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

National Wildlife Refuge System Improvement Act of 1997

In This Issue:
- R/V Arlluk sinks..................... 2
- Swan study................................ 2
- Fire destroys duplex............... 3
- Belugas................................. 3
- Traveling education................. 4
- Help protect eagles................... 5
- Speaker Series ...................... 5
- Calendar Contest..................... 6-7
- Bird events........................... 8

Annual Camp at Risk
Due to Congressionally mandated sequestration budget cuts, funding has been lost for all USFWS supported educational camps throughout Alaska. Taquka Kuik (Bear Creek) Science and Culture Camp in Becharof NWR is no exception.

Friends of Alaska National Wildlife Refuges stepped up to help raise funds for this year’s camp. Friends member Chuck Iliff is spearheading the effort. He was an instructor at the 2012 camp, and is an enthusiastic supporter of education. He can be reached at ciliff2@yahoo.com; or at (907) 315-4406.

Refuge Welcomes New Manager
On May 17, the Refuge’s new manager, Susan Alexander, arrived in King Salmon with her husband Carl Ramm. A Georgia native, Susan is new to King Salmon, but has spent years in other parts of Alaska.

After earning a degree in Biology at Oberlin College in Ohio, she moved north, working for a number of years in Anchorage and Homer for various non-profit organizations, including The Nature Conservancy, Alaska Natural Heritage Program, and Kachemak Heritage Land Trust. In 1994, she started her Fish and Wildlife Service career as an Administrative Assistant at Alaska Maritime National Wildlife Refuge. She later moved to the Alaska Regional Office in Anchorage, where she worked in Realty and as the Chief of the Budget and Facilities Branch for Refuges.

Her most recent move took her back down south – and back to the field – as the Deputy Project Leader for the South Arkansas Refuge Complex. She is now returning north as Refuge Manager of Alaska Peninsula and Becharof National Wildlife Refuges. “I’m thrilled to be coming home to Alaska, and to have the opportunity to manage two such spectacular refuges,” she says.

In introducing herself to her staff, Susan said working as a Refuge Manager in Alaska was a dream come true. “I’ll be floating a few feet off the ground for a while,” she said. Welcome, Susan!
**Research Vessel Arlluk Sinks in Kodiak Harbor**

At 11 p.m. on February 7, the *R/V Arlluk* was tied up in her berth in Kodiak's St. Herman's Harbor. By 3 a.m., she was underwater, lying on her side.

No one was on board at the time. The cause of the sinking is unknown. Captain Orville Lind had guided her through a busy and successful season in 2012, supporting many cooperative and Refuge projects. The vessel was scheduled for improvements during the winter, readying her for the upcoming 2013 season. Preparations were under way to move her to Homer within the month.

Supervisory Wildlife Biologist Ron Britton flew to Kodiak to assist with salvage and the investigation. The engines and generators were determined to be salvageable; but the overall cost of rehabilitating the vessel is far too high for the Refuge.

Built in 1979 and originally named the *Caroline*, the boat was seized by the Drug Enforcement Agency (DEA) in the late 1990s. The DEA used it for undercover operations.

In 2009, the Refuge took ownership, renaming it *Arlluk*, which means “killer whale” in Alutiiq. After refurbishing the motors and other parts, the boat was estimated to be worth $2.5 million. The vessel went to public auction April 19 and sold May 1 for $43,175.

Refuge staff expressed relief that no one was injured. The vessel remained tied to the dock and did not sink to the bottom of the harbor, which made pulling it out of the water and into dry dock much less complicated.

A full season of projects had already been scheduled for 2013. The loss of the *R/V Arlluk* is a tremendous blow to the Refuge. It is extremely unlikely the Refuge can afford to replace the boat.

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**Tundra Swan Collar Data Revealing**

From 2006 to 2010, the USFWS participated with the US Geological Survey’s Alaska Science Center and Madison Wildlife Health Center to capture and test tundra swans for Avian Influenza. No local swans were found to carry the highly pathogenic flu virus. As an additional project, the birds were also collared and banded. Since the fall of 2006, volunteers have been reading and reporting tundra swan collars to Refuge Wildlife Biologist Susan Savage, to USGS Biologist Craig Ely, or to the Bird Banding Lab Collar Reporting web page: http://www.pwrc.usgs.gov/BBL/bblretrv/.

For the 356 tundra swans marked within 100 miles of King Salmon, the USFWS has received over 3,500 individual reports of 276 birds, a remarkable 77% of all the birds marked. And records continue to be received. Biologists at the Refuge and at USGS are cleaning up the data to be used in a classic mark-recapture study. The data will be able to give a survivorship curve for our tundra swan population. This tells us the proportion of individuals surviving from one year to the next and the age structure of the population. The information is useful when estimating the swan population and also important for management decisions, including setting hunting regulations and winter range habitat management.

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**Please Report Bird Bands**

There is no penalty for shooting marked birds. Returned bands help biologists get information.

Report your bands here:
1-800-327-BAND
www.reportband.gov

You can also call Susan Savage at the King Salmon USFWS office: 246-3339.
Fire Consumes Duplex

At 4 a.m. on March 16, Wildlife Biologist Dominique Watts woke to hissing and popping sounds. His alarm clock was off, indicating the power was out. He ran downstairs to discover his home was on fire.

Due to unknown causes, fire started on one side of the government-owned duplex. Dom immediately called 9-1-1, then used a fire extinguisher to suppress the visible flames. A propane tank was within the fire zone, so he grabbed it and ran outside, throwing it far from the house.

In the other side of the duplex, Supervisory Wildlife Biologist Ronald Britton was sleeping. Dom pounded on the front door, and getting no response, ran to the back, intending to go through a window. Luckily, he found the back door unlocked, and ran upstairs to alert Ron. Then he raced back to his side of the structure and grabbed a few things to rescue. Ron exited the building, groping through the thick smoke with some belongings, and drove his truck out of harm’s way.

The Bristol Bay Borough Volunteer Fire Department responded with every volunteer in town and all their equipment. The fire was inside the wall, and spread to Ron's side, pushed by a northeast wind. Volunteers were on the scene until midnight the following night. An estimated 100,000 gallons of water was poured onto the house, but smoke continued to rise from the wreckage for several more days.

Friends, co-workers, and neighbors helped Ron and Dom salvage personal items from the ruin, assisted by volunteer firefighters. An account was set up at the local bank in their names.

The most important thing, said Acting Refuge Manager Tina Moran, is that both men survived.

The duplex was located in a neighborhood built by the Federal Aviation Administration in the mid-nineties. The ruins of the house were demolished, and the debris hauled to the landfill in Naknek. Clean-up of the site is ongoing.

Beluga Whales Provide Information and Subsistence

In May, two beluga whales in the Naknek River drew special attention. One was found dead, wedged beneath the borough dock. The other, a juvenile, was accidentally drowned in a subsistence net.

The adult whale was spotted in the evening of May 18 by a crew member on a vessel tied up at the borough dock. A series of phone calls led to the Alaska Marine Mammal Stranding Hotline: 877-925-7773.

Wildlife Biologist Dominique Watts, Visitor Services Manager Julia Pinnix, and Refuge Volunteer Tom Prang responded. The boat's captain used the vessel's crane to lift the whale over the deck so tissue samples and the head and pectoral flippers could be retrieved. With a permit from NMFS, the skull and bones will be used for education and display at the Refuge.

On May 22, Bristol Bay School middle school students were on the beach for Sea Week. A young beluga became entangled in a subsistence salmon net. It was too deep to safely reach before it drowned. The Alaska Native owner of the net butchered and distributed the meat and blubber so it would not be wasted. Tissue samples from both whales were delivered to NMFS in Anchorage. A wide range of information can be gleaned from these materials.

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Alaska Natives are allowed to harvest beluga whales for traditional subsistence in a non-wasteful manner. For questions about beluga or other marine mammals, call the NMFS Alaska Regional Office at 907-271-5006; or visit the website: www.nmfs.noaa.gov.
Education Programs Reach Many Village Schools

Schools in villages throughout the Alaska Peninsula hosted educational programs delivered by the Refuge in 2013. Volunteer Janet Saczawa and Visitor Services Manager Julia Pinnix spent March and April creating and delivering curricula on insects and paleontology. Janet and Julia visited 7 schools in Lake and Peninsula School District as well as Bristol Bay Borough’s school in Naknek.

Wildlife Biologist Dominique Watts began inventorying bees on the Alaska Peninsula two years ago, discovering a much higher diversity than expected. USFWS Director Dan Ashe issued a Pollinator Challenge in 2012 to incorporate pollinator conservation and education into Refuge work. Our refuge was the top-scoring office in Alaska in 2012. In support of the Challenge and Dom’s continuing research, Janet and Julia taught students about insects and encouraged them to pay attention to and collect bees from their village areas.

The world's oldest Arctic dinosaur tracks are found on the border of Native corporation lands and the Alaska Peninsula National Wildlife Refuge. 150 million years ago, theropods the size of modern humans left prints in a sandy shoreline, preserved today in rocks uplifted by tectonic activity. Janet and Julia helped students learn to appreciate the geological forces at work on the Alaska Peninsula and to recognize and appreciate the many fossils found in the region.

The programs Janet and Julia developed are based on kits assembled over the past year. Refuge Ranger Orville Lind guided the assembly with his intimate knowledge of the learning styles of students in the region. Hands-on activities are emphasized. A collection of real and replica insects and fossils form the core of each kit.

The kits are available for loan to other refuges in Alaska by request, and can also be loaned to teachers in Bristol Bay and Lake and Peninsula school districts. Contact Julia Pinnix for more information: (907) 246-1211; Julia_Pinnix@fws.gov.

Supporting organization Alaska Geographic paid for Janet’s ticket from Alabama to King Salmon. They also supplied additional tickets to send Janet to several villages on Grant Air. Alaska Geographic paid Janet’s way up in 2012 when she was recruited to catalog and organize the Refuge’s educational lending library, located in the King Salmon Visitor Center. The Refuge is deeply grateful for the support Alaska Geographic has consistently shown for educational efforts on the Alaska Peninsula.

Use of the educational lending library is available to all educators on the Alaska Peninsula. Visit the website: http://www.librarything.com/catalog/KingSalmonVC to have a look at the collection. Contact Julia for more information, or contact Debi Tibbetts at the King Salmon Visitor Center: (907) 246-4250; Deborah_Tibbetts@fws.gov.
Eagles Vulnerable

Bald eagles are a common sight in our area, but they are more vulnerable than many people realize. Our nation’s symbol spent decades on the Endangered Species List in the Lower 48. Even in Alaska, populations were depressed due to a bounty from 1917-1952. A ban on the pesticide DDT, increased public awareness, and protection of nesting, feeding, and roosting sites have helped eagles recover.

Eagles are especially sensitive to disturbance when they are nesting. On the Alaska Peninsula, nests are sometimes on or near the ground, since there are few tall trees. People passing by can easily drive eagles from the nest without meaning to. The USFWS Migratory Bird Management Office recommends avoiding nests by 330-660 feet. Watch for nests and give them a wide berth; and remember to keep dogs away from nests, too.

Eagles are still protected under the Migratory Bird Treaty Act of 1918 and the Bald and Golden Eagle Protection Act of 1940. These laws protect eagles from being killed or disturbed. Dead eagles and feathers are sent to the National Eagle Repository. Native Americans with a permit can receive eagle parts and feathers from the Repository for cultural activities.

If you find an injured eagle, call the Refuge office for help: 907-246-3339. Eagles are dangerous animals even when injured, so don’t handle them without advice.

Please report dead eagles to the Refuge, too. You can also call the Bristol Bay Borough police. Another source of help is the Bird Treatment and Learning Center in Anchorage: 907-562-4852. They rehabilitate injured eagles as well as other kinds of birds for release when possible.

Grant Air and Peninsula Airways have helped move injured birds and other animals. Their assistance is important and greatly appreciated. Thanks also to concerned citizens who have reported injured wildlife!

Third Annual Speaker Series Focused on Wildlife

The Refuge’s Speaker Series brings high-quality guest speakers to the Alaska Peninsula during a slower-paced time of year. Three speakers came to share their knowledge of wildlife this winter and spring.

John Trent, newly retired from USFWS Marine Mammals Management, spoke at the Refuge office and Bristol Bay School in Naknek about walrus and sea otters in March. The Refuge’s collection of walrus bones and ivory was put to use as hands-on exhibits.

April’s speaker was timed to coincide with the arrival of beluga whales in the Naknek River. Barbara Mahoney from the National Oceanic and Atmospheric Administration (NOAA) provided information about the white whales at the Refuge office, the school in Naknek, and via the web to 10 schools of Lake and Peninsula Borough.

John Hudson, co-author of two books on Alaskan insects, arrived in May. He gave a talk on dragonflies in the Martin Monsen Library in Naknek, and a presentation on aquatic insects in the Refuge office. At Bristol Bay School, he took 89 students, from preschool through 10th grade, out into the wetlands behind the school to capture and examine aquatic insects. Groups rotated out hourly all day, returning to the classroom wet, muddy, and excited.

This year’s Third Annual Speaker Series could not have happened without assistance from Alaska Geographic, the supporting organization that earns funds from book sales at the King Salmon Visitor Center. Thank you to all those who made purchases from the King Salmon Visitor Center bookstore. The funds raised by sales make events like this possible.
Calendar Contest Draws Winners from Alaska Peninsula

This year’s winners in the 2014 Alaska Migratory Bird Calendar contest were selected by Refuge staff and volunteers. It was difficult to choose with such high quality entries! Some of the local winners went on to become state winners, too, and will appear in next year's calendar. Congratulations to all the winners, and to every participant!

The Alaska Migratory Bird Calendar Contest gives students throughout the state a chance to celebrate birds in art and literature each year. The Refuge has long been a strong supporter of the contest, visiting schools of the Alaska Peninsula to demonstrate how to draw wildlife and providing relevant educational programs.

In January, Wildlife Refuge Specialist Liz Julian and Visitor Services Manager Julia Pinnix flew to four schools in Lake and Peninsula School District and made multiple visits to Bristol Bay School in Naknek to promote the contest and theme: “Healthy Birds for Healthy People.” Liz and Julia delivered programs exploring the link between habitat, birds, and people. Refuge Ranger Orville Lind mentored Liz in teaching drawing. Liz is an accomplished artist, and learned quickly how to share her interest and techniques with students.

Contest Winners *(State winners shown in yellow)*

<table>
<thead>
<tr>
<th>Grade</th>
<th>Student</th>
<th>Art</th>
<th>Lit.</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-2</td>
<td>Starla Jo Matson</td>
<td>X</td>
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<td>Bristol Bay School, Naknek</td>
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<tr>
<td></td>
<td>Ellah Wardell</td>
<td>X</td>
<td></td>
<td>Port Alsworth</td>
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<td></td>
<td>Owen Young</td>
<td>X</td>
<td></td>
<td>Port Heiden</td>
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<td></td>
<td>Tatianna Anderson</td>
<td></td>
<td>X</td>
<td>Chignik Lagoon</td>
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<td></td>
<td>Isabelle Gust</td>
<td></td>
<td>X</td>
<td>Newhalen</td>
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<td></td>
<td>Chariessa Askoak</td>
<td></td>
<td>X</td>
<td>Newhalen</td>
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<tr>
<td>3-5</td>
<td>Lucy Young</td>
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<td>Port Alsworth</td>
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<td></td>
<td>Mikayla Bindon</td>
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<td></td>
<td>Naiya Burgraff</td>
<td></td>
<td>X</td>
<td>Bristol Bay School, Naknek</td>
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<td></td>
<td>Zoe Smith</td>
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<td>X</td>
<td>Port Alsworth</td>
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<td></td>
<td>Katelyn Johnson</td>
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<td>X</td>
<td>Egegik</td>
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<td></td>
<td>Dakota Johnson</td>
<td></td>
<td>X</td>
<td>Egegik</td>
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<tr>
<td>6-8</td>
<td>Cameron Hawkins</td>
<td>X</td>
<td></td>
<td>Chignik Bay</td>
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<td></td>
<td>Lei’Lani Kiana</td>
<td>X</td>
<td>X</td>
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<tr>
<td></td>
<td>Abigail Swanson</td>
<td></td>
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<td>Bristol Bay Christian Learning Center</td>
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<td></td>
<td>Alex Nielsen</td>
<td></td>
<td>X</td>
<td>Kokhanok</td>
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<td></td>
<td>Jamie Chernikoff</td>
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<td>Egegik</td>
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<tr>
<td>9-12</td>
<td>Hope Swanson</td>
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<td></td>
<td>Peter Christianson</td>
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<td>Linda Anderson</td>
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<tr>
<td>All</td>
<td>Hope Swanson</td>
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<td>Manager’s Choice</td>
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<tr>
<td>All</td>
<td>Dakota Johnson</td>
<td>X</td>
<td></td>
<td>Manager’s Choice</td>
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</table>
These selections from the poster entries for 2013 highlight the creative work done by students throughout the region.


**Christmas Bird Count Completed**

Ten souls braved the weather for the 27th King Salmon/Naknek Christmas Bird Count on December 16. Although the day was clear, calm, and beautiful, the temperatures made this year’s count among the three coldest, rivaling 2001 and 1992 with -15 degrees F reported at King Salmon. Teams fanned out from Lake Camp to Naknek, with other counters watching feeders. Refuge staff opened the Visitor Center on the 15th to gear up for the count.

We recorded 858 birds of 15 species/species groups. No species were observed during count week that were not reported on count day. We counted these birds in 59.3 miles and 8.4 hours of driving, 1.55 miles and 2.2 hours of walking, and 7 hours at feeders. The total was below our average by about 560 birds, and ranked 7th lowest number out of 27 counts. Only two species exceeded their 27 year average: black-billed magpie, and boreal chickadee.

The birds of the day included: a gyrfalcon seen over the airport, a northern hawk owl, a red-breasted nuthatch at a feeder, and a white-throated sparrow (present at a feeder most of the winter). The white-throated sparrow was unknown to the area prior to this sighting.

The nationwide website for Christmas Bird Count is: http://birds.audubon.org/christmas-bird-count. Our data are posted on the web page.

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**International Migratory Bird Day Celebrated**

Fifteen people turned out for the 15th annual International Migratory Bird Day on May 11. This year’s theme was Life Cycles of Migratory Birds. Three teams counted from Lake Camp to the Kvichak Beach.

Although the spring has been cold and late, our count total (6,795) was above the average (5,996). Sixty-nine species were counted (average is 70). We did not add any new species this year. Highlights included: a parasitic jaeger chasing down a mew gull, several merlin pairs courting or mating, mating Hudsonian godwits, several collared swans, and a rough-legged hawk.

Thanks to our team leaders: Rod Cyr, Richard Russell, and Kevin Payne. Special thanks to all who helped to make International Migratory Bird Day 2013 a success. For more information on the count, or birds in general, please contact Susan Savage at (907) 246-1205 or susan_savage@fws.gov.

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**Bird House Event a Hit**

On April 20, the Refuge hosted 11 children at its second Cavity Nesting Birds Workshop. Kids and parents learned about the two most common cavity nesting birds found locally: tree swallows and black-capped chickadees. Lessons included nesting biology and how to build and install nest boxes that are healthy and safe for the birds.

Tree swallows are migrant insect-eating birds. Recently there has been concern about the population health of species in this group of birds. Chickadees, on the other hand, are resident omnivores who may nest in the boxes in spring and roost in them in winter.

Participants were encouraged to monitor the nesting activities in their boxes and contribute information to the Cornell Nest Watch Web Site: http://www.allaboutbirds.org/page.aspx?pid=1139. Refuge staff have maintained 5–10 nest boxes on the Refuge compound and at staff housing for over 15 years and have contributed to the Nest Watch database since 2007.

Unfortunately, last year was a bad one for nestlings. We lost the entire clutch in 3 of 6 boxes and half the clutch in another box. Although some dead nestlings were sent to the Wildlife Health Center in Madison, Wisconsin, they were unable to determine the cause of death. We hope nesting success is better this year so we can see our nestlings take flight!