



United States Department of the Interior



NATIONAL PARK SERVICE

Glacier Bay National Park and Preserve

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IN REPLY REFER TO:
A2621 (GLBA)

Glacier Bay National Park & Preserve Superintendent's Report 2010

Highlights

- Newly awarded concession contracts for cruise ship services resulted in nearly \$3 million in additional franchise fee revenue. This provided funding for critical research, safety and visitor service programs.



NPS Transfer Vessel Serac with Diamond Princess. (NPS Photo)



AKR Safety Achievement Award

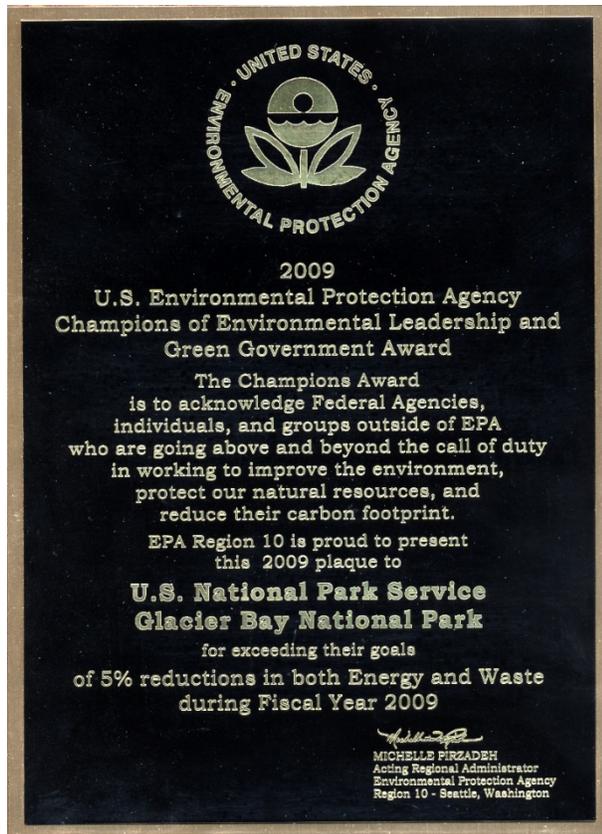
- For efforts in improving the NPS safety culture and reducing employee accidents Park Safety Officer Jake Ohlson received the 2009 Alaska Region Employee Safety Award, the highest level employee safety award in the Region.
- Community Outreach: Gustavus Dock
Throughout the 1990s and the first decade of the 2000s, the Gustavus Dock, built in the mid-1960s, had reached its designed use-life and went into a steady state of decline. The result of the decline was a continual loss of functionality and safety. As this happened many residents in Gustavus began to advocate for, and in some instances, foment political support for, designating Bartlett Cove as “Gustavus’s Port”, where they hoped a new dock would support the communities waterfront needs. Within this scenario, in 2005 the State of Alaska, under the direction of Governor Frank Murkowski, went so far as to schedule regular Alaska Marine Highway ferry service to Bartlett Cove. But the Gustavus City Council knew that such a plan – to create a new municipal waterfront development in Bartlett Cove and open the lower bay to unlimited vessel traffic – would encounter many difficulties. The City, taking the initiative, was successful in the summer of 2005 in securing from the US Congress an \$3,000,000 earmark for construction of a new dock on the Gustavus waterfront. Shortly thereafter, the State of Alaska, the City of Gustavus and Glacier Bay National Park signed an agreement to jointly seek funding for the new Gustavus Dock. NPS was able to secure \$7,200,000 for the project through several fund sources, with the State securing the balance through the American Recovery and Reinvestment Act program. Construction on the \$18,000,000 facility began in April 2010, and by December, 2010, was able to accept the first Alaska Marine Highway ferry

to dock in Gustavus. The project is slated for completion in the early summer of 2011. A related project – the City of Gustavus Floats Project, - will complete the project to provide a safe, reliable marine hub that will serve Gustavus for many decades to come.



Community Outreach: Falls Creek Hydroelectric Project

The Falls Creek Hydroelectric Project is another issue that had been before the park since the 1980s, and reached a milestone in 2010. The local electrical utility, Gustavus Electric Company (GEC), had identified the Falls Creek watershed as an economically viable waterway for generating hydroelectric power. After years of effort GEC was finally successful in 1998 when Congress passed the Glacier Bay National Park Boundary Adjustment Act. When enacted, over 1000 acres was removed from Glacier Bay National Park's wilderness lands and transferred to the State of Alaska. In exchange NPS acquired 1000 acres of state land in and near Klondike Goldrush National Historical Park, and designated 1000 acres of new wilderness lands within the boundaries of Glacier Bay National Park. In 2003 GEC filed a license with the Federal Energy Regulatory Commission, and began the process of environmental review, followed by the beginning of construction in 2006. The project was completed in 2009 and began to generate power the following winter. In July, 2010, GEC hosted a dedication ceremony at which Wayne Howell spoke on behalf of the NPS. As we enter 2011 NPS is beginning to explore the possibility of connecting its Bartlett Cove area to the GEC network through an electrical intertie.



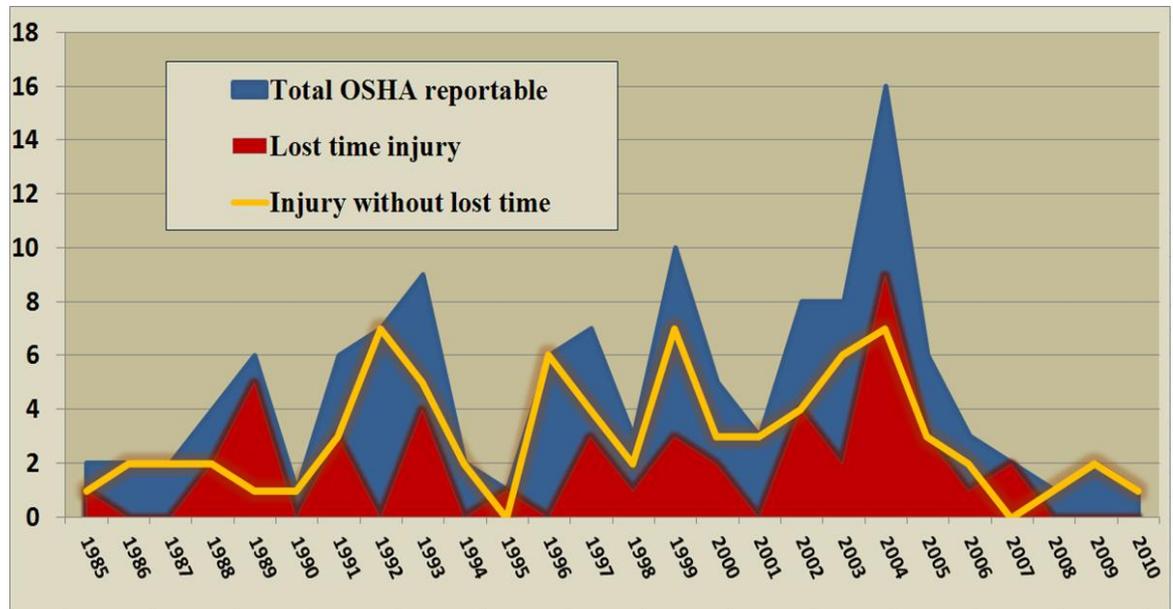
2009 EPA Leadership Award

- To reduce vehicle emissions and fuel use, the Park enacted an Alternative Transportation Program that rewards employees for carpooling, walking, and biking to and from work. The program resulted in more than 32,000 commuter miles saved and an estimated 29,000 pounds of carbon dioxide (CO₂) saved from emissions.

Environmental Management (Safety)

Accident Prevention

- One OSHA recordable injury occurred at Glacier Bay NP&P in CY10 for an OSHA Incidence Rate of 1.30, the lowest such rate in the recorded history of the Park.
- Zero lost-time injuries occurred in CY10, for a total of zero days away. This marked the third consecutive year of zero lost-time injuries in the Park and the first time the Park had exceeded two years without incurring a lost time injury.
- Zero cases of Days Away, Restricted, or Transferred (DART) occurred in CY10, for a DART rate of 0.00.
- The Park Safety Officer continued to serve on the Servicewide Maintenance Safety Leadership Team and the Interagency Serious Accident Investigation Team (SAIT).



GLBA Recordable Injuries by Year 1985-2010

Operational Leadership and the NPS Safety Culture

- A four hour Park developed Operational Leadership (OL) training was presented four times to a total of 47 employees, most of which were seasonal or temporary employees. Additionally, a two hour OL training was presented six times to a total of 14 employees.
- The Park Safety Officer represented the NPS AK Region at a weeklong American Society of Safety Engineers (ASSE)/DOI Conference in Baltimore that included a one day Service-wide OL program planning session.
- A Park developed Operational Leadership newsletter that was distributed to all AK NPS employees.
- An article written by the Park Safety Officer about the Safety Culture improvements at GLBA was published in Ranger Magazine.

Park Safety Committee and Employee Involvement

- The Park Safety Committee presented safety awards to GLBA employees Robert Vathke, Jaenell Manchester, a group of boat deckhands (Jeff Pietka, Randy Thomas, and Sarah Betcher), and to the GLBA Bear Committee (Tania Lewis, Gus Martinez, Tom VandenBerg, Margaret Hazen, and Christopher Behnke) to recognize their efforts in safety leadership.
- A “Safety Day” was organized and presented by the Park Safety Committee. Topics this year included Job Hazard Analysis training, fire extinguisher training, and five modules of Operational Leadership related content.
- The Park Safety Committee installed hand sanitizers at all primary work exits and personal hygiene (hand washing) signs in all employee and visitor bathrooms.

Collaborations, Partnerships, and Outreach

- A collaborative effort was formed with the US Coast Guard (USCG) Juneau Sector to develop and share Operational Risk Management training materials. A GLBA team audited a US Coast Guard (USCG) Team Conditioning Training (TCT) in 2010 per the request of the trainer. USCG TCT, the predecessor to the NPS Operational Leadership (OL) program, is undergoing a major upgrade at the same time, but independently from, NPS OL.
- A new collaboration with the US Forest Service allowed the Park access to the latest hazard tree evaluation technology and subject matter expertise. Through this collaboration the Park developed and began to implement a hazard tree management program.



Hazard Tree Assessment

- An annual oil spill response training and drill was again held with assistance from the US Coast Guard and the AK Department of Environmental Conservation.
- A “mass casualty” marine rescue drill took place in Gustavus as part of a collaboration with the AK Department of Transportation, the US Coast Guard, the Civil Air Patrol, and the Gustavus Volunteer Fire Department.
- A partnership between the Park and OSHA’s AK Regional Office resulted in the Park gaining access to technical experts in safety code compliance.

- Presentations were given about fire safety to Gustavus Preschool and Gustavus School Kindergarten through 5th grade students and hands-on training about fire extinguisher use was provided to Gustavus School 6th through 12th grade students.

Planning and Policy

- A UTV policy developed at GLBA in FY10 was distributed to all AKR Parks and adapted for use by several Park Units service-wide.
- Several Park safety policies were reviewed and updated to be consistent with changes to NPS and DOI policy and OSHA regulation.
- A Hazard Tree Management Plan and Hazard Tree Evaluation Worksheet were developed with assistance from the US Forest Service. Hazard trees were then evaluated in several high density visitor and employee areas and prioritized for removal based on hazard probability.

GLBA Environmental Management

Recycling Diversion Rate

Achieved a recycling/waste diversion rate of 60.3% which exceeds President Obama's Executive Order goal for 2015 by more than 10%.

Energy Conservation and Pollution Prevention

- GLBA earned the Environmental Protection Agency's (EPA) 2009 Champions of Environmental Leadership and Green Government award for exceeding the Federal Green Challenge goals of 5% reduction in energy consumption and a 5% increase in waste stream diversion. During the rating period GLBA achieved a 7% reduction in electrical use, a 9% reduction in fuel use, and a nearly 8% increase in waste stream diversion.
- A contracted energy audit was accomplished for several Park administrative buildings and housing units. The audit results will be used to identify and prioritize future energy efficiency improvement projects.
- Lighting fixtures at the Public Use dock and Fuel dock were retrofitted with light emitting diode (LED) bulbs for energy efficiency and to help preserve night skies.
- A waste diversion spreadsheet was updated monthly and distributed to all Park employees so that they may track the results of their ongoing recycling efforts.
- The Park's "Garbage Guide", which explains the Park recycling process, was rewritten to showcase recycling efforts to visitors and employees.



GLBA Recycling Stats

Environmental Stewardship

- Jake Ohlson, the Park Environmental Management Coordinator served as panel member for EPA’s Green Symposium and presented to 23 Federal agencies a program entitled, “Managing Waste in a Remote Facility” about successes in the Park’s recycling efforts.
- The Park’s public webpage was updated to include information on Park environmental management efforts including the Climate Friendly Parks outreach program.
- As a member of the NPS Alaska Region “Green Team”, the Park Environmental Management Coordinator presented web-based conferences on recycling, energy reduction, and carbon reduction.
- Implementation of the Climate Friendly Parks “Do Your Part” initiative allowed visitors to participate in efforts to protect Parks from the effects of climate change.
- Concessioners within the Dry Bay area received NPS environmental audits that included recommendations for improvements.

Oil Spill Prevention and Response

- A two day Hazardous Waste Operations and Emergency Response (HAZWOPER) training was hosted by the Park. Participants included the US Coast Guard, the AK .

- Department of Environmental Conservation, concessioners, and local fuel companies.
- The Park Field Incident Response Team (FIRST) held monthly meetings which included hands-on oil spill response drill, a management tabletop drill, and a specialized training on marine salvage techniques.



**FIRST Spill training –overturned skiff
National Park Service**

Management

Alaska Native Program and Community Outreach

Management Assistants –Ken Grant and Wayne Howell
Cultural Anthropologist – Mary Beth Moss

The 2010 calendar year saw several projects reach milestones and others start up.

Alaska Native Program: Huna Tlingit Gull Egg Harvest Plan - Early in the year the final touches were put on the “Harvest of Glaucous-Winged Gull Eggs by Huna Tlingit in Glacier Bay National Park”. The final legislative environmental impact statement was published in May, and following the public comment and no action periods, the Record of Decision (ROD) was signed in August, 2010. In some way or another, this issue has been active in Glacier Bay since September 1997, and the signing of the ROD marks a milestone. The ROD documents the NPS determination that harvest of glaucous-winged gull eggs could be authorized in Glacier Bay National Park without impairing the biological sustainability of the Park’s glaucous-winged gull population or impacting other Park purposes and values. The ROD describes that Alternative 3, could be implemented upon enactment of legislation to authorize the annual harvest of glaucous-winged gull eggs at up to five designated locations in Glacier Bay National Park on two separate dates by members of the Huna Indian Association (HIA). Legislative proposals from the NPS are subject to review by the Department of the Interior and the Executive Office of the President

before transmittal to Congress can be approved. Thus, a legislative proposal is not included in the Record of Decision. If legislation authorizing the annual harvest of glaucous-winged gull eggs is enacted, each year the NPS and the HIA would prepare a harvest plan to identify sites open to harvest based on annual monitoring and harvest history. Pending legislation and adoption of regulations, the earliest gathering could happen would be 2012.

Alaska Native Program: Journey to the Huna Homelands – As in years past, NPS, in collaboration with partners the Hoonah Indian Association, Huna Heritage Foundation and Hoonah City Schools, hosted five cultural-oriented field trips into the park. On May 7 a catamaran carrying about 100 passengers, including most of the students in Hoonah Middle School, along with their teachers, parents, clan elders and representatives from Huna Totem Corporation, traveled to Margerie Glacier, a sacred site to the Chookaneidi clan. The trip up-bay included structured educational activities for the students – Tlingit language practice, sampling Native foods and Tlingit place names. At the glacier the Chookaneidi clan conducted a ceremony in which they shared tobacco and food with departed ancestors. During the trip down-bay the students took over the program and performed Tlingit songs and dances for several hours without break. Many who participated felt that the student performance of songs and dances was not just the highlight of this trip, but a high point for this program that has now been developing for 15 years. A second school trip occurred on September 10, where students from Hoonah High School and Middle School visited Bartlett Cove for a day of land-based activities, including a treasure hunt in and around Glacier Bay Lodge, a hike to Halibut Point where a number of stumps in the intertidal zone - relics from the Huna ancestral homeland – demonstrate to the students the reality of the stories they have heard, and a tour of NPS facilities and meetings with employees, with a focus on NPS careers. As a result of the last activity several students expressed interest in learning more about NPS careers.

Alaska Native Program: Tlingit Songs – The Hoonah Indian Association (HIA), Huna Heritage Foundation and the National Park Service (NPS) gathered 109 recorded Huna Tlingit songs and worked with knowledgeable elders to transcribe the songs and document the history related to the songs – the composer, clan ownership, purpose, location where it was composed, and the events surrounding its composition. Most of the work centered on songs affiliated with the T'akdeintaan Clan. Gathering this background information is important because before a song is sung it is important to credit the composer, clan ownership, and why it was composed and how it is being used. It is also important to know if it is a spirit song, mourning song, happy song or love song. There are many recorded songs which are not being sung today, and these important facts could be lost to future generations if the information is not captured now. Glacier Bay and the outer coast of the Park is the ancestral homeland of the Huna Tlingit where the majority of the songs were composed and are an important source for the Tlingit history in the ancestral homeland. The NPS is working with the Tribe to strengthen the cultural history, and these songs play an important role.



Thomas James and his haul of nagoon berries.

NPS also hosted a berry gathering trip to the Gustavus area, where 23 folks from Hoonah were able to harvest an abundance of nagoon berries from parklands.

Glacier Bay also hosted two youth kayak trips. From May 10-15 a group of seven students from Hoonah High School and Middle School explored Muir Inlet in the east arm of Glacier Bay. In a survey following one of the previous catamaran trips to Margerie Glacier many students expressed that they had seen plenty of glaciers from the deck of the boat, but they wanted to experience them first hand by actually touching one. The NPS and Hoonah City Schools therefore designed a wilderness kayak trip to make that happen. An NPS vessel took the students to Wachusett Inlet where the group established the first night's camp. From there the group paddled to McBride Inlet with the intent to kayak and hike up and touch McBride Glacier. However, McBride Glacier had been calving so actively that the mouth of the inlet was so choked with massive ice bergs that the group could not enter. Instead, the following day they paddled to Riggs Glacier, where they were able to disembark and hike up and onto the glacier. By removing a thin layer of earth and rock, the students were able to peer into the obsidian blackness of the glacier where no light had penetrated for untold decades. From there the students paddled back to Wachusett Inlet for a departure back home. The last day of the trip started with the students waking up at Wachusett Inlet, and they were back in Hoonah in time for the prom that night.

The second kayak trip was co-sponsored with a group out of Juneau called AWARE (Aiding Women in Abuse and Rape Emergencies). This organization had recruited youth who were interested in creating a wilderness-based leadership program, so contacted Hoonah City Schools and Glacier Bay National Park to gauge interest in co-sponsoring the program. Although two youth from Hoonah originally signed up for the program, when the kayaks launched on June 4, only four youth – one from Tenakee Springs, one from Juneau and two from Gustavus – were on board. The primary theme the students developed for the trip was *Change*. The students developed the theme of *Change* because it was important to them to foment positive social change within their communities. Because the story of Glacier Bay is a story of landscape change, the students and AWARE felt it an ideal laboratory for exploring this concept. Once the group settled on this theme, one specific objective of the group was to work with the park's former cultural resource manager in an attempt to find the remains of John Muir's cabin. Muir first came to Glacier Bay in 1878 in the search for direct evidence of the power of glaciers to sculpt landscape, which he found in abundance. When he returned in 1890 with colleagues they built a small cabin as a base from which to launch their research. That cabin received only limited use and by the early 1900s had fallen into disrepair, with the only remains eventually diminishing to a pile of stones from its chimney marking its location. After his Glacier Bay adventures Muir went on to lead the charge for landscape preservation and became the founding father of the environmental movement, and in so doing, he changed the world. Following this story of how one person can change the world, the group spent two days thrashing through alders and deciphering old aerial photographs to track down the stone cairn that marks the location of the cabin, now several hundred yards inland from the beach, where it once stood, this because of the process of landscape change – isostatic rebound. The last time anyone from the Park Service had seen the cairn was in the 1980s, and vegetation had completely overgrown the scene. The students and adults went away from the experience with a great sense of accomplishment, new knowledge and respect for Muir, and a sense that an individual, through vision and persistence, can indeed change the world for the better.

Alaska Native Program: Journey to the Gunaxóo Kwaan Homelands

In May the NPS sponsored a trip of Gunaxóo Kwaan representatives to Dry Bay for a site visit. The Gunaxóo Kwaan last occupied the Dry Bay area as a social group over a century ago, when changes in economy (the arrival of the commercial salmon industry) drew many people to lives in Yakutat and other communities in SE Alaska. During the past 15 years NPS has worked with Kwaan members to relocate former village sites, and recover from the ethnographic record and oral history the social history of their ancestral homeland. During the May 2010 visit Kwaan spokesman Bertrand Adams offered that the group was ready to formally reconnect to their homeland. He noted that the proper way to do that would be through hosting a potlatch – the last potlatch to be hosted in Dry Bay occurred in 1909 – and he proposed that the Gunaxóo Kwaan host such an event in May 2011. All in attendance agreed to participate, and planning is underway at this writing for a potlatch to occur May 20-23, 2011 near the NPS facilities on the east side of the Alsek River.



Part of the AWARE kayak group poses at the stone cairn that marks the remains of John Muir's cabin. The white smudges are mosquitoes in front of the camera lens. Shown are back row L-R: Ati Nasiah (AWARE), Kelly Nemeth (Student - Gustavus). Front: Wayne Howell (NPS), Meryl Chew (Student- Tenakee Springs).

Alaska Native Program: Huna Tribal House Project

In 1998 NPS conducted a planning process for the final build-out for Bartlett Cove. At that time the Hoonah Indian Association proposed construction of a full-sized replica of the traditional plank house, with the idea that it would be a place that would represent Huna Tlingit culture in the park, be a place where visitors could learn about the culture, and most importantly, be a place where Huna Tlingit youth could come to learn about their culture. The concept was adopted in the final plan, and was entered into the NPS line item construction program. Early on it appeared there would be funding that would become available by 2008, but given changes in national priorities that never came to fruition. Yet the notion of the tribal house remained alive among many within the community, and some elders came to refer to it as their 'dream house'. By 2010 the Huna Tlingit folks decided to get the program moving. The Huna Heritage Foundation was able to secure two large red cedar logs donated by Sealaska Corporation. This coincided with the NPS Concession Franchise Fee program making funds available for just this sort of program. In August 2010, NPS and HIA signed a cooperative agreement to initiate the project. The first project to come on line was the house screen that will stand inside the house. The purpose of house screens is to depict the history of a clan, or in this case, the entire tribe.

HIA hired master carver Gordon Greenwald and apprentices Herb Sheakley and Owen James in November, 2010. The logs were milled into these amazing 3' x 29' x 16 foot long slabs, and the layout and carving began. The design is by Gordon Greenwald and depicts a map of the sacred ancestral landscape of the four main clans of the Huna Tlingit. The picture below shows half of the screen – 15 feet wide by 16 feet tall – and when complete it will be 30 feet wide by 16 feet tall.

Alaska Native Program: Tlingit Songs –

The Hoonah Indian Association (HIA), Huna Heritage Foundation and the National Park Service (NPS) gathered 109 recorded Huna Tlingit songs and worked with knowledgeable elders to transcribe the songs and document the history related to the songs – the composer, clan ownership, purpose, location where it was composed, and the events surrounding its composition. Most of the work centered on songs affiliated with the T'akdeintaan Clan. Gathering this background information is important because before a song is sung it is important to credit the composer, clan ownership, and why it was composed and how it is being used. It is also important to know if it is a spirit song, mourning song, happy song or love song. There are many recorded songs which are not being sung today, and these important facts could be lost to future generations if the information is not captured now. Glacier Bay and the outer coast of the Park is the ancestral homeland of the Huna Tlingit where the majority of the songs were composed and are an important source for the Tlingit history in the ancestral homeland. The NPS is working with the Tribe to strengthen the cultural history, and these songs play an important role.

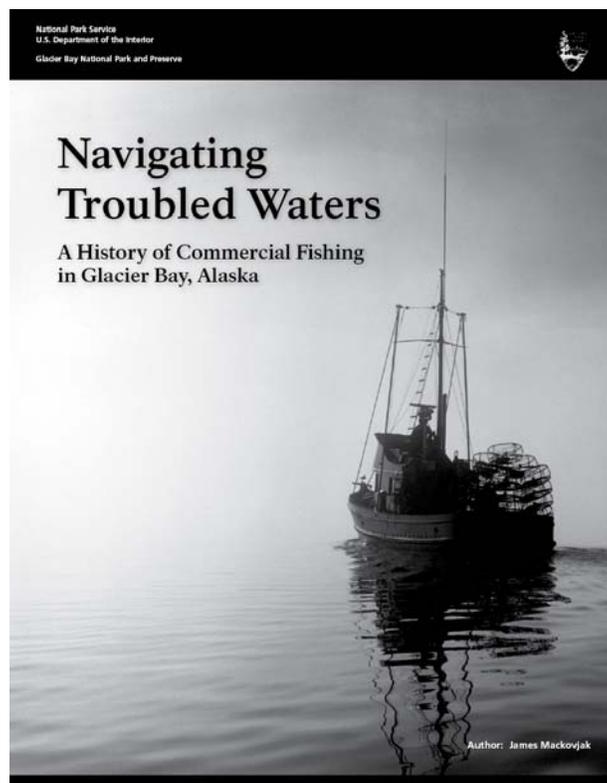


The large face in the middle represents the main valley glacier of Glacier Bay. The small faces to the left of the face represent ice bergs. The image on the left represents Lituya Bay, and the image above it represents Mount Fairweather, with a spirit visible inside the mountain.

Community Outreach: Navigating Troubled Waters

The commercial fishing issue consumed much the Glacier Bay Superintendent's time and energies for several decades during the 1980s and 1990s. The first significant step at resolving the conflict happened with passage of legislation in 1999. Another significant milestone happened in 2005 with the US Supreme Court ruling in favor of the National Park Service against the State of Alaska over jurisdiction of the 'bay' of Glacier Bay. And eventually the issue will not come to an end until the final life-time access permit is retired, still some decades in the future. The resolution of the issue left the regional community divided, but looking to heal.

Another milestone was met in 2010 that was designed to help heal that divide. Former Superintendent Tomie Lee, before retiring in 2007, knew that such a long and complex history could have a tendency to evolve with each telling, and with each telling the divided could develop into a chasm. She also saw the need to accurately capture that history while many of the people who were involved in its making were still around. And reasoning that the story could best be told by someone most familiar with it, Superintendent Lee was able to find a local historian, James Mackovjak, who also happened to be a local fish processor who had been directly involved in the issue since the 1980s. In addition to writing the history of commercial fishing in the park, Superintendent Lee also had the foresight to commission Mackovjak to glean any information he might come across that dealt with the history of the seine fishery as it developed in Hoonah at the turn of the last century. The result, published in the fall of 2010, is an authoritative and scholarly account, told in two parts, of the industrial, administrative and political history of an exceedingly complex and pivotal issue for the park. With over 1000 citations and numerous insightful analyses, the volume establishes the standard upon which any future histories will be based.



Concessions

Staffing and Operations: Dave Nemeth continued as Chief of Concessions & Marilyn Trump returned to work in February at Glacier Bay after tele-working from Chehalis, Washington the past year. Dave continued management of the cruise ship transfer vessel operation and hired Fritz Koschmann as a permanent subject to furlough lead captain of the Serac and supervisor to the Serac crew.

Transfer Vessel Operations: This operation provides transportation to park staff between Bartlett Cove and cruise ships visiting Glacier Bay (cruise ships carry about 95% of all park visitors), primarily interpretive rangers and cooperating association personnel. Fritz Koschmann was the lead captain, assisted by Tom Howard, Don Morda and Hadley Owen. Various park staff provided relief deckhand assistance, primarily late in the season. Personnel board the cruise ship while vessels are under way via a rope ladder suspended from the ship. Over 1,800 transfers were completed without a single injury or near miss.

Audits: NPS Environmental Audits were conducted on 19 Concessioner operations including charter and tour vessels, Dry Bay Lodges and guided hunting in the Preserve. The majority of the audit found very few or no deficiencies.

Bartlett Cove Lodging: Glacier Bay Lodge and Tours continues to experience poor financial returns, having reported net loss for each of their seven years of operation under the current contract (2004-10). The operator received “marginal” overall ratings for 2005, 2006 and 2007 and an “unsatisfactory” rating in 2008. They showed some improvements in 2009 and received a satisfactory rating. However, in 2010 their rating dropped back down to a “marginal” rating primarily due to contract compliance deficiencies and problems with the Day Tour vessel operation. Contract compliance deficiencies included a significant maintenance backlog and inadequate day tour services after the primary vessel suffered an engine failure, resulting in the use of smaller vessels, including the Yukon Queen.



m/v Yukon Queen - NPS Photo

Charter Vessel Services: Sixteen companies continued providing services under ten year concession contracts issued in 2006. Demand for June - August use days (limited to six vessels per day) was up 24% over 2009. Use was still well below capacity with barely 65% of available use days utilized. Charter vessel services were also authorized under Commercial Use Authorizations (CUA) for the shoulder season and marine waters outside Glacier Bay and Dundas Bay during June-August. There was an 18% decline in CUA charter vessel passengers during May and September, which is primarily guided halibut sportfishing. The decline is probably related to a reduction in the catch limit for charter caught halibut from two per day to one per day.

Tour Vessel Services: Four companies provided tour vessel services; three under ten year concession contracts issued in 2008, one under the Glacier Bay Lodge contract. One company, West Travel (DBA Cruise West), which had two tour vessel contracts went out of business at the end of the 2010 season due to financial difficulties. Overall, tour vessel passengers were up 4% over 2009.



Cruise West "Spirit of 98". Cruise West ceased operations in 2010. NPS Photo

Cruise Ship Services: Five companies held new concession contracts beginning in 2010 and four of the five companies operated in Glacier Bay. A total of 220 cruise ships visited Glacier Bay, carrying 419,737 passengers, about 1% fewer than in 2009. The new concession contracts resulted in enhanced visitor services, safety, environmental protection and a significant increase in franchise fee revenue (\$4,817,784 vs. \$2,114,795 in 2009).

Guided Alsek River Rafting: Demand for guided river rafting services continued to be low with less than 50% of the available trips being run. Passenger counts were up by 12% this year. The Park continued to work with Canadian land management agencies (Parks Canada, British Columbia and Yukon Territorial Government, as well as Champagne-Aishihik First Nations) to cooperatively manage this trans-boundary river system.

Guided Sea Kayaking: Three concessioners continued providing these services in 2010: Alaska

Discovery and Alaska Mountain Guides provided overnight guided kayaking trips. Glacier Bay Sea Kayaks provided day trip guided kayaking based out of Bartlett Cove.

Bartlett Cove-Juneau Passenger Ferry: Glacier Bay Lodge and Tours operated evening ferry trips between Bartlett Cove and Auke Bay, utilizing the Fairweather Express II day tour vessel, two evenings a week until the vessel suffered an engine failure on June 20, 2010. At this point, the ferry services were cancelled for the season.



Photo courtesy of Chilkat Guides

Dry Bay Lodging: Three small remote lodges (Northern Light Haven, Johnny's East River Lodge and Alsek River Lodge) were in operation, primarily serving sportfishing and hunting clientele. Northern Lights Haven received a marginal rating for unauthorized vehicle use off the trail system and for constructing additions to their facilities without prior park approval.



Unauthorized Structure on Northern Light Haven Land Assignment

Commercial Use Authorizations were issued to 40 companies. Services included charter vessels (see above), air taxi, guided hiking and sightseeing, guided sportfishing, guided kayaking, ferry services, guided rafting, mountaineering and fuel sales.

Commercial Visitor Services Authorized in 2010

Alsek River Rafting (US)

Alaska Discovery, Inc. (CC-GLBA008-05)
Chilkat Guides, Ltd. (CC-GLBA011-05)
Colorado River & Trail Expeditions, Inc. (CC-GLBA012-05)
James Henry River Journeys (CC-GLBA013-05)
Mountain Travel Sobek (CC-GLBA014-05)
Wilderness River Outfitters (CC-GLBA017-05)

Alsek River Rafting (Canadian)

Champagne & Aishihik First Nations [managed by Nahanni River Adventures/CRE] (IBP1071)
Explorers League-World & Wilderness Rafting Expeditions Ltd. (CUA1092)
Rivers, Oceans and Mountains (CUA2069)
Nahanni River Adventures, Ltd. d.b.a. Canadian River Expeditions (CUA1098)
Skeena Valley Expeditions (CUA2041)
Tatshenshini Expediting Ltd. (CUA1073)

Charter Vessel Services

Adventures Afloat (CC-GLBA028-06)
Alaska Yacht Charters (CC-GLBA031-06)
Chichagof Charters (CC-GLBA015-06)
Dolphin Charters (CC-GLBA030-06)
Fairweather Adventures at Glacier Bay (CC-GLBA025-06)
First Out, Last In Yacht Adventures (CC-GLBA022-06)
Alaska Glacier Guides, Inc. (CC-GLBA018-06)
Gustavus Marine Charters, Inc. (CC-GLBA027-06)
Lisianski Charters (CC-GLBA026-06)
Marine Adventure Sailing Tours (CC-GLBA019-06)
Sea Wolf Adventures, Inc. (CC-GLBA032-06)
The Alaska Sailing Co. (dba: Sound Sailing) (CC-GLBA023-06)
Southeast Alaskan Adventures (CC-GLBA024-06)
Whale Song Adventures (CC-GLBA016-06)
InnerSea Discoveries (dba American Safari Cruises) [Ownership transfer from Erin Ohlson to InnerSea Discoveries] (CC-GLBA034-06)
The Cove Lodge, Inc. (CC-GLBA010-06)

Cruise Ship Services

Carnival Cruise Line (CC-GLBA050-10)
Holland America Line Inc. (CC-GLBA005-10)
NCL Cruises Ltd. (CC-GLBA007-10)
Princess Cruises, Inc. (CC-GLBA004-10)
West Travel, Inc. (CC-GLBA040-10)

Lodging

Alsek River Lodge (CC-GLBA033-05)
Glacier Bay Lodge & Tours (CC-GLBA001-04)
Johnny's East River Lodge (CC-GLBA029-05)
Northern Lights Haven (CC-GLBA020-05)

Guided Sea Kayaking

Alaska Discovery, Inc. (CC-GLBA009-07)
Alaska Mountain Guides (CC-GLBA049-07)
Glacier Bay Sea Kayaks (CC-GLBA021-07)

Hunting Guides

Gary Gray, Registered Guide (CP-GLBA901-05)
John Latham, Registered Guide [Transfer to Gary Gray] (CC-GLBA902-05)

Kayak Rental

Glacier Bay Sea Kayaks (CC-GLBA035-04)

Tour Vessel Services

American Safari Cruises, LLC (CC-GLBA042-06)
Lindblad Expeditions, Inc. (CC-GLBA038-06)
West Travel, Inc. (CC-GLBA037-06 & CC-GLBA039-06)

Commercial Use Authorizations (excluding Alsek Guided Rafting listed elsewhere)

Air Excursions, LLC, CUA0520
Air North, Yukon's Airline, CUA0351
Alaska Mountain Guides & Climbing School, Inc., CUA0559
Allen Marine Tours, Inc., CUA1069
Alsek Air Service, Inc., CUA0905
Black Rock Charters, CUA2004
Brabazon Expeditions, LLC, CUA0497
Cross Sound Express, LLC, CUA2058
Deep Blue Charters, LLC, CUA2002
Doc Warner's Alaska Fishing, Inc., CUA1079
Earth Center Adventures, Inc., CUA0671
Elfin Cove Lodge, LLC, CUA2137
Fish Alaska Charters LLC, CUA2126
Glacier Bay Lodge & Tours, CUA2048
Glacier Bay Sportfishing, CUA2015
Gustavus Fuel LLC, CUA2142
Hobbit Hole Guesthouse & Charters LLC, CUA0875
Icy Strait Adventures, CUA0555

Majestic Expeditions, Inc., CUA2103
Mountain Flying Service, CUA0373
North Pacific Seaplanes, LTD, CUA2139
Off The Beaten Path LLC, CUA0870
Pacific Catalyst II, Inc., CUA2010
Packer Expeditions, Ltd, CUA0599
Reiseagentur Brandner, CUA0566
Ripple Cove Charters, LLC, CUA2024
Salmon Air, Inc., CUA2121
Salmon Run LLC, CUA2111
Tanaku Lodge, CUA0574
Taylor Charters Fishing Company, CUA2052
True North Sportfishing, CUA0828
Ward Air, Inc., CUA0524
Wings Airways, Inc., CUA2064
Yakutat Coastal Airlines, CUA2046

Resource Protection

Early in the year Randy Larson and Gus Martinez worked extensively with Sitka National Historic Park staff in planning numerous high profile events surrounding the park's centennial celebrations. In late March Randy Larson, Rangers Todd Bruno, James Latendresse and Jacqueline Ashwell travelled to Sitka and directly assisted park staff in successfully implementing these events by performing in incident management overhead and supporting roles.

Mid season, Rangers Gus Martinez and Erica Francis were requested to assist in the massive, multi-day air search of missing Katmai NP employees. Gus acted as Operations Chief for the duration of the search and Erica performed as the initial family liaison.

Due to a close call of a charging brown bear, which required the use of pepper spray, protection staff closed, signed and swept the Bartlett River trail assuring public safety. The incident required the multiday closure of the heavily used trail with several follow up site inspections with VIS, LE and RM staff.

Much of the park staff assisted RM staff Chad Soiseth and Craig Murdoch in implementing an intensive effort to monitor charter fishing activities. These efforts included many coordinated air and vessel patrols and a cooperative database being developed and maintained by Ranger Patrick Reimann for protection staff efforts.

Rangers Wendy Bredow and Jim Capra spent a month detail in South Dakota supporting "Operation Alliance", a two year long operation implemented by the Dept. of Interior. Leading the AK SET team, Wendy provided supervision and Jim provided patrol support to the Bureau of

Indian Affairs in an interagency attempt to curb the increasing crime rate on the Standing Rock reservation.

Ranger James Latendresse attended a weeklong “Wildlife Crime Scene Investigation” training, which proved very valuable as he assisted park biologists and AK state troopers in several necropsies and wildlife fatality investigations this year.

Staffing

Randy Larson	Chief Ranger
Jacqueline Ashwell	Dry Bay District Ranger
Jim Capra	Dry Bay Ranger
Erin Shanley	Dry Bay Ranger (Seasonal L.E.)
Gus Martinez	Bay District Ranger
Wendy Bredow	Park Ranger
Todd Bruno	Park Ranger
James Latendresse	Park Ranger (transferred to GLBA)
Margaret Hazen	VIS Supervisor
Mary Sullivan	VUA Supervisor (transferred to Forest Service)
Patrick Reiman	Park Ranger (Seasonal L.E.)
Erica Francis	Park Ranger (Seasonal L.E.)
Bethany Vanderzanden	Park Ranger (Seasonal L.E.)
Jade Peterson	Park Ranger (Seasonal L.E.)
Patty Bean	Park Ranger (Generalist)
Wayne Clark	VUA
Rachel Chunn	VUA
Sarah Braden	VUA
Lindsay Latendresse	VUA
Justin Racioppi	VUA
Joseph Whelan	VUA
LaDonn Robins	VUA
McKenzie King	VUA
Teaira Parker	VUA (Pro Ranger)

Chief Ranger Randy Larson was asked by the Regional Office to step into a detail role for Sitka as the acting superintendent in May. Randy was then selected as permanent Superintendent.

Ranger James Latendresse was hired from Hot Springs NP to replace outgoing ranger Duane Grego.

Despite enduring the morale loss from the previous year’s personnel debacles, seven seasonals returned from the 2009 roster. Patrick Reimann, Erica Francis, Patty Bean, LaDonn Robbins, Mackenzie King, Racheal Chunn, and Wayne Clark proved instrumental in ensuring a successful season as they had a grasp of the operation and were able to assume leadership roles in some patrols and other operation functions.

The division pursued hiring a diversity candidate through the Pro Ranger program where Teaira Parker was brought into the division and worked at the VIS. She had patrols with all divisions and by the time she left she had thorough knowledge of the park and its major functions.

Death March 2010

Every year the division embarks on what is endearingly called the “Death March”. The 2010 “Death March” took place on the outer coast, beginning at La Perouse Glacier and ending at the entrance to Lituya Bay. The first day time was spent using the ice crampons on top of La Perouse Glacier. The hike consisted of many river crossings, challenges of sleeping on snow, observing the geological make up of that section of the coastline and the bonding and understanding how each team member works within the team.

Safety Operations

The division had one reportable injury with no lost work time. The GAR model has continued to be used by staff as a means to slow down, communicate and judge risk in the work place. JHA’s are being used to plan patrols. Safety tailgates are being used consistently with all operations.

Program Management

Visitor Information Station (VIS)

This year the VIS staff had one permanent, nine seasonals which included one first year “Pro Ranger”. Having the increased staff has increased our visitor safety by having one dedicated person monitoring AIS, Spot devices, dispatching, while another can give uninterrupted orientations that are safety focused. Staff are out patrolling and educating the public on hiking, fishing and bear safety.

Radio dispatching and communications with park staff and the public continued to be a very important role for the safety of all concerned.

The Visitor Information Station continues to be the communications hub for the park.

Campground and Backcountry Management

Campground and backcountry numbers went up this year from last. We had 437 campers in the campground and 922 campers in the backcountry. 159 camper orientations were given to groups. There were three different Saga crews camping in the campground this summer. The decision came from the superintendent to allow the second and third group to cook and eat in the parking lot at the generator plant.

Because of a bear feeding on a seal carcass in an area just past the campground we had an area closed for three weeks. This took extra steps by the L.E Rangers and VIS staff to ensure visitors were not hiking in this area.

The 2010 pin was a silhouette of a kayaker and was very popular. This was the second year for our pin project and has become an obvious collector item!

Private Boating

From June 1st through August 31st, 655 private boating permits were issued, 627 boater orientations were given, and 15 mooring agreements given out. Of the 2,300 use days available 1,705 of them were used. The average visitor on their vessel stayed for 3.2 days. A waiting list proved to be very helpful for visitors to get days that they were wanting.

This year a new orientation film was introduced and was very well received by both new and returning visitors; concessionaires also asked to have copies to show their visitors onboard their boats. Along with the new film we had keychain floats to give out after the orientation was complete. These small gifts have top safety reminders along with the NPS arrowhead.

Special Uses Permits

Six Special Use permits were given out this year, these included two radio shows and a ministry.

The park had 16 inquires for Filming permits this year of those, nine were given out. Of those given out four of them became very time intensive. "Teton Gravity Research" needed special guidelines because of the area they wanted to film in. "Orangenhain" from Germany had a difficult time with planning and decision making. "La Part du Monde" began with needs early in the year and has not completed activities as of the end of the year. The "Alaska Experience" became a coordinated effort for three different parks through the Alaska region in which we coordinated.

Alsek River Management

Twenty three private and twenty two commercial rafting trips arrived at Dry Bay with a total of 492 boaters. Dry Bay staff met one hundred percent of the arriving river trips for the second year in a row. A patrol trip down the upper Alsek to Dry Bay was conducted in August with Parks Canada, BC Parks and Champaigne-Aishihik First Nation personnel. Two GLBA RM staff Craig Smith and Michele Jespersen, Bay District LE Ranger Wendy Bredow and Yakutat District Ranger Jacqueline Ashwell participated in the Alsek trip with Dry Bay Ranger James Capra.

Resource and Visitors Protection Activities

Bay District Rangers wrote 23 citations this season and executed one arrest; a successfully adjudicated DUI. Citations ranged from typical speeding and permit/vessel violations to illegal commercial filming.

In Dry Bay one violation notice was issued for a private group exceeding the camping limits at Gateway Knob. Three violation notices were issued for 1) Violation of rafting permit conditions 2) Off trail ATV travel and 3) Destruction of Natural Resources.

Staff responded to and/or assisted in ten EMS calls ranging from the typical cruise ship transfer to the size up and mutual response to two injured parties at the foot of Crillon glacier.

One injury was reported on a commercial trip when the lead raft rounded a corner on the lower Tatshenshini and met an unexpected sweeper. Two clients were pinned in the boat until it was

freed five minutes later. One suffered broken ribs. The injured party continued the trip for two days until the pain got to be too much and she was medivaced by helicopter from Gateway Knob.

With the arrival of a loaner Fish and Wildlife vessel, lower bay protection staff was able to provide a substantial increase in lower bay coverage by performing more overnight patrols and day patrols to Excursion Inlet, Dundas Bay and surrounding "Outer Waters" areas. Staff spent an approximate total of 1,282 hours on patrol outside of Bartlett Cove developed area on day or overnight waterborne and/or land patrols. Highlights of patrols this year include:

- Five day Lituya Bay skiff and hike patrol
- Four day Seclusion Lake and Seclusion River patrol
- Four day kayak patrol of John Hopkins Inlet area
- Five day skiff patrol of the East Arm

Subsistence Management

Jim Capra attended the SE Regional Advisory Committee (SERAC) in Saxman in March as the Alaska NPS staff and supported the RAC with information on NPS, Glacier Bay and Yakutat issues and policy. He also served the first half of a two year term as the co-chair of the Alaska Region NPS Subsistence Advisory Committee (SAC). The Committee's biggest accomplishment was to secure the release of a long proposed \$300,000 fund for statewide subsistence research and support for the first time and get it distributed to several deserving projects. Capra also served again on the selection panel, interviewing prospective new members for the SERAC. The travel ceiling prevented Capra's attendance to the annual SAC meeting in Anchorage and the second SERAC meeting in Hoonah. Wayne Howell represented GLBA in Hoonah.

Subsistence activity in the Preserve was light with only six individuals subsistence fished in the East Alsek River and eight subsistence hunters during the moose season. Four moose were taken through the combined sport/subsistence season by Yakutat residents.

Resources Management Highlights

Our division continues to support to Resource Management from transportation to assisting in data gathering and monitoring. Our divisions work very closely and for many of our employees this is the highlights of their summers. This year a couple of the more notable incidents that our staff were instrumental in were:

- Assisted fisheries biologists with coordinated air/vessel patrols in an attempt to gather data on charter vessel activity.
- Four day assist with fisheries biologists on the Doame River.
- Multi-day assist with the Milner stream study.
- Documented a suspected archeological site (Tlingit summer fish camp) on the Doame River.
- Participated in a potlatch/celebration at Muddy Cr. that will likely result in a larger gathering for all the Gunaxoo (Dry Bay) Tlingit in 2011.
- EAs for the Rescue 21 USCG radio repeater continue.
- EA for the relocation of Caleb Robbins fish camp, closure/relocation continue.
- EA for the relocation of a trail crossing of Dog Salmon Creek continue.
- Assist with soundscape management project.

- Multiple overnight trips with the on-going bear study being done by Tania Lewis.
- Two day patrol with Wayne Howell and Greg Steveler to Lisianski Inlet for archeology site visit.
- Daily Bartlett River Patrols by VIS staff educating visitors.
- Daily vessel counts in Bartlett Cove.

Employee Development and Training

This division excels in providing training and operational support for a myriad of programs which sustain other divisions operations. Examples from the past year include:

- Numerous CPR and First Aid courses for other park employees and the community of Gustavus.
- A first ever glacier travel and rescue ropes course was taught on Reid Glacier
- Conducted seven ATV operator classes for 21 employees, VIPs and annual training for 17 others. The UTV familiarization was given to 18 employees.
- Conducted and co-taught DOI Motorboat Operator Course.
- Coordinated a three day kayak safety class for park staff and community youth
- Coordinated the annual hazwopper class as well as continuing to lead FIRST team trainings.
- Firearms portion of the annual Bear Aversive Conditioning course for the park
- The staff taught taser, firearms and defensive tactics at both the regional as well as in-house Glacier Bay courses.
- Basic ropes and climbing instruction provided to the local Girl Scout (Brownies) group

External Outreach and Partnership Involvement

Our division of Visitor and Resource Protection excels in both the areas of outreach and partnership involvement. Among the many opportunities that the division had were:

- We worked closely with other agencies; National Marine Fisheries, United States Coast Guard, and Alaska Wildlife Troopers worked with us at different times throughout the summer.
- In an attempt to strengthen communications with outside agencies, a joint USCG/NPS patrol of Lituya Bay was planned but fell through due to CG cutter engine issues. Through relationship building however, initial plans are on the table for a cooperative patrol in Lituya Bay next summer season.
- Sent an Alaska Visitor Use Assistant subject expert to work on a team in Kansas City with OPM and SROC.
- Staff member acted as Administrative Officer for eight weeks.
- One of the most fun outreach projects we do is fix breakfast for the community at the school. This year staff made tasty breakfast burritos for all those that showed up!

Interpretation

Personal services continue to be the centerpiece of our interpretation and education program at Glacier Bay. With our staff of four permanents and 20 seasonal employees, in 2010 we provided interpretive services and original programs to more than 450,000 visitors at Bartlett Cove, on cruise ships and on tour vessels. We also provided educational outreach programs that reached over 600 students, both locally and nationally.

The following list highlights specific programs, products and services for 2010

Staffing and Program Offerings

Our interpretive program consisted of seven different types of programs conducted on cruise ships, tour vessels, and land-based in Bartlett Cove. To carry out these programs in FY 2010, the division staff totaled 24.

Permanent Staff

Kris Nemeth
Chief of Interpretation

Tom Vandenberg
Supervisory Park Ranger

Melanie Heacox
Supervisory Park Ranger

Steve Schaller
Supervisory Park Ranger

Staff Changes

Marieke Slovin was hired as an Education Specialist GS-07/9 under the Student Career Education Program (SCEP) as a doctoral candidate.



Seasonals

Twenty seasonal staff consisted of the following positions: 19 GS-07 interpretive rangers, and one GS-04 park guide. Our seasonal staff continues to be a highly experienced and dedicated cadre of Glacier Bay interpreters. In fact, among our 2010 returnee staff were 100 years of combined experience

at Glacier Bay! Only three of our 20 seasonal staff were new hires to the park. Our multi-lingual staff (three Spanish, two German, one French speaker and two-sign language interpreters) reached a more diverse audience in the visitors' native language. Once again, our division received Centennial funding that allowed us to continue providing a daily three-hour Bartlett Cove hike and fully staff the visitor center continuously from 11am-9pm. A student, serving as a park guide was also hired to assist with office support and educational programs both on land and on ships.

daily tour boat, was significantly compromised throughout a substantial portion of the summer due to mechanical failures and inadequate replacement vessels. The Safari Explorer and Safari Quest provided opportunities for park interpreters to take part in up-bay glacier shore excursions, hiking, and even kayaking with the passengers. Special children's programming was again provided on family-oriented tour vessel itineraries to rave reviews. Due to financial difficulties, 2010 was the last summer of Cruise West's long run of providing quality visitor experiences in Glacier Bay.

Huna Totem Cultural Program

The park's working relationship with Huna Totem Corporation (HTC) staff, who provide interpretive services on Holland America ships and Cruise West tour vessels, improved significantly this year. The division chief oriented the new HT Chief Executive Officer to the cruise ship interpretive program this summer. Division staff worked closely with HTC and concessioners to adjust program timing on vessels so that the HTC and NPS programs complimented each other. The park continued to transport Huna Totem Corporation cultural interpreters to cruise ships via the M/V Serac. At an end-of-season debriefing meeting with HT and NPS, both parties left with a better shared understanding of HT and NPS operations and new ways of enhancing our operations in the future.

Cruise Ship Junior Ranger & Explorer Programs

The Glacier Bay Junior and Explorer Ranger programs on board cruise ships continue to reach thousands of children cruising in Glacier Bay during the summer months. This award-winning program was enthusiastically embraced by on-board youth staff, which used both the activity books and the center activities to enrich their programs for youth aged 6-16. Division staff spent time in each ship's children's center presenting special programs to the staff and youth.

The Junior Ranger Program for school age children and the Explorer Program for teens continued to be delivered on cruise ships, tour vessels and at the lodge.

Program enhancements included the following highlights:

- The **new Glacier Bay National Park Junior Ranger badge** is now a reality. With a glacier and humpback flukes, this is one Junior Ranger badge that kids won't find anywhere else!
- A **Cruise Ship Itinerary Guide** was provided to captains and cruise directors on board ships featuring the elements that make a successful interpretive program in Glacier Bay.
- A wide variety of library **reference books** were purchased for all park employees.
- Division staff facilitated the construction and installation of a "**naturalist's nook**" **aboard the daily tour boat**, Fairweather Express II. A beautiful wooden case was constructed by GLBA maintenance and a series of interpretive panels were mounted on the wall, providing passengers with a nice location to learn about Glacier Bay's resources while on board.



- Division staff arranged for the installation of a **new sound system** on the FXII significantly improving the interpretive experience that alleviated years of technical sound quality problems.
- A variety of **visiting guest speakers** provided special presentations at the Glacier Bay Lodge. Topics included murrelets, climate change, climbing Denali, ocean currents, soundscapes, and predation.
- Division staff established a **new protocol this summer for reporting to ship captains** on a daily basis. This resulted in quick solutions to any issues that arose, excellent open dialogues with ship personnel, and successful operations on board for rangers, crew, and passengers.
- A 15-minute “**pre-program**” **DVD was produced for use on cruise ships.** Played just before the formal interpretive program in the ship’s lounge/theater, this montage of park images arranged by interpretive theme with nature sounds and music helps the passengers identify the park’s significance and sets a nice tone before the ranger program begins.
- The **End-of-the-Year Slideshow and Photo Contest** at the Lodge attracted a full-house (75+) for two showings, and 25 people saw the program at the Gustavus Public Library in September. We also provided this enjoyable program for the maintenance staff as part of their weekly meeting. Images in the show were fantastic and people were hard pressed to cast their vote for best image. Alaska Geographic provided the awards for the winners.

Education and Outreach Programs

First Bloom



Park staff joined a Juneau Girl Scout Troop in developing a Glacier Bay Native Plant Garden at the Alaska State Museum in Juneau and assessing the effectiveness of a proposed ethnobotany trail in the park. Scouts spent the winter learning about native plants in Glacier Bay’s ecosystems and applied that knowledge in summer projects and explorations led by park education specialists. This project that serves primarily underserved youth is sponsored by the National Park Foundation. In 2011, the park will be working with the Hoonah School and Sitka Girl Scouts.

Gustavus School

All students at Gustavus School were provided interpretive and educational programs by division staff ranging from boat trips to classroom sessions.

Middle School Scientists

Middle school students in local schools starred in the park’s new video series focusing on Glacier Bay research. The students and scientists will be exploring six topics ranging from underwater acoustics to Tlingit cultural landscape research. The videos are currently in the editing stage and will ultimately be supported by an online curriculum component. This project was funded through a Parks As Classrooms grant with a scheduled completion date of 2012.

Design, Develop, and Research (DDR)

The division worked with the University of Alaska, Southeast to present a week-long field program for high school students studying the role of science in the management of the park. Participants conducted intertidal inventories and studied glacier dynamics while aboard the *M/V Glacier Seal*.

Discovery Days Summer Camp

One hundred and twenty youth could be found exploring Glacier Bay's Watersheds in this popular day camp held in June and July. This program consisted of four weekly, 3-hour camps filled with ranger-led instruction, games, activities, and projects for students aged 4-7 and 8-12. An exciting "Glacier Bay Coloring Contest" was added to the program this year due to the generous donation of a series of Glacier Bay Watershed drawings by Alaskan artist Jona Van Zyle. Kids from camp and all over the country downloaded, colored, and submitted drawings in competition for an exciting art prize. Winners were announced on the park website.



Arts in the Parks

Forty-eight youth could be found weaving food webs and designing Glacier Bay ecosystem mobiles as part of two *Arts in the Parks Programs* sessions focused on Glacier Bay's invertebrates. Education staff also offered an *Arts in the Park Program* for adults but unfortunately no one attended, possibly due to late advertising and heavy rain.

Library Reading Program

In partnership with the Gustavus Library, division staff presented weekly park-focused educational programs at the Gustavus Library Reading Program during June & July reaching 509 students and adults with music and storytelling. The park also sponsored a special storytelling event with nationally-acclaimed Brent Dillingham in the spring.

Hoonah Boat Trips

Division staff participated in two cultural boat trips with Hoonah students, native elders, the Hoonah Indian Association, Huna Heritage, and other park staff. Highlights included native elders and middle school students sharing their traditional knowledge through story, songs, dances and regalia while sailing to the face of Margerie Glacier. On a separate trip high school students and elders spent time in Bartlett Cove, a traditional village site, hiking to Halibut Point, interviewing elders about history of the area, and learning about employment opportunities at the park. Seven interpretive staff presented programs and facilitated activities throughout the day.

Long Distance Classrooms

Using the park's videoconferencing system, the division presented a series of long distance education programs to seven classes (161 students) from Little River Elementary School in Chantilly, Virginia. This seems to be a promising method of reaching large numbers of kids, and

underserved youth who might not be able to actually visit Glacier Bay in person. The division is currently researching the latest technology to discover ways to build upon this great start.

Juneau Boat Show

In March, division staff represented GLBA at the Juneau Boat Show, resulting in over 2000 contacts with prospective park boaters and visitors.

Media Products

Award of Excellence for Park Map and Guide

Glacier Bay's Park Map and Guide received this award from the National Association of Government Communicators. The park and Harpers Ferry Center collaborated with writers, designers and cartographers to develop this publication that shares the Glacier Bay story compellingly.

Wayside Exhibit Project

The Bartlett Cove Wayside Project was originally generated by Harper's Ferry Design Center, and subsequently subcontracted to Whirlwind Graphics. This large project of 54 interpretive panels, required major effort on the part of all park staff, but especially Interpretive Supervisor Melanie Heacox. This year, early designs were circulated among all park staff and feedback, corrections, and suggestions were provided to Whirlwind. We are moving forward and are currently in the final editing and approval stages for many of the panels. Expected completion and installation is summer 2012.

New Bird ID Cards/Graphics



Artist George West generously donated his illustrations for the creation of a new family of high-quality "bird cards" for interpretive staff to share on board ships and tour boats. These handy roving graphics will serve interpreters and visitors for years to come.

Interpreter's Pocket Guide

The 36-page guidebook produced by this division each Spring to assist NPS shipboard interpreters, has become an extremely popular product for park employees in all divisions. This year, we had to produce more than ever to satisfy park demand.

Facility Management Software System

With the help of maintenance division staff, the park has entered all existing interpretive media assets into the FMSS system for improved inventory, upkeep, and condition assessment.

Holland America Podcasts

Twelve division staff provided interviews for a new series of audio podcasts produced by NPS and Holland America Line. These fun and informative ranger interviews cover a wide array of park resources (history, wildlife, plants, research, wilderness, etc.) and will be available summer 2011 online and via kiosks on board Holland America ships.

Forever Wild

Division staff worked with Holland America to update this popular park orientation film that is shown daily in the visitor center, on board ships, and on the park's website.

Marine Environment Online Curriculum

The six units of the Glacier Bay online distance learning curriculum have been converted to conform to the new NPS web format, and are now available for educators to use. Units include: crabs, sea otters, kelp forests, halibut, seabirds, and oceanography.



The Fairweather Visitor Guide

The division and AK Geographic again produced the park visitor guide, *The Fairweather*, a magazine-style, full-color publication printed on newsprint, which features short articles and graphics on a myriad of topics. The park harbor seal tracking study was highlighted in this year's issue. The goal of this guide is to provide one source of information to help ensure a safe, educational, and enjoyable park visit.

Park Website Improvements Our park website features continual improvements, updates and new offerings. Highlights for FY 2010 include:

- The year's major effort consisted of a service-wide mandatory conversion to the new NPS Content Management System Phase II, requiring extra time and effort during the busy summer season.
- Hundreds of photographs, and a variety of online videos were uploaded and linked.
- Created Glacier Bay Environmental Commitment and Hunting in the Preserve webpages.
- Currently editing a new series of "Ranger Minute" informational online videos.
- Created online version of "On the Water," the park boater orientation video.
- German and French language versions of the park map created and posted for download/printing.

Glacier Bay "Tweets" and Facebook

Glacier Bay entered the world of social media through the use of Twitter. Tom Vandenberg serves as the park's "tweetmaster." There are currently 750 followers of our "tweets" which include short items of interest, photos, press releases, and links to articles and further information. In December, Glacier Bay established a presence on Facebook, providing another exciting way to connect to the park. As one of the first Facebook pages for a national park, Tom Vandenberg brought Glacier Bay to the forefront of this new media. Currently, the page contains videos, images, and fun information that is updated regularly.

3D Relief Maps of GLBA

Working with Summit Terragraphics, Tom Vandenberg developed a new 3-D Relief Map of Glacier Bay using the park's unigrid map as the base image. These were brought on board ships where they provided countless opportunities for passengers to orient themselves and understand the complex physical



nature of Glacier Bay's mountains, waterways, weather, and glaciers. This popular product has now become a model for other parks in Alaska.

Alaska Experience Initiative

Interpretive and resource division staff assisted with the development, imagery, scripting, and filming for the "Alaska Experience" Airport/Ferry/Train travel displays and video series. One exhibit was distributed to the park for display at a location yet to be determined.

Camper Orientation Video

Division staff assisted Visitor Information Station staff with the editing of a new and improved version of the Glacier Bay Camper Orientation Video focusing on Leave No Trace principles.

Beyond Our Borders

Interpretive Development Program

Tom VandenBerg continued to be a national IDP Peer Review Product Certifier. Tom VandenBerg, Melanie Heacox, and Steve Schaller achieved additional IDP certification as local registered coaches for the Interpretive Talk, Conducted Activities, and Informal Contacts. Two seasonal IDP coaches presented sessions at seasonal training and provided coaching for new staff. All seasonal staff participated in the IDP program by taking online courses, partaking in coaching sessions, or attending training.

Training

- In September all permanent division staff attended 40 hour **supervisory training** held at the Gustavus Inn.
- Tom VandenBerg attended **NASA "Earth to Sky" Training** at Harper's Ferry and discovered a wide array of available media to assist with climate change interpretation and seasonal training.
- Steve Schaller attended **Fundamentals II** training at the Horace M. Albright Training Center in Grand Canyon National Park.

Ranger Exchange with U. S. Forest Service

Steve Schaller visited the Tongass National Forest to learn about their interpretive Wilderness Rangers program that has many similarities to our tour vessel interpretive program. Schaller and Forest Service rangers exchanged best practices while kayaking and presenting programs to visitors on tour vessels near Sawyer Glacier.

National Association of Interpretation

Kris Nemeth, representing the National Education Council, and Tom VandenBerg attended the National Interpreter's Workshop in Las Vegas, NV during November.

Regional Education Advisory Group

The chief served as co-chair of the Regional Education Advisory Group through June 2010. She was responsible for planning and coordinating a week-long strategic planning meeting that reinvigorated the group.

National Education Council

In December, Kris Nemeth became the co-chair of the council after serving as the vice-chair the previous year. The council is implementing an action plan that forwards the interpretive and education goals and objectives of the NPS Director's Four Priorities, Interpretation and Education Renaissance Action Plan, and the Second Century Commission Report.

In addition to beyond our park borders, the division also took an active part in numerous park-wide committees and work groups including safety, library, whale exhibit, marine review, bear management, information technology, wayside, housing, and brochure.

Evaluation

Government Performance and Results Act Survey

Of 400 Visitor Survey Cards distributed during the summer, 114 were returned and analyzed. Approximately 92% of respondents were satisfied with park facilities, services, and recreational activities. In addition, 96% of them understood and appreciated the significance of Glacier Bay National Park.

Safety

All division employees consider safety a top priority, which is reflected through their continued attention to both employee and visitor safety. Interpretive permanent staff prepared and presented a clever interactive session on the importance of communication to safety for the all employee "Operational Leadership" training in March. The division conducted nine hours of formal safety training within seasonal training, ranging from interactive classroom sessions to marine safety training including experience in the water wearing immersion suits.

All division employees were certified in First Aid and CPR. Safety drills continued on the Serac throughout the summer. The division also participated in a new risk analysis of transfer vessel operations using Operational Leadership Tools. The division chief also oriented the Alaska Regional Office Employee Relations and EEO Specialists to the job responsibilities and physical abilities required for interpretive rangers, which included donning immersion suits and entering the water. This knowledge would allow them to evaluate potential candidates and employees suitability for safely performing their job responsibilities.



Supervisory ranger Tom VandenBerg received the park's Quarterly Safety Award as a member of the GLBA Bear Committee.

2010 Statistics

Visitor Statistics

Below are selected visitor statistics from the 2010 visitor season. Park interpretive staff made 680,143 visitor contacts through formal and informal programs. In addition to these numbers,

there were also attendees at programs presented by guest speakers, other divisions, and the End-of-the-Year slide program that were not included in the total visitor contacts:

Park Interpretive Presentation Attendance:

419,737	Cruise Ships	12,093	Tour Boats
6,275	Visitor Center	1,301	Evening Programs at Lodge
2,073	Lodge Films	26,973	Marine Wildlife Watch
1,103	Forest Loop Walk	406	Morning Hike
		7,233	Education & Outreach

Volunteers

One hundred and two volunteers donated 7,823 hours to the park. Resource management and maintenance projects utilized the majority of volunteer time with 5,857 combined volunteer hours. \$5,887 was spent in the park's VIP account, which translates to approximately \$0.74 per volunteer hour. A new array of VIP uniform items were purchased which will improve VIP recognition and professionalism.

Budget

The division spent \$855,000 of which the cruise lines contributed approximately \$412,000 through our cruise ship cost-recovery interpretive program.

Alaska Geographic



In addition to branch manager, Karen Platt, AK Geo employed two seasonal full-time positions and one seasonal part-time position. Their assistance on board larger cruise ships was again invaluable to the interpretive rangers. AKGeo operations resulted in higher sales than expected despite a slow economy, a smaller inventory on our four largest ships, and a reduction in staff hours. Platt did a great job of creatively providing the same high-quality products and visitor service and increased our sales by 9% from last year. Sales reached over \$346,000.

Direct support of approximately \$12,074 was reinvested into the park's interpretive and information operation. These funds supported a myriad of projects and purchases that resulted in enhanced interpretation, professional development, and increased opportunities for park visitors to connect to the resources and meanings of Glacier Bay.

Resource Management

- RM staff collected a truckload of trash while hiking around Gustavus Point on a warm sunny spring day.
- Two RM staff participated as active members of the park's inter-divisional Marine Safety Committee; another participated in the GLBA Safety Committee.
- RM collaborated with the Protection Division to conduct "Sportfisheries" monitoring to assess and encourage concessioner and unguided angler compliance with park regulations.
- Glacier Bay now has a Public Information Officer! Allison Banks now takes charge of

park news releases, requests for information from the media and other parties, posting draft and other documents to NPS news pages, and will be developing toolboxes for park staff needing to submit news items to regional and national news groups.

Humpback Whale Monitoring Program

- We safely and effectively completed the 2010 whale monitoring data collection which resulted in a record high whale count for the Glacier Bay and Icy Strait study area. Data processing and reporting were completed for the 2009 season (see publications).
- Our growing collaboration with University of Alaska Southeast Sitka Campus whale scientists is culminating in a collaborative database which has involved intensive work with whale monitoring program staff and GLBA information manager Bill Eichenlaub to incorporate GLBA whale data into a regional database.
- Our collaborators at UAS in Sitka announced the release of the Southeast Alaska humpback whale catalog (<http://www.alaskahumpbacks.org>) that contains GLBA whale photographs and educational links.
- *Collaborative marine mammal studies:*
 - CESU agreement with University of Alaska Sitka to incorporate SPLASH genetic data into regional database
 - CESU agreement with Oregon State for genetic analysis of southeastern Alaska SPLASH data
 - CESU agreement with the Institute for Bird Populations to create humpback whale population estimation routines that GLBA can run annually to estimate population size
 - Ongoing collaboration with Department of Fisheries and Oceans Canada on killer whale vocalizations and photographic identification
 - Provided photos of Steller sea lion brands to Alaska Department of Fish and Game biologists to track animal movements
- *Inter-divisional collaborations:*
 - Worked with seasonal VIS staffer Rachel Chunn to write the first draft of a Ship Strike Standard Operating Procedure requested by the Superintendent.
 - Ongoing work with VIS Ranger staff to continue the systematic counts of vessels moored, anchored, or docked in Bartlett Cove. RM maintains the database of these counts from 2008-2010, so far.
 - Collected opportunistic photos of sport fishing vessels as part of a “Sportfisheries” monitoring program, a collaborative effort of the RM Fisheries program and GLBA Law Enforcement staff.
 - Assisted Ranger Erica Francis to create a storyboard for a video on disentanglement that could be played by NPS at boat shows.

Underwater Acoustic Monitoring Program

- Acoustic data collection has continued essentially un-interrupted since October 2008 from an anchored hydrophone in Bartlett Cove. In 2010, a new computer workstation was designed and installed by Navy collaborators and subcontractors.
- The resulting acoustic data are being used in collaboration with scientists at Cornell University and Marine Acoustics Incorporated to quantify the effects of vessel-generated

underwater noise on whale acoustic habitat (see publications).

- Expansion of acoustic monitoring to include a variety of areas in GLBA is being planned in cooperation with Kurt Fristrup from the NPS Natural Sounds Program in Fort Collins.
- In August 2010, we completed the hiring process for a STEP student with experience in acoustic analysis of whale vocalizations to investigate whale vocal patterns in relation to vessel noise and diurnal rhythms. This will be the first directed study of whale vocalizations ever completed in GLBA.
- Gabriele was invited to represent NPS/GLBA at a NOAA – Navy sponsored meeting in Washington, DC to discuss nationwide approaches to issues pertaining to marine mammal acoustics. Travel expenses were paid by NOAA.

Marine Mammal Strandings

- We responded to and/or maintained documentation on an exceptionally high number (40) marine mammal stranding events, and sometimes up to 3 per day. We consulted with the National Marine Fisheries Service on several additional necropsies and whale entanglement responses in SE Alaska.
 - 17 sea lions (at least 12 different ones dead, 2 injured and 3 entangled)
 - 5 harbor seals (4 dead, 1 injured)
 - 1 harbor porpoise (dead)
 - 15 dead sea otters (at least 7 were collected and shipped to U.S. Fish & Wildlife Service in Anchorage for necropsy)
 - 4 humpback whales (one adult female and fetus found dead in May at Scidmore Cut, one entangled mother calf pair at Point Adolphus (not sighted again after initial report)).
- The humpback whale stranding at Scidmore Cut involved several trips to the site starting on May 5th, to try to determine cause of death and to collect missing bones needed for the Whale 68 skeleton exhibit (see below). The September bone collection trip led to the discovery of the bones of a whale fetus approximately 6 ft in length. After each visit, we consulted with Dr. Frances Gulland, DVM, of the Marine Mammal Center in Sausalito, CA, about prospects for determining cause of death, and the implications of the size of the fetal calf in terms of the month in which the adult female died, which is still inconclusive.
- We organized and participated in whale disentanglement training for about 15 Park staff with NOAA Sanctuaries whale rescue expert Ed Lyman.
- We maintained records for two near-miss collisions between whales and vessels, one with the Allen Marine boat during the NPS orientation cruise in May in the Inian Islands, and one involving a cruise ship and a sleeping whale that detected and avoided the ship at the last second.

Whale 68 Skeleton Preparation

- Whale monitoring staff arranged a small contract with whale bone expert Lee Post of Homer, Alaska to assess and inventory the whale #68 bones in preparation for skeleton re-articulation and a new wayside exhibit in 2011-2012. We determined which bones were missing and found replacements from two stranded whales in Alaska. We also made progress on final cleaning of several bones. We worked with Maintenance staff and AKRO architect Brad Richie on the design and placement of the bone exhibit, and

worked on an Environmental Assessment for the shelter with Glen Yankus and Daniela Takacs at AKRO. The Environmental Assessment will be released for public review and comment in early spring, 2011.

Fisheries Management

Commercial Fisheries

- Attended International Pacific Halibut Commission January Annual Meeting in Seattle which significantly increased staff familiarity with management and research efforts for this species. Lobbied IPHC survey manager for expanded longline survey sampling in Glacier Bay Proper. IPHC decision on the matter has been delayed pending a full review of their survey design in 2010/2011.
- Completed collaborative monitoring of annual commercial Tanner crab fishery opening Feb. 15-23 in Glacier Bay Proper with Protection Division. Conducted aerial and vessel based surveys aboard chartered aircraft and ADFG's M/V Enforcer. Three commercial fishing vessels were observed and pot gear from one additional vessel was encountered. All participating vessels held Limited Access Permits (LAPs).
- Contractual data request (CFEC Project #2008110) for summary of commercial fisheries harvest and effort information completed by state Commercial Fishery Entry Commission at our request. These data will be summarized and reported in 2011.
- Develop/clarify park position on LAP fisheries bycatch for park staff. Confirm noticing of "existing fisheries" in Compendium.

Sport Fisheries

- Kept park staff aware of ongoing development of NOAA NMFS regulations limiting entry for the charter halibut fishery in Area 2C and 3A encompassing park waters. Qualification for Charter Halibut Permits (CHP) was based on historical operation during 2004 or 2005 and 2008. CHP's are awarded with angler endorsements allowing 4, 5 or 6 anglers to fish for halibut. This affects all charter halibut fishing operations permitted under CUA and Concessions permits and is anticipated to at least temporarily reduce halibut harvest.
- Continued RM/Protection collaborative "Sportfisheries" monitoring program employing aerial and vessel based survey methods. This program is designed to evaluate and ensure better concessioner (Concession's contracts and CUAs) compliance with recreational activity, fishing effort and harvest reporting requirements as well as unguided sport angler compliance. Conducted 13 aerial and 32 vessel based surveys of sportfishing activity between the end of May and mid September.
- Continued Bartlett Cove "Dock Use" monitoring (collaboration with VIS staff) and Creel Surveys (RM Creel Clerk) during September as part of continuing (2nd season) targeted data collection for Shoulder Season (May and September) vessel use of Glacier Bay Proper.
- Continue self reported charter logbook program data input, monitoring and reporting. Developed final draft of report detailing decadal trends in fisheries effort and harvest.
- Developed Access database for Dry Bay CUA recreational fishery harvest. All data have been entered but have yet to be summarized.

Other Fisheries-related work

- Conducted upper basin field survey of Bartlett River/Lakes drainage July 20-22 in order to document and map salmonid distribution. Confirmed specific caveats affecting past sockeye salmon escapement estimates.
- Confirmed erroneous angler harvest (not legal) of a 29.5 inch king salmon from the Bartlett River on July 11th. King salmon have not previously been documented in this drainage.
- Complete Doame River fisheries survey enumerating salmon species presence and abundance during week of Aug. 16 with Protection staff. Confirmed presence and location of single spawning king salmon within this river.
- Conducted collaborative resource survey down the Seclusion River with Protection staff Aug 30-Sept 2. Documented presence of spawning king salmon. Previous evidence indicated spawning fish were present but confirmation and location information was previously lacking.
- Further develop plan for Dual frequency Identification SONar (DIDSON) installation to monitor coho salmon escapement in the Bartlett River. Collaborate with ADFG Regional Sport fishery biologists on this issue, develop instrumentation and power specifications, develop study plan, and assist in initiation of minimum requirement analysis for Wilderness installation.
- Installation, monthly calibration and data downloads, and end of season removal of Salmon River water quality monitoring sonde (June-October). This is part of the I&M water quality monitoring program.
- Supervise and conduct collaborative Bartlett River angler counts with VIS staff. Install and monitor trail counter along Bartlett River trail. Angler effort has increased two fold over the last decade.
- Analysis of tidal inundation frequency and temporal duration for tides ≥ 10 ft during Dry Bay commercial set gillnet fishery and potential impact on local fishermen requesting fishery access across Dog Salmon Creek. This document provided significant guidance to upper level managers on public access desires within the context of resource impacts.
- Collaborative fish distribution collection and mapping with ADFG in Dry Bay area streams between Dog Salmon Creek and Varney camp during week of May 4.
- Provided analysis and management staff guidance on aquatic and fisheries resource issues concerning proposed Dry Bay Varney camp short cut trail.
- Provide review of proposed USCG Rescue 21 communications installation on Beartrack Mountain.

National Environmental Protection Act (NEPA) Compliance and Review

There was quite a bit of environmental compliance activity in the park this year in addition to a number of smaller localized facility projects. Seven EA- or EIS-level projects were started or completed in 2010. The status of each is listed below:

- US Coast Guard requested a Right of Way permit for a proposed search and rescue communications array in the park's backcountry. After many discussions over possible locations, alternatives, site visits by USCG and NPS personnel, and wilderness resource

concerns, the EA considers one potential site in the National Preserve at Deception Hills. The EA was completed by USCG contractor, released for public review in December, 2010, and a FONSI is now in draft.



An existing USCG communication site on Althorp Peak in the park

- The park received a request for a new commercial fishing cabin permit in Dry Bay of the National Preserve. The EA was released for public review in January, 2011.
- A shelter to house the re-articulated humpback whale skeleton has been designed for Bartlett Cove. An EA was prepared by AKSO staff and will be released for public comment in early spring, 2011.
- Three years after implementation of the Dry Bay ORV management plan some designated trails are being fine-tuned. Two existing ORV trails may be closed, one trail relocated, and one trail re-opened to protect stream corridors and to provide better access supporting commercial fishing operations in the Preserve. An EA describing trail changes will be completed in 2011.
- The SEAN I&M program has proposed a network of climate monitoring stations in the park backcountry. Existing stations operated by US Army Corps of Engineers scientists may be removed or incorporated into the SEAN network to reduce the number of installations in park wilderness. The EA analyzing programmatic effects will be completed in 2011.
- A proposal to install a DIDSON sonar array in the Bartlett River to identify and count coho and sockeye salmon during fall runs will be evaluated through an EA in 2011. This proposal has been under discussion by RM fisheries biologists for the past two years.
- The LEIS for Hoonah Tlingit Harvest of Glaucous-winged Gull Eggs in the park was finalized in 2010 with a Record of Decision signed in September.

Invasive Species Management

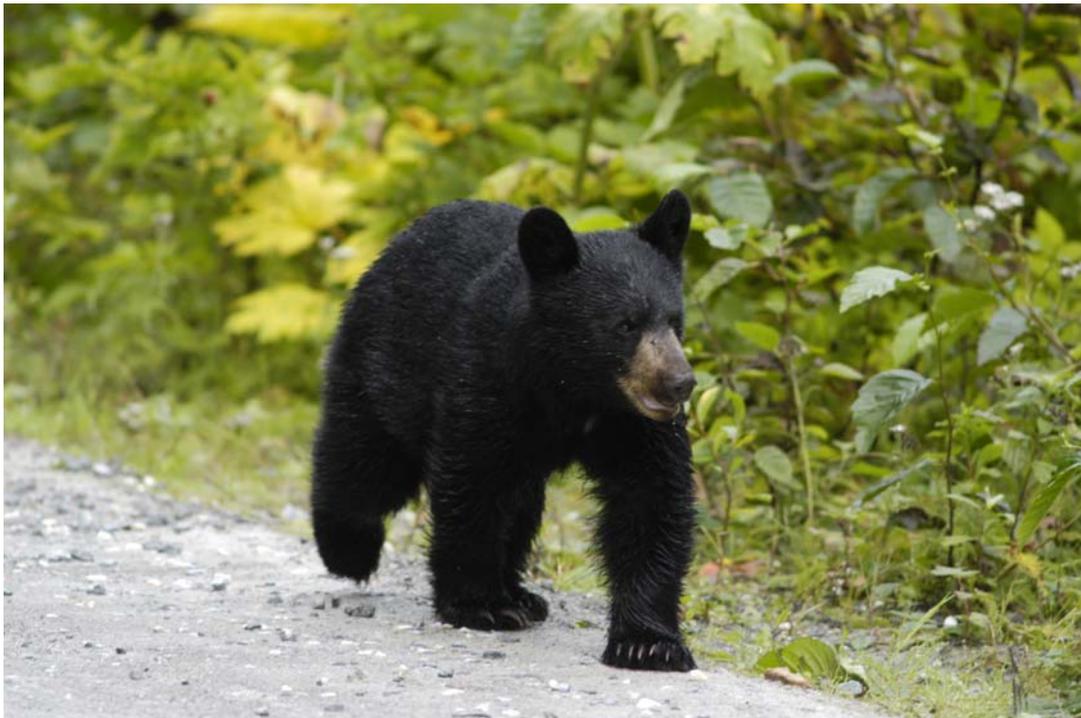
- The 2010 GLBA Exotic Plants Management Team (EPMT – one seasonal biological technician + one Student Conservation Association intern) surveyed 200 acres of park lands for the presence of invasive species. Additionally, they:
- Controlled 25 acres, and
- Treated 2.8 acres, hand-pulling 2300 lbs. of weeds, a 55% increase over 2009.
- This year the GLBA invasive plant management strategy moved away from control of

large infestations of low-risk plants and began to focus on smaller infestations of high-risk plants. This was a major positive strategic direction shift that should result in considerably greater success.

- In 2010 the team continued quarterly trap surveys for invasive European green crabs (still negative), and twice sampled settlement plates deployed to detect the presence of invasive marine tunicates (still negative).

Human/Bear Interaction Management

- The Bear Management Team provided bear safety information to park staff, public, and researchers, held a 2-day Bear/People Management Training, and made two trips to the Preserve to work with staff and residents on education and minimizing bear-human conflicts.
- The team repeatedly monitored at least seven individual black bears in the Bartlett Cove Developed Area, including one sow with three cubs who frequented the area for the entire summer. No human food was obtained, and no bear-human conflicts occurred.
- For the first time in memory, brown bears inhabited the front-country of GLBA and neighboring town of Gustavus for much of the summer. The Bear Management Team monitored brown bears near the developed area and provided educational flyers and presentations to the park and community to help people adapt to living with brown bears.
- We conducted 10 site investigations and responsive management actions due to a brown bear charging a hiker, a brown bear eating a seal carcass near a popular trail, and black bears repeatedly obtaining fish from sport anglers.
- We assisted AK State Troopers in the investigation and necropsy of a brown bear shot in Gustavus on July 6-7.



A black bear cub crosses a parking lot in the Bartlett Cove Developed Area



A brown bear feeds on a seal carcass along the shoreline beyond the park campground

Terrestrial Wildlife Research

- The wildlife biologist conducted 15 bear data collection trips to over 41 research sites, collecting over 600 bear hair samples at 50+ locations to determine bear species distribution with the help of park staff from all divisions and numerous volunteers.
- We completed “Disturbance and Displacement of Brown Bears by Vessels in Glacier Bay, Preliminary Analysis”.
- We collected over 8500 time-lapse photos of brown bears and wolves scavenging a humpback whale carcass in the West Arm.
- We worked with ADF&G and other collaborators on funding proposals for moose, mountain goat, and glacier bear research in GLBA.
- We collaborated with ADF&G and an OSU graduate researcher on a project examining the impacts of predators and scavengers on the ecosystem of Glacier Bay and the Gustavus Forelands.
- We represented the NPS at ADF&G meetings developing the Dude Creek Critical Habitat Management Plan.
- We conducted preliminary surveys (vessel and attempted ground) to observe glaucous-winged gull nesting activity on South Marble Island on March 30 and April 22.
- We conducted a vessel-based reconnaissance-level mountain goat survey between Tlingit Point and Queen Inlet on March 30.



Brown bears quickly discovered the humpback whale carcass that beached in the West Arm in May

Coastal Cluster Program

Harbor seal/Steller sea lion research and monitoring

- Safely and effectively completed harbor seal monitoring aerial surveys (n = 17) for all harbor seal haulout sites in GLBA
- Project management included all planning, budget management, hiring of seasonal staff, logistics, and conducting aerial survey counts, data management, data analyses, outreach efforts, and collaboration.
- Completed analyses and manuscript preparation for long-term trends (1992-2009) in the numbers harbor seals in Glacier Bay.
- Completed analyses and manuscript preparation for long-term trends (1970s to 2009) in the number of Steller sea lions in Glacier Bay region.
- Completing processing of all aerial imagery and protocol development for methodological comparison of survey methods for surveying seals in glacial ice. Statistical analyses are currently underway with National Marine Mammal Laboratory biometrician.
- Trained seasonal technician (Senac) in processing imagery from aerial surveys.
- Provided harbor seal monitoring data collected in Glacier Bay to the National Marine Mammal Laboratory for the purposes of estimating state-wide abundance of harbor seals and for the preparation of NMFS annual stock assessment of harbor seals in Alaska.
- Worked with GLBA fisheries staff (Soiseth & Murdoch) and NMFS-Office of Protected Resources to conduct outreach efforts associated with concerns regarding Steller sea lions and charter fishery interaction in the Glacier Bay region.

- Created Harbor Seal Project Aviation Safety Plan and completed DOI Aviation Safety Training.
- Continued collaboration with agencies including National Marine Mammal Laboratory, Alaska Department of Fish & Game, University of Alaska Southeast, and Oregon State University.
- Delivered 10 presentations regarding pinniped (harbor seal and Steller sea lion) research and monitoring in GLBA at various venues including the Alaska Marine Science Symposium (Jan 2010), National Marine Mammal Laboratory (Mar 2010), University of Alaska Southeast (March 2010), Oregon State University (OSU)-College of Ocean & Atmospheric Sciences (April 2010), OSU-Hatfield Marine Science Center (May 2010), Hoonah Indian Association (June 2010), Gustavus Public Library (June 2010), Society for Marine Mammalogy meetings (Oct 2009), and NPS Cruise Ship Science Meeting (Dec 2009).
- Prepared summary material regarding harbor seal population monitoring and research in Glacier Bay National Park with the Glacier Bay Interpretive Division for inclusion in *The Fairweather*, the official visitor's guide to Glacier Bay National Park & Preserve for 2010.
- Participated in filming, interviews, and review of curriculum for a NPS Middle School Scientists Project. Educational activities and curriculum will be developed by NPS interpretive staff in collaboration with NPS biologists.
- Conducted manuscript peer- reviews for several journals including Marine Ecology Progress Series, Journal of Theoretical Biology, Marine Mammal Science, and Fishery Bulletin.

Shipboard Observer Program

- Organized and completed 86 cruises aboard cruise ships as part of project intended to better understand cruise ship interactions with endangered humpback whales in and near Glacier Bay. Cruises constituted over 630 hours of observation and documented more than 490 ship-whale encounters
- Collaborated and coordinated logistics, scheduling, funding, and permitting with a number of agencies and institutions including the University of Washington, University of Alaska Southeast, Department of Homeland Security, Cruise Line Agencies of Alaska, Holland America Line.
- Supported graduate student at the University of Washington, Karin Harris, who completed Masters of Marine Affairs degree (Thesis title: Spatial and temporal variation in patterns of cruise-ship humpback whale encounters in and near Glacier Bay National Park, Alaska)
- Presentations of emerging results presented to a number of agencies and organizations including the Hawaiian Island Humpback Whale National Marine Sanctuary (Honolulu, HI), National Oceanic and Atmospheric Administration (Silver Spring, MD), NPS Cruise Ship Science Meeting (Seattle, Washington), and Society for Marine Mammalogy (Quebec City, Quebec, Canada).

Science Advisory Board

- Organized a 2.5-day Cruise Ship Science Meeting, and a 2 day Science Advisory Board meeting in Seattle, WA, with the purpose of bringing together researchers working on

studies addressing potential impacts of cruise ships to resources in Glacier Bay, with park, regional, and national managers to inform and communicate emerging research results on potential impacts should cruise ship quotas change. Organized 17 invited speakers representing 13 different agencies, universities, companies, and other institutions.

- Organized Graduate Student Seminar Series at the University of Alaska Fairbanks School of Fisheries and Ocean Sciences: Fish 693: Current Issues in Marine Policy-Cruise Ship Impacts in the Marine Environment. Seminar series run in the Fall of 2009 included 12 seminars from different speakers representing the suite of impacts of cruise ships to coastal resources and communities (socio-cultural, economic, engineering, political, air quality, water quality, marine mammals, enforcement and regulation).

Committees

- Gende served as the NPS representative on the International Committee for Marine Mammal Protected Areas (ICMMPA), a group of national and international agency, university, and NGO representatives tasked with guiding development and advocating design, enforcement, understanding, and monitoring of protected areas for marine mammals worldwide.
- Gende served as a representative for developing a national Migratory Species program within the NPS.
- Glacier Bay Science Advisory Board – Chair (Gende)
- Karin Harris Graduate Faculty Committee, University of Washington (Gende)
- Tim Marcella Graduate Faculty Committee, Oregon State University (Gende)
- Colleen Young Graduate Faculty Committee, San Jose State University, Moss Landing Marine Lab (Gende)

Cultural Resources Management

- The Cultural Resources Program Manager co-chaired the Cultural Resources Advisory Council (CRAC). Responsibilities included facilitating the monthly teleconferences and the annual meeting in Anchorage, as well as responding to numerous WASO inquiries and issues concerning the Alaska region's historic preservation programs. Representing CRAC, the GLBA program manager attended an Alaska Leadership Council (ALC) meeting and described the role, function, and accomplishments of CRAC.
- The program manager provided technical advice and assistance on matters relating to historic preservation, the compliance process of Section 106 of the National Historic Preservation Act, and the cultural resources program to park staff and the public.
- The program manager reviewed, commented on, and evaluated impacts to cultural resources on 15 undertakings within the park and preserve in accordance with preservation laws.
- The program manager conducted 21 conditions assessments with Wayne Howell on historic sites in Glacier Bay proper and Dundas Bay. Findings were documented in the ASMIS database.

- The program manager attended a government-to-government meeting with the Yakutat Tlingit Tribe, and participated in several meetings with the Huna Indian Association concerning the Huna Homeland and the development and construction of the Tlingit Tribal House in Bartlett Cove.
- The program manager participated in a day trip up bay with Huna elders and students to the Margerie Glacier. While en route, students learned about the natural and cultural resources of Glacier Bay, attended Tlingit language sessions, and learned of their cultural



heritage from their elders through stories, dances, and songs. In September Hoonah High School students travelled to Bartlett Cove for a career day. Their day was spent visiting park facilities and job sites. They also enjoyed exploration hikes.

Wayne Howell (R) and Craig Smith conducting site Condition assessments at the Dundas Bay Cannery

Museum/Library

Museum Collection

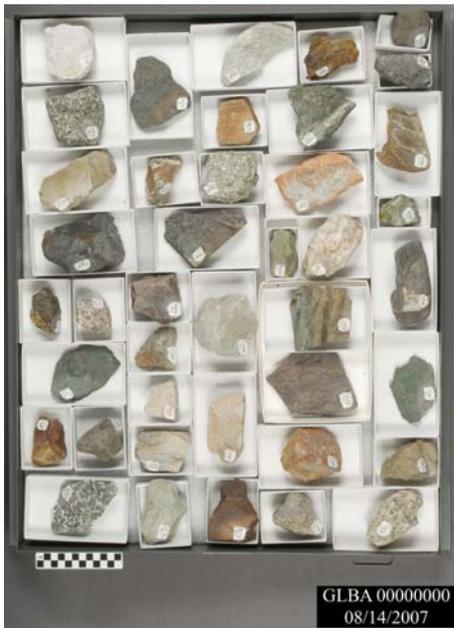
- Cataloged 904 objects in the museum collection, including 294 natural history specimens.
- Accessioned 13,152 objects into the collection, including 252 natural history specimens and the entire 20-year catalog of whale fluke photographs.
- Completed smooth draft of Scope of Collections Statement revision and put it out for review.
- Completed final cataloging of all Exotic Plant Management Team plant specimens.
- Instituted oral history tape project with five taped interviews of Gustavus homesteaders now completely digitized and archived.
- Reduced cataloging backlog by five accessions.
- Completed all required inventories and national catalog submission in compliance with museum program deadlines and standards.



Acid-free storage boxes protect the permanent collection



Carved Tlingit halibut float from the ethnographic collection



Pressed and dried seaweed specimen



Mineral specimens individually are identified and cataloged

Library

- Upgraded library with new table and archival flat file to hold oversize items.
- Organized the large-format aerial photographs and preserved them in mylar sheet protectors.
- Hired seasonal librarian Artemis BonaDea, who accomplished the following tasks:
 - Cleared cataloging backlog of library books and reports.
 - Devised procedure and tools for creating library cards in-house.

- Performed book restoration/conservation on several archival items, including rebinding of several rare and/or fragile documents to professional standards.
- Began removal of documents from “brown folders” to more state-of-the-art clear-front binders.
- Maintained Endnote database of library items, and began addition of Dewey decimal numbers to Endnote.
- Reorganized reprint file to make it easier to find documents.



Librarian Artemis BonaDea (L) and long-time library volunteer Lynne Jensen

Science Coordination

- Issued ~15 new Research Permits; managed ~40 ongoing valid Permits; developed researcher reporting guidelines (collections, data deliverables), developed framework for prioritizing park in-kind logistical support (vessels, housing) to outside researchers.
- Ongoing refinement and implementing of review tool for use in evaluating benefits and impacts of scientific activities in wilderness.
- Ongoing development of framework for evaluating cumulative impacts of scientific activity in wilderness.
- Organized facilitated “Research Agenda” meeting of RM staff to identify and prioritize scientific information needs to support resource management decision-making.
- Developed and initiated implementation of CESU Agreements for “Mapping the Lowland Surficial Geological Deposits of Glacier Bay National Park and Preserve” (Univ. of WI), and “Paleontological Inventory and Geologic Framework of Glacier Bay National Park and Preserve” (Ore. St. Univ.); secured Technical Assistance Request for Program Center support of paleo inventory field work in 2011. Coordinated review of USGS comprehensive hard-rock geology map of the park.
- Began developing comprehensive soundscape monitoring program for the park; secured Technical Assistance Request for Senior Acoustic Scientist (Fristrup) from Program Center to initiate integrated strategy to monitor airborne and underwater soundscapes in

summer 2010, followed by field deployment of airborne sound sensors in the backcountry; developed inter-divisional model of implementation to ensure long-term sustainability.

- Coordinated technical assistance of USFS crosscut saw specialist re. alternative to chainsaws for sampling interstadial wood in wilderness (also coordinated crosscut saw training for park trail maintenance crew).
- Developed/implemented “boat-by” photographic monitoring protocol for the Tidal Inlet landslide.

Inventory and Monitoring

- Ecologist/Research Coordinator served on the Southeast Alaska Network Technical Committee.
- Participated in development of comprehensive protocol for long-term oceanographic monitoring of Glacier Bay; conducted nine oceanographic surveys; generated reports.
- Established and initiated implementation of long-term monitoring of wet-deposition (precipitation) elemental mercury; GLBA now a site within the nationwide Mercury Deposition Network.

Research and Management Support

- The RM Division offered free temporary housing for visiting researchers again this year. 12 beds were available in Gustavus and Bartlett Cove, and were filled to capacity about 60% of the summer. Housing is typically requested from April through the end of October.
- The park also provided single and double kayaks and associated gear for research activities upon request. This provides a sustainable, wilderness value-sensitive alternative to motor vessel transport.
- We began the process of procuring a rowboat for use by researchers/park staff in seasonally motorless waters.
- The park’s GIS Specialist/Data Manager provided ongoing support to staff in those areas, particularly mapmaking and database design/management.
- The R/V Capelin provided season-long logistical support to staff and independent researchers, transporting personnel and equipment throughout Glacier Bay. The vessel supported 12 projects in 2010, with 73 trips and a total of 69 operating days.

Education and Outreach by Resource Management Staff

- Humpback Whale Monitoring Program staff did the following:
 - Gave talk and lab on whale fluke identification to 12 University of Alaska students at University of Hawaii Hilo in March 2010.
 - Gave an acoustics talk to Juneau and regional high school science students at Bartlett Cove dock in June 2010, just prior to their trip up-bay on the Glacier Seal with instructors Clay Good and Riley Woodford, and Park education specialist Patrick Hair. Talk was well received and spurred students to do some underwater listening during their trip.
 - Gave annual talks on whales and acoustics to Interpretive staff, VIS staff, kayak guides, and captains of the Glacier Bay Lodge’s day tour vessel Fairweather Express II.
 - Interviewed for Holland America Line audio podcasts on humpback whales and marine mammals in July 2010.

- Interviewed for middle school science interactive podcasts with film crew Jim Pfeiffenberger and Kelly VandenBerg and students Stephen Nemeth and Rowan Sharman in August 2010.
- Fisheries Program staff did the following:
 - Spring presentation to interpreters on the dynamics of the Bartlett River and sockeye salmon escapement estimates.
 - Conducted angler outreach to prevent sockeye snagging and negative bear-human interactions on the Bartlett River
 - Meetings with charter operators over CUA permit requirements and effort and harvest reporting as well as shoulder season issue in collaboration with Concessions and Protection staff. Two meetings were held in Gustavus (May 12 and July 28) and park staff also participated in a collaborative information sharing meeting with NOAA NMFS OLE and ADFG/State Troopers in Elfin Cove on May 20.
 - Chaperone and stream development subject matter authority during May 4 & 5 Gustavus School trip aboard the Seawolf.
 - Two field day presentations to Gustavus school grades 3, 4, and 5 on stream structure and Falls Creek hydro power.
 - Complete summary poster (for VIS) of boreal toad chytrid sampling results and amphibian presence and distribution
 - Continued 2nd season of producing Anadromous Streams brochure available at the VIS and online to park visitors.
- EPMT staff designed and manned a themed “invasive plants” booth at the annual Gustavus community Fourth of July celebration, including an interactive exotic plants game, and native plant buttons to give away. Throughout the season the team provided training for park staff, and created informational flyers and PowerPoint presentations to educate the public about invasive plant issues.
- Research Coordinator (Sharman) sat for a subject-matter filming production interview (BBC - isostatic rebound and landscape development of the Glacier Bay region; tidewater glacial dynamics), and an audio production interview (Alaska Experience - scientific research in Glacier Bay). Also provided material on the park’s legacy of scientific research and its contributions to scientific knowledge of biological succession and community development for an upcoming book about Glacier Bay. Collaborated with Interpretive Division on Parks As Classrooms selections of focus research projects, technical review of wayside exhibits project. Served as invited Science Judge for National Ocean Sciences Bowl (Alaska state level – Tsunami Bowl, Seward, AK) high school student competition.
- Sharman coordinated several “live” public presentations by various researchers in the park on their scientific investigations; coordinated the generation of several posters of same for inclusion in Visitor Information Station “research” binder.

Technical Presentations

- Gabriele and Neilson co-authored a whale-vessel collisions poster that Aleria Jensen (NMFS) presented at Alaska Marine Science meeting in January 2010.
- Gabriele presented a talk on GLBA underwater sound studies and issues to University of Alaska Marine Ecosystem Sustainability in the Arctic and Subarctic (MESAS) faculty and graduate students at the Gustavus Inn in August 2010.

- Neilson presented a whale-vessel collisions talk and marine mammal stranding talk at the Alaska Region Stranding Network meeting in February 2010.
- Gabriele was co-investigator with Adam Frankel, Christopher Clark, Blair Kipple, Scott Gende and Noble Hendrix on four talks at the Glacier Bay Cruise Ship Science meeting in Seattle in December 2009. After the meeting, staff reviewed and commented on GB Cruise Ship Science meeting report sections. Three of these studies are summarized in the following article:
 - Christine M. Gabriele, Christopher W. Clark, Adam S. Frankel, and Blair Kipple (in press, 2011). *Glacier Bay's Underwater Sound Environment: The Effects of Cruise Ship Noise on Humpback Whale Habitat*. Alaska Park Science, Winter 2010, p. 14-19.
- Christine M. Gabriele and Blair Kipple 2009. *Cruise ship shallow water near-bow sound recordings*, a poster presentation at Marine Mammals Society Conference in Quebec City, Canada, Oct 8-18, 2009.
- Murdoch and Soiseth attended conference and coauthored poster at Alaska Chapter of the American Fisheries Society annual (October) meeting in Juneau. The poster was entitled "Fisheries Research Opportunities in Glacier Bay National Park: Why Glacier Bay and Why Now?"
- Blodgett, R.B., Rohr, D.M., Santucci, V.L., and **L.C. Sharman**. A paleontologic resource assessment of Glacier Bay National Park and Preserve, Southeast Alaska – providing data for future geologic mapping. Presented at the 2010 Annual Meeting of the Geologic Society of America.

Reports and Publications

- Christine M. Gabriele, Christina Lockyer, Janice M. Straley, Charles M. Jurasz and Hidehiro Kato (2010). *Sighting history of a naturally marked humpback whale (Megaptera novaeangliae) suggests ear plug growth layer groups are deposited annually*. Marine Mammal Science 26: 443-450.
- Ellen M. Chenoweth, Christine M. Gabriele, David F. Hill (in press, 2011). *Tidal influences on humpback whale habitat selection near headlands*. Marine Ecology Progress Series.
- Janet L. [Neilson and Christine M. Gabriele \(2009\). Results of humpback whale population monitoring in Glacier Bay and adjacent waters: 2009. Report to the National Park Service. Glacier Bay National Park and Preserve, Gustavus, AK. 19 pp.](#)
- Decker, D. 2010. Invasive and exotic species management for Glacier Bay National Park & Preserve 2010 Summary report. Natural Resource Data Series NPS/GLBA/NRDS—2010/108. National Park Service, Fort Collins, Colorado.
- Landres, P., Fincher, M., **Sharman, L.** et al. 2010. A framework to evaluate proposals for scientific activities in wilderness. Gen. Tech. Rep. RMRS-GTR-234WWW. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 74 p.
- Hoekman, S.T., Moynahan, B.J., Lindberg, M.S., **Sharman, L.S.**, and Johnson, W.F. *In press*. Line transect surveys for murrelets: accounting for incomplete detection and identification. Marine Ornithology 00:000-000.
- Sharman, L. 2010. Driving the marine ecosystem: oceanography as a key long-term monitoring vital sign at Glacier Bay National Park and Preserve. Alaska Park Science 9(1):36-39. National Park Service, Alaska Regional Office, Anchorage, AK.

- Danielson, S., Johnson, W., **Sharman, L.**, Eckert, G., and B. Moynahan. 2010. Glacier Bay National Park and Preserve oceanographic monitoring protocol, version OC-2010.1. Natural Resource Report NPS/SEAN/NRR—2010/265. National Park Service, Fort Collins, Colorado.
- Womble, J.N., Pendleton, G.W., Mathews, E.A., Blundell, G.M., Bool, N.M., Gende, S.M. 2010. Harbor seal decline continues in the rapidly changing landscape of Glacier Bay National Park, Alaska, 1992-2008. *Marine Mammal Science* 26:686-697.
- Womble, J.N., Conlon, S. 2010 . Observation of Steller sea lion predation on a harbor seal in the Glacier Bay region of southeastern Alaska. *Aquatic Mammals* 36: 129-137.
- Womble, J.N., and Gende, S.M. 2010 (*in press*). Contrasting trends for harbor seals and Steller sea lions in and near Glacier Bay National Park, Alaska. *Alaska Park Science*.
- Womble, J.N., and Gende, S.M. 2010. Investigating causal factors of harbor seal decline in Glacier Bay National Park & Preserve. Final Report to for PMIS#35747 to National Park, Service, Fort Collins, Colorado. 53 pp.
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- Blundell, G.M., Womble, J.N., Pendleton, G.W., J.K., Karpovich, S.A., Gende, S.M. 2011 (*in press*). Use of ice and terrestrial habitat by harbor seals in Glacier Bay Alaska: why pup in the ice? *Marine Ecology Progress Series*.
- Mathews, E.A., Womble, J.N., Pendleton, G.W., Jemison, L.A., Maniscalco, J.M., Streveler, G. 2011 (*in press*) Population expansion and colonization of Steller sea lions in the Glacier Bay region of southeastern Alaska: 1970s to 2009. *Marine Mammal Science*.
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- Gende, S.M., and B. Sheinberg. 2010. Glacier Bay National Park Cruise Ship Science meeting and Science Advisory Board meeting December 8-11, 2009. Final report. 101pp.
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Maintenance

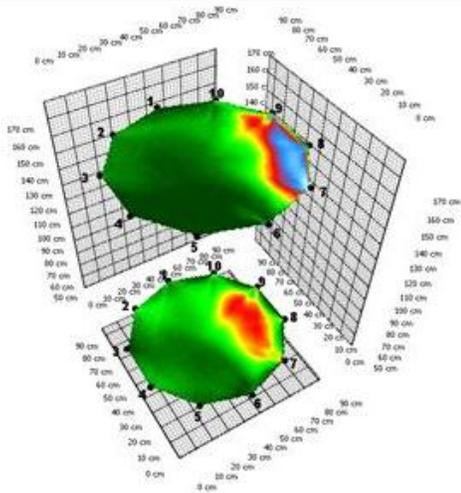
Buildings, Roads, and Trails Department

Bartlett Cove Projects

- Renewed Hazard Tree Program - Created an inventory of hazardous trees in Bartlett Cove and began removal of hazardous trees adjacent to Park structures.



- US Forest Service Specialists provided training to three Park Maintenance employees on hazard tree identification using visual assessment, a micro-drill resistograph, and an acoustic tomography unit.



- Rehabilitated and corrected drainage issues on several camp-sites and sections of the campground trail.
- Brushed and did minor repairs on the Bartlett River and Bartlett Lake Trails utilizing day labor and AmeriCorps crews.
- Brushed and marked most of the Gustavus/Park Boundary utilizing day labor and a 10 person SAGA crew.
- Began replacement of rotted planks and hand railings on Forest loop trail.
- Began project to restore lodge boardwalk railings to original configuration.
- Thinned 90% of remaining alders along ½ mile of the beachfront trail, around seasonal and permanent housing, as well as 3.5 miles of park road shoulder using hand tools as per Vegetation Management Plan.
- Replaced 90% of deteriorating bog bridges on the Bartlett River Trail including sleepers and planks with poly mesh traction surface. AmeriCorps 3-5 person crew for 5 days
- Three Maintenance employees received crosscut saw training.



- **Dry Bay Trails Projects**

- Cleaned, organized and upgraded NPS facility at Dry Bay including the inventory and labeling of tools and materials and the disposal of unwanted materials.
- Began addressing fueling operations issues: labeled all fuel and oil stored in the fuel shed and installed filters, pumps, hoses and flow meters on fuel systems for diesel and gasoline.
- Added 1000gal of water capacity to catchment system utilizing portable potable tank.
- Worked with National Park Service and Alaska Department of Fish and Game fisheries biologists at Dry Bay to determine trail improvement priorities.
- Brushed and cleared 15 miles of trail.
- Performed maintenance and numerous repairs on trails associated with Dog Salmon Creek.
- Brushed southeast main air strip Dry Bay, removing approximately 300 trees
- Identified and began addressing issues with waste handling operations.

Building Repair and Maintenance

- Repaired and stabilized rotted posts on the culturally significant Tlingit canoe shelter.



- Removed lead contaminated soil from historic Park site in Gustavus.
- Completed an exterior restoration project for a historic structure that had been converted from boiler house to storage building.
- Repainted exteriors of park seasonal housing units including three apartment buildings, three duplex apartments, and one house.
- Converted a storage building into a recreation center for park housing occupants.
- Commenced construction of new Maintenance storage and parking structure begun via an American Recovery and Reinvestment Act (ARRA) funded contract.



- Initiated a contracted re-carpeting project in the Park Administration Headquarters building.
- Repainted the exterior of the Visitor Information Station and the nearby Comfort Station.
- Applied wood preservative to the roofs of several park structures.
- Cleaned and repainted all structures in the Bartlett Cove Campground area.
- Constructed contaminated soil remediation structures at the Recycling Depot site.

Fleet Vehicle and Marine Vessel Repair and Maintenance

- Contracted for the repowering of the MV (Motor Vessel) Talus with twin turbo diesel engines. Prior to the contract, the vessel had been underpowered and propelled by a defective single jet engine.
- Repainted the MV Petrol (fuel barge), MV Arete, and MV Serac via an American Recovery and Reinvestment Act (ARRA) funded contract.



- Maintained 12 large (20-38 foot) motorized vessels, in addition to maintaining a fleet of motorized skiffs.
- Maintained a fleet of 39 vehicles and pieces of heavy equipment, in addition to many smaller pieces of equipment.

Road and Dock Repair and Maintenance

- Completed above-water and underwater condition assessments at the Indian Point dock and at the Bartlett Cove inner Lagoon dock via contract.



- Continued working on a road resurfacing project (chip seal) for the main Park road – some on site work completed but majority of time taken by contract negotiation.
- Modified operations on road maintenance to protect new “chip seal” road surfacing.

Utilities Department

Water and Wastewater

- Repaired a leak in a 108,000 gallon drinking water storage tank.
- Inspected and cleaned both of the Park’s drinking water storage tanks using a Remote Operated Vehicle via contract.
- Installed anodes in drinking water storage tank to prevent corrosion.



- Due to process improvements relating to Disinfection By-Products (DBP), the Bartlett Cove water system was removed from the AK Department of Environmental Conservation's Significant Non-compliance (SNC) list.
- Received from AK Department of Environmental Conservation a permit to operate a membrane-filtration system to treat drinking water at Bartlett Cove.



- Received from AK Department of Environmental Conservation a permit to operate a retrofitted drinking water system at Gustavus.
- Installed security fencing around the Bartlett Cove drinking water storage tanks and constructed a utility shed within the fenced area.



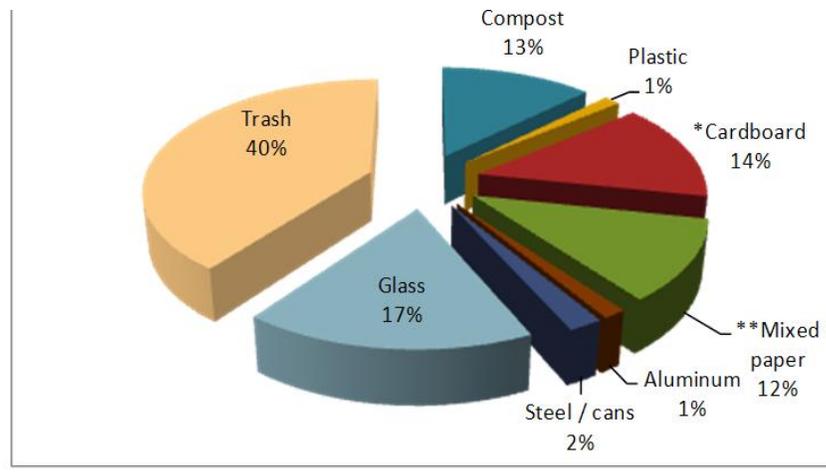
- Removed old penstock and dunnage during a cleanup of the Alder Creek drainage area.



- Pumped out septic tanks at the Dry Bay rafter haul-out site and installed a system to add water to the tanks.
- Repaired a damaged reactor baffle in the Bartlett Cove Wastewater Treatment Plant (WWTP) with assistance from a contracted manufacturer representative.
- Rebuilt a Marine Pump-out (MPO), adding a new control panel, new grinder
- Pumps, and installed an aeration system on the associated storage tanks.
- Rebuilt the administration area sewer lift-station using new a new control panel, new pumps, and added “soft starts” to controls.

Solid Waste and Recycling

- Obtained a new Alaska State Landfill Operating Permit to allow continued use of the Depot site.
- An inspection of the Depot by the AK Department of Environmental Conservation showed 100% compliance with State policy.
- The Park diversion rate for office and household waste improved to 60.3%.



- The total office and household waste stream was reduced to the lowest number of pounds on record at the Park. 18,437 pounds of recyclables were removed from the Park's 30,586 pound waste stream in CY10.
- Constructed a recycling center for use by residents in the Gustavus Park housing area.
- Procured and installed new bear-proof outdoor recycling receptacles for use by the Glacier Bay Lodge concessioner.

Mechanical

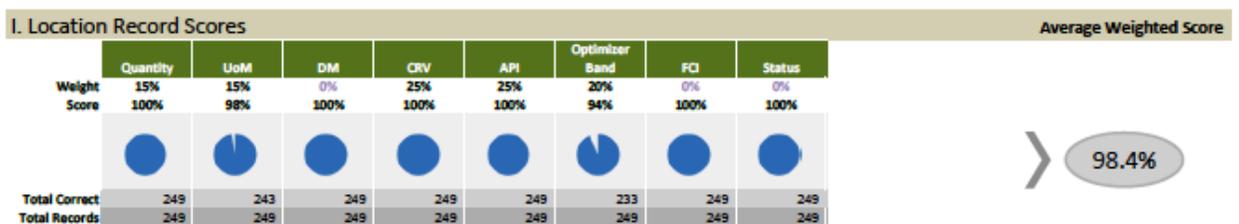
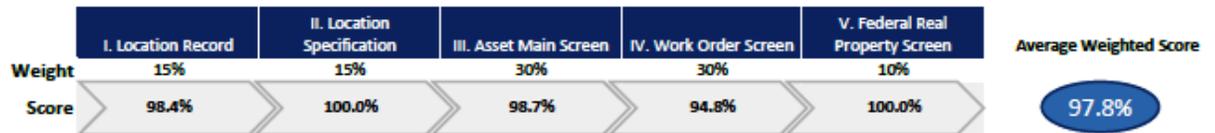
- Replaced the stationary wash-down recycling pressure washer system and procured a portable pressure washer.
- A new boiler and indirect-fired water heater were installed at the Indian Point Office building via an American Recovery and Reinvestment Act (ARRA) funded contract.
- Commenced a contracted project to upgrade fuel dispensers and hose reels at the Bartlett Cove Fuel Dock and shore refueling station.
- Established annual cycles for boiler and backflow assembly preventative maintenance.
- Established daily, weekly, and monthly cycles for fire suppression systems to meet National Fire Protection Association (NFPA) standards.
- Installed a backflow prevention assembly manifold at the Bartlett Cove Inner Lagoon dock.
- Flushed and pressure tested fire hydrants within the Bartlett Cove area.
- Commenced work to install fire suppression systems (sprinklers and alarms) at Bartlett Cove via contract. Construction began with underground work at the Glacier Bay Lodge area.
- Upgraded fire alarm system components at the Park Administration building, Generator building, Maintenance Building, and Glacier Bay Lodge.
- Received new Environmental Protection Agency (EPA) qualifying Tier 3 diesel powered generators to replace the non-compliant generators currently in service at Bartlett Cove. Installation is planned via contract.

Facility Management Program

Facility Management Software System (FMSS) Implementation

- Provided training and support to staff for fully implementing Interpretive Media in the FMSS at GLBA, KLGO, and SITK.
- Updated and improved electronic Daily Work Reports for distribution and use by maintenance employees for recording labor hours and work activities.
- Input Glacier Bay Lodge maintenance deficiencies into FMSS for tracking.
- Completed a thorough inventory, condition assessment, and data entry of interpretive exhibits at the Glacier Bay Lodge (425 asset records) and Lodge trail systems.

- In addition to providing FMSS Network support to GLBA, SITK, & KLGO, provided support to KEFJ, KATM, YOSE, and WASO PFMD on various programs or projects.
- Completed extensive QA/QC on data in the FMSS which improved accuracy on key performance indicators from 85% to 97.8% and achieved the highest Scorecard rating in the Alaska Region.



The Scorecard gives a snapshot of a park’s ability to complete critical fields of data which are essential for effectively managing park resources.

Project Management and Program Support

- Completed beta test and upgrade for the Fleet Management Deployment in the FMSS.
- Completed testing on the WebCRV script.
- Provided support for the second phase of the 35B Utilities Cost Recovery study for Water and Solid Waste systems.
- Scott Vantrease served as a Subject Matter Expert for the Cost Estimating Work Group and the Utilities Work Group for Water and Waste Water Systems.
- Scott Vantrease served as a Subject Matter Expert for the Labor Entry Exploratory Team led by Jeff Reed at WASO to support the Development Operations Group (DOG)
- Provided technical support to WASO PFMD for the FMSS Release of the 6.2.1 Maximo upgrade.
- Provided support and technical data for completing a structural Energy Audit on high priority park assets.
- Provided training in the FMSS, Eos Explorer, PST, and importing projects into PMIS for maintenance staff in the SEAN.
- Created facility projects for SEAN by creating costed work orders, bundling them in the PST, and importing into PMIS.
- Provided support to the park concerning the new program functionality for managing PST Imported projects.

Maintenance Division Administration and Personnel

Planning and Development

- Worked with Regional Staff on several projects including: Accessibility Compliant Trail (from Lodge to Dock area), Huna Tribal House, Whale Skeleton Display Shelter, and Falls Creek Hydroelectric Intertie.
- Submitted numerous projects and various proposals for additional funding through Project Management Information System (PMIS) and Operations Formula System (OFS).
- Drafted revised Housing Management Plan and began preparations for a new Housing Needs Assessment.

Personnel

- Ken Hutchison transferred from Wrangell St. Elias NP&P (WRST) as new Chief of Maintenance (EOD – January 03).
- Scott Vantrease was hired as the Facility Management Systems Specialist (Network) for Southeast Alaska (GLBA, SITK, & KLGO). He also completed requirements to be certified as a National Trainer in FMSS through the National Trainer Development Program.
- Jacob Ohlson attended Fundamentals training.
- Maintenance Supervisors Robert Barte and Mark Ortega completed Supervisor Level II and Contracting Officer's Technical Representative (COTR) training.
- Electrician TJ Farrell earned fire alarm system certification at the National Institute for Certification in Engineering Technologies (NICET) I & II levels.
- Heating, Ventilation, and Air Conditioning (HVAC) Mechanic Michael Williams earned Backflow Prevention Tester Certification.
- Utility Systems Repairer-Operators Jason Parks and Keith Cozby each earned State of Alaska Water Treatment Plant level II certificates.
- Keith Cozby received the 2010 Small Wastewater System Operator of the Year Award. This statewide award is given annually by the Alaska Water/Wastewater Management Association to recognize excellence in wastewater utility operation and services
- Michael Lukes retired from Maintenance Worker position.

ADMINISTRATION

- Completed the processing for 94 Lifetime Access Permits, which are renewed on a 5-year basis.
- By having names removed from U.S. mailing lists, reduced 98% of mail compared to what was received in previous years.
- Donated shredded paper to a local pig farmer to divert the waste from the landfill.

- Disposed of 55 boxes of records in accordance with NPS records management disposition schedule.
- Sent out 489 information packets to students and general requests for information. Provided unknown amounts of information by telephone and email.
- Maintained an active member of the Admin Team on the Park Safety Committee.
- Processed approximately 300 travel authorizations and vouchers.
- Processed 70 purchase requests.
- Began the process for removing excess property from the park.
- Processed 16 deposits of funds received. Also received and processed over 50 fedwires (electronic fund transfers) for receipt of Concessionaire fees.
- Excessed approximately 35 computers and monitors through the Dell Recovery Services.
- Processed approximately 300 personnel actions.
- Hired local resident Christine Spute into the Administrative Assistant (Travel and Property Coordinator) position.
- Balanced the ONPS budget of \$4,782,800 within .0011%.
- Balanced all fund sources and accounts within acceptable limits.
- Hired local student Andrew McDonough as a Computer Assistant.
- Provided Information Technology staff assistance to Sitka National Historical Park during the lapse of their vacant position.
- Chief of Administration provided assistance to the Alaska Regional Office during the Regional Servicewide Comprehensive Call.
- Hosted the Introduction to Supervision class and trained 15 park employees.