fledged a chick. Three nests were documented by

camera to have been depredated by red foxes. Vegetation and landscape data were collected for nest sites and surrounding areas to determine the characteristics that define nesting habitat. Cameras were placed on a subset of nests to record attendance, species composition and delivery rates of prey to nestlings, and predation data.

Another objective of the study was to conduct frequent early morning audio-visual surveys for KIMUs. A total of 525 KIMU detections were recorded during 32 audio-visual surveys performed over a ten-week period. Ten survey stations were sampled. Four stations located less than 50 m from base camp sites comprised the core of the effort, accounting for 18 of the 32 counts.

In addition to characterizing nest sites and early morning attendance behavior, egg, embryo, egg fragments and feathers were collected that will be used to expand the genetic database of KIMUs in Alaska. In sum, the second year of the KIMU project was very successful, and added substantially to the scientific community's body of knowledge on this species.



Biological Technician James Lawonn measuring a KIMU chick. Corey Shake/USFWS

In early July, Pyle assessed murrelet activity and potential nesting habitat of the Twin Peaks area immediately N. of Alitak Cannery, S. Kodiak Island. Early morning surveys operated on four dates at different survey stations yielded a total of 71 murrelet detections including 53 detections of Kittlitz's murrelet and 16 detections of marbled murrelet. At two survey stations where both species were recorded, percentage detections of Kittlitz's

murrelet differed, ranging from 59% at the station where adjacent rocky terrain consisted of a mixture of exposed bedrock, talus, and cliff to 87% at the station where adjacent rocky terrain consisted mainly of talus, a known nesting habitat. The Twin Peaks area is one of the few places on S. Kodiak Island that likely supports habitat suitable for nesting Kittlitz's murrelet and, otherwise, affords good access to study and monitor both murrelet species despite the limited area of potential nesting habitat and number of birds it could support. [LAWONN,CORCORAN, PYLE]

5.5. b. Collaborate with USGS Biological Science Center on ship-based Murrelet (*Brachyramphus* spp.) Surveys.

In July 2009, Refuge biologist Robin Corcoran assisted USGS Alaska Science Center biologists aboard the USGS research vessel the M/V Gyre. Surveys designed by John Piatt and his research team were conducted on the west-side of Kodiak in Viekoda, Uganik and Uyak Bays and included both near shore and cross-bay transects. The survey was originally intended to continue around the western end of Kodiak Island but high winds prevented surveying the exposed coastline in this region. Line-transect methods incorporating distance estimation were used to document murrelets. Limnology and prey sampling were also conducted along selected transects. [CORCORAN]

- 5.6 Continue collaboration with the Migratory Bird Management Office, Alaska Region, on periodic monitoring of wintering Steller's eider populations to contribute to monitoring and recovery efforts under the Endangered Species Act. Expand this effort to include monitoring of emperor geese.

No funding or time allowed in 2009.

- 5.7 Develop baseline contaminants information for environmentally sensitive resident birds by 2010.

No funding or time allowed in 2009.

- 5.8 Facilitate annual operation and completion of two breeding bird surveys in the Kodiak vicinity.

Established in the early 1980s, both road-based surveys were successfully completed by volunteers Cindy Trussell (observer) and Rich MacIntosh (data recorder, navigator) in mid June 2009. Newly arrived Refuge avian biologist Robin Corcoran accompanied Cindy and Rich on both surveys. Results were issued to USGS in July. [CORCORAN]

GOAL 6: Maintain and restore native plant populations, communities, and habitats.

- 6.1 Develop and conduct reconnaissance surveys for invasive plants—particularly orange hawkweed (*Hieracium aurantiacum*), a known invasive on Kodiak Island—every five years in the vicinity of villages, private lands within the Refuge (e.g., lodges, canneries), and Refuge sites subject to routine use by people. Where invasive plants are detected, initiate collaborative control and eradication actions. [PYLE, LEE]

6.1.a. Continue implementation of approved Integrated Pest Management (IPM) plans.

We continued to implement IPM plans having received \$25 K in Invasives Control with Volunteers Funding from the Regional Office. However, we suspended herbicide application pending completion of NEPA process in compliance with the February 2009 directive of the Regional Director. Results from continued monitoring of hawkweed response at Camp Island, Karluk Lake, indicated that hawkweed frequency, a measure of plant distribution, declined 86% following annual applications of clopyralid-based herbicide (Transline[®]) since 2003. Correspondingly, native herbs have dominated ground cover on meadow sites formerly infested by hawkweed, as revealed by measurements on permanent plots and photo retakes. Monitoring data collected in August 2009 indicated that applications of Milestone[®]VM in fall 2007 and 2008 reduced thistle density (stems/m²) by 97%. Milestone[®]VM also was applied to manage oxeye daisy. Although both June 2008 September 2007 treatments of separate areas substantially reduced cover of daisy, as indicated by monitoring results, observational evidence indicated that the September treatment was most effective (>95% reduction in daisy cover). As with hawkweed, we systematically removed flowers of plants apparently missed by treatments.

6.1.b. Conduct surveys and outreach pertaining to invasive plants in remote areas of Kodiak Island within and adjacent to the Refuge.

The Refuge partnered with local volunteers and the Kodiak Soil and Water Conservation District on three major outreach and survey actions. These consisted of reconnaissance surveys and outreach in and around remote settlements, most of which were lodges and base camps of commercial salmon fishermen, along the coast in and adjacent to the Refuge. Collectively, field crews visited 43 settlement sites including eight on Refuge land and 34 on adjacent private land. We noted that most infestations were small, less than 1/10th acre, while the largest may have covered an acre. We found nine species we regard as highly invasive including orange hawkweed, oxeye daisy, common tansy, Canada thistle, creeping buttercup, and reed canary grass, Bohemian knotweed, Siberian pea shrub, and European mountain ash. In concert with landowners and the District, the Refuge will plan and institute control of these populations over the next two years. Results of remote coastal outreach and survey missions were presented to participants of the 10th Annual Alaska Noxious and Invasive Plants Management Workshop in November 2009.



Landowner from Moser Bay area displays invasive plant leaflet distributed by survey and outreach team. Tonya Lee/USFWS

6.1.c. Initiate a planning process to address management of invasive plants.

In November 2008 Region 7 of the FWS and Regional Director Geoff Haskett in particular was sued by Alaska Survival and Alaska Community Action on Toxics for failure to comply with NEPA before applying herbicides. To settle the case, RD Haskett issued a memorandum that all entities of the Service will comply with NEPA before applying herbicides. In July 2009, the Refuge distributed a scoping letter to 174 parties (individuals, conservation organizations, municipalities, congressional representatives, lawsuit plaintiffs, local media, etc.). Six responses were received. Two responses supported an IPM approach including herbicide use. Four responses expressed concerns about potential human health and ecological impacts associated with proposed use of two herbicides. It was the intention of the Refuge to prepare an EA/FONSI on its invasive plant control program. The Refuge subsequently framed its alternatives and analysis of consequences in consideration of public concerns expressed in the scoping process. Bill Pyle was still writing the EA at the conclusion of the fiscal year. [PYLE, WHEELER]

6.2 By 2008, describe species composition of plant communities for selected areas of the Refuge, with special emphasis on the Kodiak Refugium and areas likely to contain endemic plants. [PYLE]

6.2.a. Survey flora of selected areas of southern Kodiak Island.

Funding from the Service's Challenge Cost-share Program was matched with 938 hours of in-kind services contributed by two volunteers, including a botanist (Stacy Studebaker) and a bear guard (Mike Sirofchuck), in support of the field survey, which operated from five different camps on southern Kodiak Refuge between June 29 and August 7, 2009.

Preliminary identification results provided by University of Alaska Fairbanks indicated that 465 specimens were collected including more than 300 species. At least 30 species were first documented records for Kodiak Refuge and a smaller subset of 11 species comprised first records for the Kodiak Archipelago. In general, many of the newly catalogued species consisted of forbs associated with meadows and wetlands, land cover types which are especially common on southern Kodiak Island. The field botanist affiliated with the survey communicated survey results to the public in three presentations including the Alaska Botany Forum. Additionally, survey findings were documented in a report developed by Carolyn Parker, renowned Botanist affiliated with the University of Alaska Museum of the North Herbarium. [PYLE]



Kamchatka rhododendrons on southern Kodiak Island. Bill Pyle/USFWS

6.2.b. Survey soils and ecological sites of selected watersheds of Kodiak NWR and vicinity.

In 2009, the Refuge signed an intra-agency agreement with the Natural Resources Conservation Service. Subsequently, the NRCS subsampled soils and ecological sites of on 152,000 acres of Refuge land collectively encompassed within the Karluk River and Sturgeon River watersheds during late July-mid August. At no cost to the Service, an additional 75,000 acres of adjacent land was subsampled as requested by Koniag, Inc. the primary landowner. In support of survey objectives and data analysis, the NRCS acquired high-resolution orthoimagery for the Sturgeon River watershed and shared a copy of the data with the Refuge. [PYLE]



NRCS personnel sample soils and vegetation near Karluk Lake. Bill Pyle/USFWS

- 6.3 By 2010, develop a monitoring program to evaluate major plant communities in the vicinity of remote weather stations.

No funding or time allowed in 2009.

GOAL 7: Conserve the abundance of natural salmonid populations for continued human and wildlife use and to ensure the diversity of species as indicators of the health of the Refuge's ecosystem.

- 7.1 In collaboration with ADF&G, annually monitor escapement of salmon by means of aerial surveys and weir counts to ensure adequate escapement for future production and to support important commercial, recreation, and subsistence fisheries.

The 2009 Kodiak Area Salmon escapement counts were classified as weak to poor. The classification is based on yearly escapement counts compared to historical counts, which is normally the 10 year average. There are five systems on Kodiak Refuge lands and two systems on Federal submerged lands administered by Alaska Maritime Refuge (Litnik and Buskin River systems). Salmon escapement goals were not met in 2009 on three systems, Karluk River Chinook and sockeye, Ayakulik River sockeye, and Buskin River sockeye.

The 2009 lower escapement count was not met on the Karluk River for Chinook (1,307 fish; escapement goal range 3,600 to 7,300 fish); sockeye early (52,466 fish, escapement goal range 100,000 to 210,000 fish) and sockeye late (118,866 fish, escapement goal range 170,000 to 380,000 fish) run; the Ayakulik River Chinook salmon (2,615 fish, escapement goal range 4,800 to 9,600 fish) and Buskin River sockeye (7,753 fish, escapement goal range 8,000 to 13,000 fish).

However, the 2009 sockeye escapement counts for Ayakulik River (315,184 fish, escapement range 200,000 to 500,00 fish); Dog Salmon (147,798 fish, escapement range 95,000 to 190,000 fish); Frazer Lake (101,845 fish, escapement range 70,000 to 150,000 fish); Upper Station early (34,585 fish, escapement range 30,000 to 65,000 fish) and late (161,736 fish, escapement range 120,000 to 265,000 fish); and Litnik (31,358 fish, escapement range 20,000 to 50,000 fish) did meet their lower escapement goal.

The Karluk, Ayakulik, and Buskin River systems were closed to all user groups (subsistence, sport, and commercial) during the 2009 fishing season. These management decisions were made to protect both Chinook (Karluk and Ayakulik Rivers) and sockeye (Karluk, Ayakulik, and Buskin Rivers) salmon populations. Management decisions were based on historical run timing data. [VAN HATTEN]



A salmon fisher awaits her catch at the Upper Dog Salmon Falls. Chad Cook/USFWS

- 7.2 Monitor salmon escapement in streams on the Refuge that are key seasonal feeding areas for brown bears and bald eagles and work collaboratively with ADF&G to maintain escapement levels that reflect wildlife needs.

Salmon escapement counts were monitored by ADF&G on Karluk, Ayakulik, Dog Salmon Rivers, and at Frazer Fish pass as these are the only refuge systems that have weirs on them. Salmon escapements were as described above in 7.1. Other areas of interest are Sturgeon, Little, Uganik, and Humpy Rivers, and 7-Mile Creek. Escapement data is not available for these systems. [VAN HATTEN]

- 7.3 Annually review commercial, recreation, and subsistence harvest of salmon by means of ADF&G commercial harvest reports, special use permit reports, creel censuses, and subsistence reporting. Harvest data, along with escapement data, will be used to monitor productivity of salmon populations that occur in waters within Refuge boundaries.

Tonya Lee, Refuge Information Technician, established contact with all village tribal councils which were used to collect information about subsistence activities. The information was provided to the Fishery Biologist, which was then summarized into a weekly report and submitted to the Office of Subsistence Management. Due to confidentiality, ADF&G is reluctant to provide any harvest data pertaining to commercial, recreational and subsistence user groups. [VAN HATTEN, LEE]

- 7.4 Continue to review management plans and harvest regulations that may affect exploitation of fish populations located within the Refuge. Make recommendations to ADF&G, regional advisory councils, the Federal Subsistence Board, local advisory committees, and the Alaska Board of Fisheries, as needed, for modifications to existing plans and regulations and/or for new plans and regulations.

Reports were provided to and oral presentations given to the Kodiak Regional Advisory Committee and Kodiak and Aleutians Regions Advisory Committee (subsistence) at their spring and fall meetings outlining our Refuge's activities associated with subsistence species. The Alaska Board of Fisheries provided a list of proposals for changes to the state's fishing regulations. These proposals for change were addressed at the March 2009 Kodiak Regional Advisory Council meeting. Public user groups and state and federal biologists worked diligently on providing input in the best way to conserve the Kodiak Management Area fishery. [VAN HATTEN]

- 7.5 Work with ADF&G to evaluate the need for steelhead escapement goals for Karluk, Ayakulik, and Sturgeon rivers. Additionally, recommend to ADF&G management actions or regulatory proposals that foster conservation of population structure and productivity of stocks that use these rivers.

There are currently no escapement goals for steelhead on the Karluk, Ayakulik, or Sturgeon Rivers. The Kodiak Refuge office has consulted with ADF&G Sport Fish Division to start the process in establishing escapement goals for these systems.

- 7.6 Assess and monitor populations to gather baseline data on noncommercial fish species such as Arctic char in Karluk Lake, Dolly Varden char, and resident rainbow trout. Use study methods such as mark-recapture, radio-tagging, weirs, video, and creel surveys with assistance of the Service's Anchorage Fish & Wildlife Service field office and ADF&G.

No funding or time allowed in 2009.

- 7.7 Continue to require ADF&G to implement monitoring programs for Kodiak Regional Aquaculture Association (KRAA) enhancement projects conducted on the Refuge, as outlined in specific refuge management plans (i.e., Spiridon and Hidden lakes enhancement management plans). Annually review project reports provided by ADF&G to ensure that biological parameters continue to meet management plan criteria, which will ensure protection of wild salmon stocks, char populations, and wildlife within the project area.

[Steve Schrof, Kodiak Finfish Biologist for the ADF&G Division of Commercial Fisheries, has provided our office with a copy of the 2008 Spiridon \(Fishery Management Report No. 09-34\) and 2008 Hidden Lakes \(Fishery Management Report No. 09-20\) Sockeye Salmon Stocking Project and Related Monitoring Parameters report. \[VAN HATTEN\]](#)



Fishery Biologist Kevin Van Hatten collaborates with ADF&G Biologist Len Schmidt on a juvenile Chinook project on the Karluk River spawned by poor returns of adult Chinook on the Karluk. Gary Wheeler/USFWS

- 7.8 Through a collaborative effort with ADF&G, evaluate situations when fish populations are determined not to be meeting escapement goals or management targets. When weak stocks are identified (e.g., the early run of sockeye in Akalura Creek) develop strategies to improve and stabilize runs, which may include implementation of specific management actions and research or rehabilitation projects, while maintaining genetic integrity of these fish populations.

The 2009 salmon run was variable throughout the Kodiak Management Area. The areas of concern are the Ayakulik and Karluk River systems. The 2009 field season marked the second year that neither system met the lower Chinook salmon escapement goals. If either system fails to meet their respective lower escapement goal they could be labeled as a stock of concern at the next Board of Fish meeting, which will meet in January of 2011. The forecast submitted by ADF&G Commercial and Sport Fisheries Divisions showed that both Ayakulik and Karluk River systems will not have a strong Chinook salmon run in 2010. Therefore, both systems started the season with restrictions incorporated on them.

The 2009 field season was the first year of a multi-year project to identify any deficit in Chinook salmon stock production related to survival of freshwater life-stages. The main objective for this project is to assist in developing strategies to restore or stabilize the Karluk River Chinook salmon run. To accomplish this objective, a crew periodically sampled the Karluk River from March to July. Four sampling periods were conducted during the spring and summer months: April 17 – 20, 2009; May 16 – 17, 2009; June 26 – 27, 2009; and July 13 – 14, 2009. The data from this project will be analyzed and formatted into a report that will be available to interested parties. [VAN HATTEN]

- 7.9 Complete data collection and write a report describing and classifying genetic characteristics of salmon populations in the Kodiak Refugium by 2008.
- No funding or time allowed in 2009.
- 7.10 In cooperation with ADF&G, document and describe genetic characteristics and variability of natural fish populations that are important indicators of the diversity on the Refuge for both human and wildlife use.
- No funding or time allowed in 2009.
- 7.11 Through a coordinated effort with ADF&G, evaluate salmon spawning and rearing habitat to determine productivity of salmon-producing systems within the Refuge.
- No funding or time allowed in 2009.
- 7.12 Through a collaborative effort among ADF&G, the Refuge, and the Anchorage Fish & Wildlife Service field office, use escapement, habitat, and other pertinent data to establish sustainable or biological escapement goals—subject to review by the Alaska Board of Fisheries—for all species of salmon within the Refuge.
- No funding or time allowed in 2009.
- 7.13 Establish and implement monitoring plans for streamside areas to ensure salmon and Arctic char rearing and spawning habitats remain productive.
- No funding or time allowed in 2009.

GOAL 8: Provide the opportunity for local residents to continue their subsistence uses on the Refuge, consistent with the subsistence priority and with other Refuge purposes.

Most of the objectives listed under Goals 1 through 7 are also objectives for the subsistence goal. For example, there are numerous objectives related to management of deer (Goal 3), fish (Goal 7), and migratory birds (Goal 5), which are commonly used subsistence resources in and around the Refuge.

- 8.1 Coordinate with ADF&G and the Federal Subsistence Board to issue special actions, as authorized under federal in-season management, when necessary to ensure conservation of healthy fish stocks and to provide for subsistence uses (subject to Title VIII of the Alaska National Interest Lands Conservation Act [ANILCA] of fish in federal waters. Efforts will be made to minimize disruption to resource users and existing agency programs, as agreed to in the Interim Memorandum of Agreement for Coordinated Fisheries and Wildlife Management for Subsistence Uses on Federal Public Lands in Alaska.

[See report for objective 7.8. \[WHEELER\]](#)

- 8.2 Continue to coordinate with and assist the Division of Migratory Bird Management in completing the annual Migratory Bird Harvest Survey in rural communities surrounding Kodiak Refuge.

[No funding or time allowed in 2009.](#)

- 8.3 Coordinate with ADF&G and the Service's Office of Subsistence Management to complete subsistence use surveys as needed.

[No funding or time allowed in 2009.](#)

GOAL 9: Improve baseline understanding of natural flowing waters on the Refuge and maintain the water quality and quantity necessary to conserve fish and wildlife populations and habitats in their natural diversity.

- 9.1 In coordination with the Service's Fisheries and Ecological Services and the Water Resources Branch, in the Regional Office, ensure the Kodiak Electric Association complies with instream-flow requirements of the Terror Lake Project agreement and the Federal Energy Regulatory Commission license. Additionally, monitor and maintain water quantity and water quality that could be affected by future hydroelectric or other water development projects.

- 9.2 By 2009, complete the Five-Year Plan of Study for the Water Resources Inventory and Assessment on the Kodiak Refuge and, in coordination with the Service's Water Resources Branch, quantify and file for instream water rights for the maintenance and protection of fish and wildlife habitats.

[Service's Water Resources Branch completed five year study of flowing water resources of Kodiak Refuge.](#)



Wayne Stanislowki, Water Resources Division, downloads discharge data from the Upper Station gaging station, one of six assessment sites. Bill Pyle/USFWS

- 9.3 In cooperation with ADF&G and the Anchorage Fish & Wildlife Service field office, initiate limnological studies at lakes and streams within the Refuge that provide important habitat for fish and wildlife. Specifically, begin studies at Karluk, Ayakulik (Red Lake), Frazer, Akalura, Uganik, Sturgeon, Spiridon, and Little river systems.

[No funding or time allowed in 2009.](#)

GOAL 10: Provide opportunities for quality public use and enjoyment of Refuge resources through compatible fish- and wildlife-dependent recreation activities, including hunting, fishing, wildlife observation, and photography.

- 10.1 Improve monitoring and continue appropriate onsite management of seasonal aggregations of public use at Ayakulik River, Karluk River, Frazer fish pass, and Uganik River and expand to other areas as use develops.

[Frazer:](#) Completed installation of new directional and interpretive signs, built and installed new outhouse. [Uganik:](#) Contacted 94 individuals and distributed map and fishing etiquette leaflet while staffing public use contact station at outlet of Uganik Lake during most of September (peak silver salmon season). Monitoring of human use numbers is through air taxi and guide reports at the end of the year. Refuge personnel observed human use several times per summer at the most popular areas on the Refuge.

Human use was observed to comply with refuge regulations. [GLASPELL, KING, VOLUNTEERS]

- 10.2 In cooperation with ADF&G, Koniag, Inc., Akhiok-Kaguyak, Inc., and Old Harbor, continue to implement and manage easement agreements to minimize impacts of public use on fish, wildlife, and habitat; to ensure compatibility with Refuge purposes; and to provide for sustainable fish, wildlife, and wildlands recreation.

Hosted annual Refuge-ADF&G-Koniag coordination meeting. Consulted regularly with Koniag representatives on cabin construction at the outlet to Karluk Lake and operation plans, Camp Island facilities, and Thumb River bear viewing. Did annual float trip down Karluk River at peak of Chinook salmon season. No public use due to low Chinook returns and non-retention order by ADF&G. Met with President of Akhiok-Kaguyak Inc. to discuss soil survey and other current topics. [WHEELER, GETMAN, BEDINGFIELD, PYLE, LEACOCK]

10.2.a. Support implementation of Native of Larsen Bay's Tribal Wildlife Grant, much of which pertains to management of resources on the Koniag Conservation Easement. [PYLE]

In February 2009, the Larsen Bay Tribal Council received Service approval for a no-cost request to extend the Grant completion date to 31 March 2011. In May, the Council renegotiated specifications, but not cost, of its orthoimagery contract. In general, the revised contract specified: (a) change of the imagery collection platform from satellite to (1:30,000 scale) vertical stereo aerial photography (plane-based); and (b) production of high resolution digital orthoimagery based on use of high quality ground and aerial control data to georeference the high resolution scans of the aerial imagery. On 11 August 2009, the contractor successfully collected cloud-free imagery of the Council 287,000-acre project area. Following imagery collection the contractor initiated processing with expected delivery and contract completion scheduled for November 2009.

- 10.3 In 2007, develop an operations plan encompassing all aspects of law enforcement to be completed by 2008. Annually monitor commercial activities on the Refuge, including compliance with special use permit conditions and operation plans. Expand law-enforcement outreach to include education programs and media releases regarding Refuge regulations, and increase the number of field patrols to protect resource values and to enhance visitor experiences on Refuge and conservation easement lands.

Completed.



RO Bedingfield and Deputy RM Getman erect their tents along the Karluk River.
Gary Wheeler/USFWS

10.3.a. Conduct field patrols to maintain visibility and ensure compliance with fish and wildlife laws and refuge regulations. [BEDINGFIELD, GETMAN]

RO Getman and Bedingfield conducted over 250 in-field hunter/fisher compliance checks and numerous other educational contacts with recreational users.

Spring bear hunter checks - This patrol was conducted by RO Bedingfield. Eleven of the fourteen permitted bear guides were checked during the spring patrol to verify compliance with prospectus conditions. Ayakulik River, King Salmon Season, June – Refuge Officers patrolled the Ayakulik from 6/8-12 and 6/22-26. Patrol objectives were to have an officer presence during this sport fishery and to educate visitors on and enforce the emergency orders issued by ADF&G to manage a weak run of Chinook and sockeye.

Karluk River, King Salmon Season, June - The Karluk River was patrolled from 6/15-19 with the objective to have a field presence during this sport fishery, to educate anglers and guides about the emergency orders issued, and to enforce the emergency orders issued by ADF&G to manage a forecasted weak run of Chinook and sockeye. Deputy RM Getman provided an orientation to the Karluk River for RM Wheeler and RO Bedingfield.

Set net site inspections – Three written warnings were issued to individuals who had not paid their set net permit fee. A post-season aerial inspection of each set net site was accomplished in late September to determine if permittees were complying with the season of use provision of their permits. Each site inspected was boarded up and closed.

Fall salmon anglers – The emphasis was to patrol the Uganik River during the silver salmon season as some conflicts between guided and unguided anglers had arisen there during the past few years. Several multiday patrols were conducted to ensure visitors adhered to regulations and to determine if some groups were led by unpermitted guides on the refuge.

Monitor easements – Easements were inspected in conjunction with the Ayakulik and Karluk June salmon angler patrols and during other aerial reconnaissance flights.

Fall bear and deer hunters – Patrols were conducted during the 2008 and 2009 fall season. Special emphasis was placed on checking marine transporters. Two violation notices were issued for individuals failing to salvage all edible game meat and two written warnings were issued for moving antlers before meat.

Public use cabin inspections – Cabin inspections were performed throughout the year. Individuals staying in the cabins were often visited by the Refuge Officers to encourage compliance and educate the users about the Refuge.

ATV's – Two ATV's were observed on the Refuge near the head of Viekoda Bay. Refuge Officer Bedingfield determined that the ATV's were operated by individuals from Port Lions. RO Bedingfield visited the village and worked with community leaders to distribute information letting them know that the Refuge is closed to ATV use. No further ATV use was observed on the Refuge.

Special Use Permits – A permit for an exclusive sport fishing guide use area was revoked due to inadequate use by the permittee. The area was removed from the exclusive guide use system and opened to use by all refuge-wide sport fish guide permittees.

RO Bedingfield assisted FWS special agents and AK Wildlife Troopers in checking waterfowl hunters on the road system near the City of Kodiak.

- 10.4 Assess the nature of visitor experiences available in different types of bear-viewing settings to support the design and development of viewing programs at O'Malley River and other potential sites. Complete the assessment(s) in advance of the implementation of any new bear-viewing program(s).

Released public-review draft of the O'Malley bear viewing program prospectus, which will be used to select the permittee, and hired a new, permanent park ranger who will have primary responsibility for onsite support and monitoring of the O'Malley program. Completed site visits to observe bear viewing programs/activities at Thumb River, Frazer fish pass, and Halo Bay on the Katmai Coast. [GLASPELL, WHEELER]

Completed Federal Register submission for regulatory change that will permit operation of the O'Malley bear viewing program during the seasonal closure, June 25 to September 30. [GLASPELL]

- 10.5 Using rigorous social science methods assess the nature of visitor experiences, significant influences on those experiences, and public acceptability of potential management actions at Frazer fish pass. Use results of the study as input to visitor-use management and potential visitor-capacity decisions at that site.

No funding or time allowed in 2009.



New Waterfowl Lake Cabin open to the public after renovation. Gary Wheeler/USFWS

- 10.6 Manage the public use cabin system to support a variety of compatible recreation activities by carefully considering the location of all current cabins and potential future additions to the system.

Renovated the Deadman Bay and Waterfowl Lake administrative cabins for public use, increasing the total number of available cabins to nine. [BANYAS, KING, GLASPELL, VOLUNTEERS]

Made all 9 cabins available for online reservation through the national recreation.gov portal (first FWS facilities to become available on that site). Eliminated quarterly lottery drawing in favor of rolling 6-month reservation window. [GLASPELL, MONZON]

- 10.7 Continue to monitor use of 17(b) easements and implement management actions as necessary to prevent resource impacts to the easements. (Also see Goal 1.)

10.7.a. Assist Koniag Inc. with their project to harden another 1,500 feet of the Portage Trail.

YCC interns and refuge staff completed hardening on approximately 1,000 feet of trail.
[GLASPELL, YCC]

- 10.8 By 2008, assess off-road vehicle (ORV) use on conservation easements lands.

No funding or time allowed in 2009.

- 10.9 Initiate assessment of snowmachine use on the Refuge.

See section 10.3.a. Completed Federal Register submission for new regulation that will protect critical bear denning habitat by closing nearly 5,000 acres of the Den Mountain area to snowmachine use. [GLASPELL]

GOAL 11: Improve management of commercial use opportunities that are compatible with Refuge purposes, provide quality public use opportunities, enhance visitor experiences, and ensure compliance with provisions of ANILCA.

- 11.1 To accommodate an increasing number of permittees, review the current process for administrating special use permits and develop a simplified, more time-efficient system for receiving applications, issuing permits, processing use reports, and distributing billings.

Converted to new national-standard permit application form, worked with RO to develop public guidance for completion of the form, and compiled Refuge “Standard Operating Procedures” binder for use by staff. [MONZON, GLASPELL]

- 11.2 By 2008, develop an education program for commercial operators to inform permittees of refuge requirements, goals, and regulations. As a part of this, provide updated information on bear safety and awareness for distribution to clients.

Participated as instructor and content developer in third-annual KUBS/Refuge commercial bear viewing course at Kodiak College. Target audience is existing or would-be refuge permittees, and the long-term goal is to make the course a requirement for obtaining a refuge special use permit. [GLASPELL, LEACOCK]

- 11.3 By 2007, obtain stakeholder input, determine if the 1987 Management Plan for Commercial Fishing Activities needs to be revised, and update this plan if warranted.

Wrote a draft Management Plan for Commercial Fishing Activities taking into account the comments that we received at our public meeting and written comments. [VAN HATTEN, GETMAN, WHEELER]

GOAL 12: Provide outreach, environmental education, and interpretive programs that increase a sense of stewardship for wildlife, cultural resources, and the environment and that enhance visitor experiences on the Refuge.

- 12.1 Plan, design, and construct a Refuge visitor center in the vicinity of downtown Kodiak to be complete by 2009.

12.1.a Facilitate completion of building, exhibits and FF&E (fixtures, furniture and equipment).

Assisted regional IT in addressing phone and computer tech support issues as VC added and rearranged new staff. [SHAW]

Coordinated installation of additional VC building sign. [SHAW, KING]

Provided coordination of exhibit and building repairs for Blazy Construction, sub-contractors. [SHAW]

Assisted in developing conceptual plan for Madsen Bear Statue interpretive panel with Kodiak Historical Society and bear guides. [SHAW]

Facilitated the rehabilitation of the 3-way bulletin board at HQ (adding magnetic surface). [SHAW]



Happy Trails Program is one of the interpretive events run by the Visitor Services branch.
Chad Cook/USFWS

12.1.b Facilitate re-articulation and installation of gray whale with The Gray Whale Project Coordinator.

Coordinated the Kodiak Gray Whale Project photo essay exhibit—writing exhibit specifications and coordinating contract (currently in fabrication). [SHAW]

12.1.c Plan, publicize and present public talks, radio and newspaper interviews and press releases informing the public about building/exhibit progress, mission and public involvement.

Acted as liaison with the local media to produce regular newspaper articles and radio stories about how the new facility was being received by the public and featuring events happening at the Center—giving live and taped interviews for KMXT and the Kodiak Daily Mirror throughout the year. [SHAW]

Updated VC website and Facebook fan page with both forward promotional and accomplishment pieces. [SHAW, SUMMER SEASONALS]

12.1.d Revise and update Standard Operating Procedures for Alaska Geographic bookstore, facilitate visitor center employee and volunteer training, evaluate new product.

Coordinated volunteer docent and temporary staff training in Alaska Geographic policies and procedures. [SHAW, POLITO]

Functioned as acting branch manager for three months as AK GEO reviewed station needs and recruited to fill vacancy (reconciling monthly income journals, bank deposits, computer maintenance and inventory management). [SHAW]

Assisted AK GEO Central office staff in interviewing, selecting and training new part-time AK GEO branch manger. [SHAW]

Coordinated volunteer docent and temporary staff training in Alaska Geographic policies and procedures. [POLITO]

Reviewed and evaluated new product for bookstore, assuring product relevance to Refuge mission. [SHAW, GLASPELL]

Developed new commemorative product for Kodiak AK GEO branch. [SULESKI (AK GEO), SHAW]

12.2 By 2007, provide better access to Refuge information on topics such as bear safety, campfire safety, permits, and public use cabins through a Web site and other electronic media. Information would also be available through a variety of nonelectronic sources.

Added to reference library within the trip planning area of Visitor Center. This library includes books, field guides, maps, films (DVD and VHS) and other reference materials about Kodiak Refuge, the wider archipelago and southwestern region of Alaska. [SHAW]

Updated VS program resource file for VC information desk—subsistence hunting and fishing, tagging, etc. [SHAW, SUMMER SEASONALS]



New, locally roasted and sustainably grown *Bruin Brew* coffee was unveiled at Kodiak Branch of Alaska Geographic. Tina Shaw/USFWS

Added cabins to the national recreation.gov reservation portal. Converted to online reservation system and eliminated lottery in favor of rolling 6-month window. Completed online and teleconference training on new system. [GLASPELL, MONZON]

Updated .gov website to include new information regarding permits and refuge cabins. [GLASPELL]

12.3 Increase visitor center staffing to allow the center to be open seven days per week during peak visitor use season (dependent on funding).

Recruited and hired 2 temporary environmental education/interpretation SCA's (summer & fall). [SHAW]



Interpretive Park Rangers, Shelly Lawson and Chad Cook, joined the Visitor Services Team during FY09 and welcomed thousands of visitors to the Center. Tina Shaw/USFWS

12.3.a. Recruit volunteers for participation in new visitor center staffing and continue to broadly recruit across Kodiak community for the Regional-based Friends of Alaska National Wildlife Refuges.

Scheduled and tracked docent shifts for staffing information desk and roving Visitor Center in support of regular operations and special events. [POLITO]

Volunteer Coordinator served as central contact for 13 visitor center docents; recruited and trained 4 new volunteers; assigned special projects as needed; supported retention through regular phone calls, meetings and communication of appreciation. [POLITO]

12.3.b. Provide visitor center staffing year-round.

Provided information desk coverage and Alaska Geographic sales support as needed. [SHAW, KNOTH, POLITO, MONZON]

Supervised and mentored two temporary park rangers, full-time Volunteer Coordinator and a 6-month SCA volunteer (allowing year-round front desk and EE program coverage). [SHAW]

12.3.c. Develop and fund a Youth Conservation Corps (YCC) program to support Visitor Center operations and on-refuge projects.

Secured CCS funding and established partnerships with Alaska Youth for Environmental Action, ADF&G, and Koniag. All three partners joined efforts to make the YCC season a success. Three YCC "conservation interns" were hired for a nine-week season, which included six weeks working in-town at the visitor center and three weeks in the field. Field work included time at Camp Island to shadow bear biologists, providing education

and exposure to field biology, research, and bear-viewing issues. Field work at Portage on the Karluk River included installing GeoBlock on the 17b easement trail, and field work at Deadman Bay consisted of preparing an existing administrative cabin for public use. While not in the field, interns met and spoke to visitors at the visitor center, mainly on cruise ship and ferry days. Each intern gave an “end-of-the-season presentation highlighting one of the three Refuge field trips. [GLASPELL, SHAW, POLITO, DONALDSON, LEACOCK]



The YCC crew learns about bear research by shadowing Bill Leacock, a field biologist.
Brian Glaspell/USFWS

12.4 Acquire base funds for the Kodiak Summer Science and Salmon Camp base camp and village outreach project through Refuge System funding processes to avoid depending on annual fund-raising.

12.4.a In the absence of 100% base funding, seek Challenge Cost Share funding to continue community education efforts through Kodiak Summer Science & Salmon Camp.

NOTE: “Base funds” are allocated through science camp CCS process. Completed annual CCS funding request for \$20,000. [DONALDSON]

Recruited and hired temporary GS-05 Salmon Camp Director. [SHAW]

Recruited and hired 3 SCA interns in support of Salmon Camp. [SHAW]

12.4.b Participate in Dig Afognak 2007 and bring Salmon Camp to all 6 of Kodiak's remote villages.

Seven sessions of Salmon Camp were held in Kodiak City for 115 campers ranging from kindergarten through eighth grade. Sessions ran June through August. Salmon Camp was also brought to all 6 villages for 75 campers ranging from kindergarten through eighth grade. [DONALSON]

12.4.c Conduct Salmon Adventure Camp for middle school students.

Eight campers participated in Salmon Adventure Camp held for the second time in 2009. Campers learned Leave No Trace camping skills and safe camping in bear country during this overnight camping experience. Fishing, hiking, and camp cooking were some of the many activities that took place during this session. [DONALSON]

12.5 Annually sponsor, co-sponsor, or participate in community events, festivals, and programs (e.g., Migratory Bird Day, Crab Fest, Whale Fest) to build awareness of the Refuge and Kodiak ecosystems.



Retired Kodiak Refuge Manager, Will Troyer, signing copies of his latest book, *The Bear Wrangler* at Refuge Week celebration. Tina Shaw/USFWS

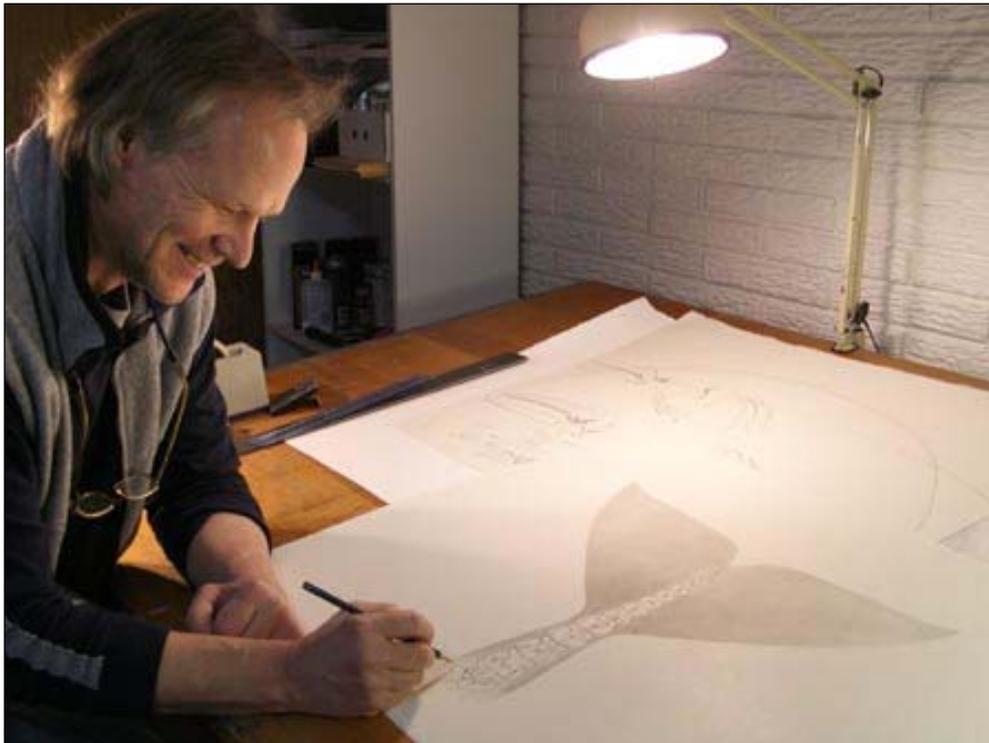
12.5.a Sponsor National Wildlife Refuge Week, planning, promoting and presenting public talks in support of the National Wildlife Refuge System.

Kodiak Refuge welcomed retired Refuge Manager and biologist Will Troyer. Refuge staff provided logistical support and orientation for visiting guest, as well as full promotion of public talk through flyers, PSA's and coordination of forward-promotion pieces in radio and print media. [SHAW, GLASPELL, BEDINGFIELD]

Planned community art walk (to run through fall/winter FY10) with partner museums and AK GEO. [SHAW, SULESKI]

12.5.b Participate in WhaleFest 2009, both in planning (planning begins Winter 2008-09) and in facilitating environmental education efforts in the K-6 schools, home school groups and informal interpretive programs for all ages.

Arranged and promoted a public talk and slideshow presentation by Kate Wynne, UAF Marine Advisory Program Marine Mammal Specialist, on her work with NMFS to create fisheries observer programs and training in developing nations in eastern Africa and Central America. [POLITO]



Artist Bruce Nelson creating the natural science illustrations that were commissioned by the Kodiak Gray Whale Project and displayed as a part of the Whale Fest 2009 celebration. Tina Shaw/USFWS

Refuge staff hosted the Kodiak Gray Whale Project illustration art exhibit and sale as an official Whale Festival 2009 event. [SHAW]

Refuge staff and Friends hosted Kate Wynne's lecture, *The Globalization of Conservation: A Personal View of NOAA Marine Observer Programs in Developing Nation*, as an official Whale Fest 2009 event. [POLITO, FRIENDS]

12.5.c Participate in Kiwanis Pink Salmon Derby, increasing awareness about Kodiak Refuge and educational programs.

EE staff set up one table for face painting and another table with games and handouts. [DONALSON, SALMON CAMP SCA]

12.5.d Develop a Kodiak Envirothon event to foster environmental awareness and scientific skills in high school students..

Refuge staff, in conjunction with Kodiak High School instructor, Jane Eisemann, developed Kodiak Envirothon competition for high school students. Nearly two-dozen resource managers and biologists assisted with the planning and development of test activities, as well as delivery of classroom presentations to prepare students for the competition. Another 15 volunteers assisted with logistics on the day of the event (April 3, 2009), and 34 students successfully completed all 6 subject test stations. The top five scoring students comprised a team that represented Kodiak at the state Envirothon and placed second overall. The event is scheduled to recur on April 9, 2010. [POLITO, KNOTH, CONNOLLY]

12.5.e Develop a series of public events that will educate the public about the 20th anniversary of the Exxon Valdez and the on-going effects of the oil spill on coastal communities.

Planned and coordinated events for EVOS20, including Prince William Sound RCAC book signing, Exxon Valdez Oil Spill Trustee Council traveling exhibit and summer interpretive programs about Exxon Valdez spill and present-day effects. [SHAW]

12.6 By 2008, work within the community to increase partnerships and volunteers to form a friends group for Kodiak Refuge.

12.6.a Get the Friends group off the ground.

Friends of Kodiak NWR coordinated with Friends of Alaska NWR to determine that Friends of Kodiak would be a separate group.

Friends of Kodiak NWR board worked to establish a logo for the group and an information pamphlet. [POLITO]

12.6.b Support 'Friends of Kodiak Refuge' information program for interested Kodiak residents and build upon current interest.

Assisted *Friends of Kodiak NWR* with coordination and hosting of eight-month lecture series (co-sponsored with Kodiak Audubon), with development of outreach materials, and with hosting of informational table and display for off-site events. [POLITO]

12.6.c Provide staff liaison to state-wide friends group and *Friends of Kodiak NWR* in order to attend regular planning meetings and create local interest.

Attended regular monthly board of directors meetings of the *Friends of Kodiak NWR* and provided support to board activities, such as initial applications for incorporation and for IRS 501(c)(3) status. Attended regular *Friends of Alaska NWRs* teleconference meetings. [POLITO]

Attended 2009 Friends Unite conference in Washington, D.C. with Friends of Kodiak NWR president, Barb Volpe. [WHEELER, POLITO]



Kodiak NWR Manager, Gary Wheeler, and *Friends of Kodiak NWR* Board of Directors President, Barb Volpe, with *Friends of Alaska NWRs* member Jason Sodergren at the *Friends Unite* conference in Washington, D.C. Lisa Polito/USFWS

During summer 2009 the Friends of Kodiak Refuge disbanded due to disagreement among the board and other commitments. [POLITO, GLASPELL, WHEELER]

- 12.7 As staff and funding allow, conduct workshops with schools and teachers across Kodiak Island to enhance curriculum and outreach dealing with Refuge resources, issues, and opportunities.

Hosted a “Project Learning Tree” workshop (titled Growing up Wild) for 14 local educators and day care providers. The program presented environmental education strategies aimed at children aged 3-5. Initiated planning for a workshop next year (FY10) as well. [DONALDSON]

Gave lectures to 3 Kodiak High School classes on bear biology and conservation.
[LEACOCK]

- 12.8 Expand opportunities for individuals, organized groups, and families to learn about the Refuge through on- and off-headquarters programs, environmental education, nature walks and interpretive programs.

Presented at Wilderness Recreation & Tourism Association conference in Girdwood on Kodiak Refuge activities. Presented at Brown Bear Working Group on spearheading genetics study and the progress made....clear guidance and protocols provided for sample collections and laboratory; secured funding and seeking additional funding (Beringian Program funds) for genetics study in cooperation with ACS (Sandy Talbot) Hokkaido genetics laboratory (H. Tsuruga); Area V grant application. [LEACOCK]

12.8.a Plan and budget 2009 Educational and interpretive activities in conjunction with cooperating association (AK GEO).

Created and tracked Alaska Geographic budget for 2009 (\$67,000) to cover some of Salmon Camp's funding needs (not covered by CCS funding), bookstore staffing, volunteer appreciation and new visitor center website. [SHAW]

Facilitated the Jr. Ranger program booklet (pending completion FY10); work to be completed by AK GEO funded contractor, Shelly Lawson. [SHAW]

12.8.b Plan and provide summer interpretation programs through Visitor Center.

Planned and facilitated 2-week interpretation training and orientation. [SHAW]

Scheduled and tracked information desk, roving, interpretive programming schedule for six visitor services staff members. [SHAW]

Launched new interpretive program, 'Coffee with a Ranger' and linked AK Geo sales product to interpretive program. [SHAW]

Planned and coordinated IMBD *Birds in Culture* events, partnering with Kodiak Audubon and the Alutiiq Museum. [SHAW]

Assisted KICVB in greeting and orienting cruise ship passengers dock-side. [SHAW, POLITO, DONALDSON]

A new program, "Happy Trials" was run during June, July, and August by the Summer SCA. The program was designed for families to take an easy hike with a Refuge Ranger. It was held every Saturday at 1:00 pm at various trail heads on the road system.
[DONALDSON]



Bird TLC Volunteer, Kristen Gwinn, introduced Gandalf the Great gray owl to a standing room only crowd of Kodiakians as a part of Kodiak Refuge's IMBD celebration. Audubon and Refuge staff assist families in building bird feeders.
Tina Shaw/USFWS

12.8.c Create 'Families Understanding Nature' educational backpacks ('FUN Pack') for loan to Kodiak and visiting families.

Four FUN backpacks were completed and ready for check out. [DONALDSON]

12.8.d Update and expand visitor center website with the purpose of educating Kodiak community about upcoming and ongoing events, programs and activities taking place at the new Visitor Center.

Refuge staff updated Visitor Center website (event calendar, temporary exhibits, etc...) throughout FY09. [SHAW, KNOTH, DONALDSON, SUMMER SEASONALS]

12.8.e Schedule public talks about and discussions of conservation and Kodiak ecosystems.

Arranged and promoted a public talk and slideshow presentation by NOAA intern, Sophie Pierszalowski, regarding southern resident killer whale behavior monitoring research. [POLITO]



Biotechnician James Lawann was a big hit with the audience at the Visitors Center talking about Kittlitz's Murrelet on the Refuge. Bill Pyle/USFWS

Planned and coordinated public talk by Refuge bio. tech, James Lawonn, on the KIMU research project in collaboration with the Alutiiq Museum's fall lecture series. [SHAW]

Facilitated the partnership between Kodiak Audubon and Friends of Kodiak Refuge to sponsor a lecture series hosted at the Visitor Center. [POLITO]

GOAL 13: Conserve cultural and archaeological resources of the Refuge.

13.1 Identify priority areas to inventory for archaeological and other cultural sites and conduct surveys as time and personnel permit. Perform surveys at a level sufficient to evaluate, without a follow-up visit, eligibility of sites identified for inclusion on the National Register of Historic Places. While actual surveys will be conducted as funding and personnel become available, the identification of priority areas and overall planning for surveys should be completed by the end of 2007. [VISITOR SERVICES]

13.1.a. Support the Alutiiq Museum's continued inventory of archaeological sites on the refuge through the Challenge Cost Share Program. [CORBETT]

The Alutiiq Museum archaeologists inventoried around Karluk Lake.

13.2 Formalize the existing partnership with the Alutiiq Museum by the end of 2006. This agreement should spell out participation of the Refuge, the Service's Regional Office in

Anchorage, and the Museum in terms of both funding and tasks. Seek out and develop partnerships with Native corporations, universities, other government agencies, etc., to cooperatively inventory, manage, and protect cultural resources.

The Alutiiq Museum has taken the lead in developing partnerships to protect cultural resources. The Refuge remains a vital part in protecting these resources.

- 13.3 Identify and acquire archaeological, historical, and ethnographical archival resources to provide the necessary background material to support archaeological and historic site protection, public interpretation, and paleobiological information useful in wildlife and habitat management.

No funding or time allowed in 2009.

- 13.4 Provide Archaeological Resources Protection Act training to Refuge law-enforcement personnel. Provide basic cultural resource training to Refuge staff. Identify sites or areas at risk for vandalism and monitor with periodic law-enforcement patrols. [VISITOR SERVICES]

No funding or time allowed in 2009.

- 13.5 Strengthen and expand the Alaska Heritage Resource Stewardship program for site monitoring and evaluating site conditions on Kodiak Refuge.

The Refuge supports this program but expended no funds during 2009.

GOAL 14: Conserve special and unique features of the Archipelago ecosystem within the Refuge.

Note: Most of the objectives listed under Goals 1 through 7 are also objectives related to the special and unique features of the Archipelago ecosystem.

- 14.1 With public involvement, develop a management plan for the Mount Glottof Research Natural Area that identifies conservation and monitoring measures to preserve and document featured values and identifies how management under the plan may influence public use and access.

No funding or time allowed in 2009.



Assistant Secretary Strickland spent a day on the Refuge in August. Gary Wheeler/USFWS

GOAL 15: Promote close working relationships through effective coordination, interaction, and cooperation with other federal agencies, state agencies, local communities, tribes, organizations, industries, the general public, and landowners adjoining the Refuge whose programs affect, or are affected by Refuge management activities.

15.1 Routinely report results of biological and subsistence management, monitoring, and research to external audiences, including Kodiak Fish and Game Advisory Committee, Kodiak-Aleutian Regional Advisory Council, tribal councils, and other interested groups and individuals. **[BIOLOGICAL & SUBSISTENCE STAFF]**

15.1.a. Report subsistence management results to Kodiak-Aleutian Regional Advisory Council in the Council's meeting handbook. **[SAITO, LEE]**

Completed two reports in coordination with Refuge staff. Reports in later section.

15.2 Use and assist in the fish and game regulation process through interaction with ADF&G, local fish and game advisory committees, state Boards of Fisheries and Game, Federal Subsistence Board, Kodiak-Aleutians Federal Subsistence Regional Advisory Council, and the Alaska Migratory Bird Co-management Council.

Commented to Kodiak-Aleutians Federal Subsistence Regional Advisory Council and Alaska Boards of Fish and Game about proposals that would affect Kodiak NWR.

- 15.3 Use public processes as necessary to encourage stakeholder involvement in implementation of this Conservation Plan.

Worked with KUBS and offered a short-course on Guiding Bear-Viewing Programs to a group of ~20 students at Kodiak College. Participated in and contributed to KUBS meetings throughout the year. Consulted with the Kodiak Brown Bear Trust to determine future prospects and potential project support. Frequently consulted with personnel of Koniag, Inc. regarding plans for commercial operations at Camp Island and Thumb River. [LEACOCK]

- 15.4 Continue the Refuge Information Technician program to enhance information exchange with local communities on refuge issues, particularly those dealing with subsistence and bear management (such as bears killed in defense-of-life-or-property).

Old Harbor has expressed interest the in a Tribal Wildlife Grant to potentially facilitate bear-proofing of its landfill, such as occurred in Larsen Bay and Port Lions. In response to Old Harbor's interest, the Refuge coordinated meetings and site visits among community representatives of Old Harbor, Port Lions, and Larsen Bay. [LEE]

- 15.5 Participate in interagency activities, cooperative agreements, data sharing, and sharing of equipment and personnel to accomplish mutual management goals and objectives.

Worked with National Resource Conservation Service to accomplish soil survey on refuge and adjacent lands. Worked with ADF&G on many projects.

- 15.6 When requested, partner with community members to address bear-management concerns at villages, remote cabins, and lodges.

See section 15.4 above.

- 15.7 Hire full-time refuge-wide Volunteer Coordinator to manage community partnerships and volunteer opportunities in support of Refuge mission.

Completed spring 2009; hired Lisa Polito as volunteer coordinator. [SHAW, GLASPELL]

- 15.8 Volunteer Coordinator will work to enhance cross-program volunteer recruitment and retention and foster collaboration and cooperation with Kodiak area agencies and organizations.

Updated Refuge volunteer opportunities postings on Region 7 website. [POLITO]



Kodiak Refuge Volunteer, Megumi Inokuma, receives her appreciation award from Kodiak NWR Manager, Gary Wheeler, while Refuge volunteer coordinator, Lisa Polito, explains the award at the KNWR 2009 volunteer appreciation event.
Tina Shaw/USFWS

Provided oversight to Refuge staff by maintaining volunteer agreements, summarizing volunteer hours and achievements across programs. [POLITO]

Submitted FWS Journal accomplishment reports about recent volunteer program achievements. [POLITO]

Completed basic construction of volunteer database. [POLITO]

Provided volunteer recognition through daily support. [POLITO]

Maintained inventory of and procured volunteer supplies and materials in anticipation of future needs. [POLITO]

Planned, coordinated, and hosted annual volunteer appreciation award event. [POLITO]

Facilitated recruitment, training, and support of biology and maintenance program volunteers. [POLITO]

Coordinated public use of visitor center multipurpose room, including processing use requests, reserving facilities and posting events on visitor center website calendar, collecting fees or identifying in-kind donations, and training event hosts on visitor center and audio/visual system use. [POLITO]

GOAL 16: Provide for safe, efficient, cost effective administration of refuge facilities and programs.

- 16.1.a Provide for a permanent and seasonal staffing pattern necessary to meet existing program management needs as identified in approved management plans.

Accomplished.

- 16.1.b Oversee AWP and budget process including budget tracking, automated data processing, document preparation and control, time and attendance, travel administration, personnel records, and purchasing.

Gerri Castonguay accomplished budgeting, time and attendance, purchasing, personnel records, and invitational travel. Cinda Childers handled automated data processing, document preparation, SAMMS, property, and staff travel.

- 16.2 Oversee AWP and budget process including budget tracking, automated data processing, document preparation and control, time and attendance, travel administration, personnel records, and purchasing.

Managed AWP and budget entry/tracking/reconciling process. Provided manager with updates upon completion of monthly reconciliation. Budget planning meeting held in January 2009 to plan activities for 2009 field season. Kodiak IT network was highly dependable with only a few minor/short term outages. Travel administration, personnel records, and purchasing consistently met administrative requirements. [CASTONGUAY]

Document preparation, time and attendance, travel administration, personnel records, and purchasing were accomplished in accordance with regulations and guidance. [CASTONGUAY, CHILDERS]

Captured and entered travel, completed travel requests, authorizations, and travel vouchers and accomplished travel management through GOV.Trip. [CHILDERS, CASTONGUAY]

- 16.3 Work with ITRM to provide a seamless, robust, secure ITRM system useful to Kodiak users and compliant with national and regional mandates.

ITRM supported the refuge this year, and Gerri Castonguay served as liaison between ITRM and Refuge personnel.

- 16.4 Provide a pro-active safety program in accordance with the Station Safety Plan and other Service and OSHA policies and regulations.

Discovered that snow load combined with rain event in March of 2009 had caused a joint in the ridge line of the roof joist system in the old visitor contact station to

fail. Used a building jack and 4” by 4” to support the roof at this point until permanent repairs can be made. [BANYAS]

Annual safety training requirements met and exceeded for permanent, seasonal, to failand volunteer employees. [WHEELER]

Paul Banyas served capably as Safety Officer again this year. Charity Haring conducted a safety audit this year. The Refuge had a number of minor violations, but nothing major.



Jeff Lewis instructs another MOCC class. Brandon Saito/USFWS

Maintained safety certifications. Provided Bear & Firearms safety training. Insured that biotechs, volunteers, co-workers, YCC interns, and others were safe in the field and employed safe practices. Crews were in bear country all summer long. They were educated and trained about safe and proper behavior in wilderness and bear country. Insured that they operated all equipment in a safe and caring manner. Insured that they showed proper respect to bears and other wildlife. [LEACOCK, PYLE, KING]

Contracted a study of indoor air quality at the triplex. Results were that indoor air quality was not considered unhealthy at the triplex as long as residents ran their dehumidifiers. [BANYAS]

- 16.5 Develop and implement an aviation program to support Refuge biological, visitor services, law enforcement, and maintenance programs.

The Refuge is assigned one Husky A-1B and one DHC-2 Beaver.

The aviation program goal for FY2009 was to complete as many flights as possible using refuge aircraft and pilots. Refuge pilots provided aircraft support for many programs and projects (i.e., bald eagle surveys, intensive aerial bear surveys, bear stream surveys, bear behavior studies, mountain goat surveys, coastal bird surveys, VIP orientation trips, maintenance work at cabins, and law enforcement patrols). Refuge pilots safely logged 210.6 flight hours on refuge projects and activities. There was a significant reduction in the number of air charter flights used and these were mainly in situations where refuge planes or pilots were unavailable or another type of aircraft was more appropriate for the job. [VAN HATTEN, BEDINGFIELD]



RO Bedingfield conducts the annual Bear Intensive Aerial Survey. Brandon Saito/USFWS

- 16.6 Conduct refuge LE program in cooperation with community, state and federal authorities with emphasis on prevention and education.

See section 10.3.a.

- 16.7 Maintain and replace equipment and facilities and effectively use and update real and personal property records, SAMMS, and MMS databases.

Cinda Childers effectively managed the real and personal property records and the SAMMS database. Paul Banyas provided major input on the replacement of personal and real property. Dave King worked to maintain and replace equipment.



The Frazer fish pass site has remained popular with bear viewers. Chad Cook/USFWS

Major renovations were made to the Little Waterfall Lake public use cabin on Afognak Island. Work included constructing a new foundation, replacing the door and windows, and installing a new woodstove. The meat cache was also repaired and repainted.

[BANYAS, KING]

A new outhouse was constructed at Frazer Fish Pass for visitors and staff.

[BANYAS, KING]

Significant renovations were made to the Deadman Bay public use cabin. Work included installation of a new oil stove, four new bunks, and new paint for the exterior.

[KING, YCC CREW]

Hired Lee Bondurant under the economic stimulus program to maintain the visitor center.

[BANYAS]

Replaced sidewalk to the employee parking lot and rimmed it with gravel. Straightened sidewalk to allow better drainage of the sidewalk, allowed easier use of the power broom

to remove snow from the sidewalk, and allowed easier access to the building by motor vehicles. [BANYAS, KING, CONTRACT]

Captured in SAMMS all costs of maintenance, repairs, and supplies for all Kodiak NWR facilities which include, headquarters, shop, hanger, quarters, triplex, and Lily Lake facility. Captured costs of repairs, materials and supplies for all public use cabins and other field operation bases. This includes all utilities such as electricity, heating fuel, propane, water, sewer, trash removal and road maintenance. The labor costs for all employees and volunteers are also accounted for in SAMMS. Also included are repairs, supplies, materials, utilities and labor costs for the boats, outboards and URSA Major II. This is logged and entered on a monthly basis and at the end of the FY all cost have been captured, completed and closed. [CHILDERS]

Updated all real and personal property records; replacement of any vehicles and any excessed property has been documented and sent to the Property Specialist in the Anchorage office by the end of the FY. [CHILDERS]

The semi-annual vehicle report which includes; property number, license number, odometers reading, fuel usage, fuel cost, direct and indirect cost for each individual vehicle was accomplished on time and has been sent to the Property Specialist in the Anchorage office. [CHILDERS]

Completed the Annual Energy and Water Conservation Report for FY08 for each organizational code. Kodiak NWR has (4) which includes; cost and units of electricity, cost and gallons of heating fuel, cost and units of propane, cost and gallons of aviation fuel, unleaded fuel, diesel, and jet fuel used. [CHILDERS]

- 16.8 Complete annual RAPP report with accuracy, consistency, and timeliness.

Compiled relevant data and entered into online RAPP database by August deadline. [GLASPELL, PROJECT LEADERS]

- 16.9 Manage the Refuge special use permit (SUP) program to ensure that refuge uses are appropriate, compatible, and have minimal impact upon refuge resources.

Renewed 25 big-game guide permits for second 5-year term. Converted all permits to new permit form (Alaska-specific one expired). Administered 95 total permits: 25 big game, 5 small game, 9 air taxi, 18 sport fish, 14 prospectus (limited entry) sport fish, 21 wildlife viewing, and 17 research and other activities. [MONZON, GLASPELL]

Established new fee structure for set-net site permits. [WHEELER, MONZON, GLASPELL]

Issued draft prospectus for O'Malley Bear viewing program. Began review process in preparation for FY10 prospectus sport fish offerings. [GLASPELL]



Our maintenance crew renovated the Waterfall Lake cabin. Gary Wheeler/USFWS

16.10 Maintain file system in accordance with Service standards.

Completed. [\[MONZON & OTHERS\]](#)

16.11 Establish centralized, data management system of administrative, public use, and biological data that is accessible by all staff and the public as appropriate.

[Data management system is arranged logically and open to the public for examination.](#)

16.12 Manage the Refuge's digital and slide images to facilitate their effective use in Refuge programs and by the Public.

[Refuge images are maintained on the computer server drive accessible to the entire staff and are available for all to use.](#)

16.13 Utilize the Refuge vessel Ursa Major II and other watercraft in support of Refuge programs and activities. [\[LEWIS\]](#)

[Arranged for and conducted the MOCC class on the Coast guard base again this year. Arrangements were made for ten students in the class and included arranging for use of the Nemitz Gazebo, fire station, USCG pool, and chow hall privileges. The class was](#)

held 18 – 22 May. The class included use of 4 vessels, the 10-foot inflatable with 6 hp motor, the 13-foot inflatable with 15 hp motor, the 18-foot Lund with 30 hp motor, and the 19-foot Ursa Major II skiff with center console and 90 hp motor. Other activities included the float of the Buskin River in inflatable kayaks, shooting flares, trip anchoring and running lines.



The Ursa Major II on a winter survey of the Katmai coast at anchor in Hallo Bay.
Jeff Lewis/USFWS

Repaired holes in the hull of the Rufus with a welder borrowed from AK Maritime NWR.
Replaced the starter switch and tachometer in the Rufus.

Replaced the prop on the UM II with a prop constructed by Sound Propeller out of Seattle, WA. The contract for the prop was \$12,000. The prop resulted in about 10% increased speed, a smoother ride, and increased fuel efficiency.

A fuel haul to Larsen Bay was completed May 4-7, June 30-July 1, and in September.

Robin Corcoran, Meg Inokuma, and Rich MacIntosh completed the east side colony survey off the UM II and skiff June 19-26.

Blythe Brown and Tonya Lee did invasive weed outreach around the Island off the UM II July 8-16 and Robin Corcoran joined them in Chip Cove for a bird colony recheck.

David Sinnett USDA biologist and RO Frank Simms joined Robin Corcoran for banding seaducks on the west side of Kodiak during August. A total of 43 harlequin ducks were banded.

Four salmon Camp counselors spent a day and a night aboard the UM II as a morale building exercise.

Pressure washed, sanded and painted hull; replaced zincs; installed Cutlas bearing; checked shaft packing on rudder; cleaned water line; removed old wooden deck and replaced with new wooden material purchased in FY-00; arranged for Kodiak metals to replace the UM II rudder; installed new propeller; and bay tested prop.

Backhauled Water Resources gear from Camp Island in association with September fuel haul.

- 16.14 Continue to acquire private lands inside the refuge boundary in accordance with the Land Conservation Plan as opportunities arise from willing sellers.

Continuing.

- 16.15 Assist the Regional Office Realty Division when land actions or program action activities occur.

Continuing.



Deputy Refuge Manager Mike Getman retired near the end of the fiscal year after 10 years of service to the Refuge. Jim Traub/USFWS