In spring 2004 a large chunk of earth collapsed along the upper Selawik River, spewing mud and silt into the water and pushing the river against its far bank. Gooey sediment from the landslide turned the clear upper Selawik River into an opaque, turbid stream. Although more than two years have passed since the landslide, mud and silt continue to drain into the river especially during the warm summer months.

Many ideas have been tossed around as to what triggered the landslide. Thawing permafrost? Heavy rain? Warm springs? Climate change? So far no one knows for certain what caused it.

Important spawning grounds for sheefish and whitefish are located downstream of the landslide. Will the extra mud and silt in the river be harmful to the spawning habitat and water chemistry?

To help answer this question, Fish and Wildlife Service staff are teaming up with researchers from the University of Alaska Fairbanks. Together they will analyze water samples to determine the effect of the muddy outflow on the river and on spawning habitat. They will also study the geology of the area, looking for clues as to what triggered the slide.

No one lives year-round near the landslide so its immediate effect on humans was small. However, Selawik residents depend heavily on sheefish and whitefish for subsistence. Any disruption to fish on the river would be cause for serious concern.

We welcome any experience or thoughts you might have on landslides like this. Please feel free to call or stop by our office. And stay tuned for future updates! For more photos of the slide, please turn to the back page.
Iñupiaq elders have long known that sheefish aren’t found in Tagragvik River (a major tributary of the Selawik), so it was surprising to learn that sport fishermen were catching them there this fall. If this were true, why and when did sheefish move into this area? With the help of Selawik residents, Fish and Wildlife Service staff plan to investigate this next summer.

Sheefish in Stunning Numbers

Sheefish spawning in the upper Selawik River have exploded in number over the past 10 years, according to a recent study on the Selawik National Wildlife Refuge. The surprising results showed that 4 to 9 times more sheefish spawned in the Selawik River in 2004 and 2005 than in the mid-1990s.

Smaller and presumably younger sheefish accounted for most of the increase, leading biologists to think that unusually good conditions in these fishes’ early lives spurred this population growth.

Sheefish, called sii in Iñupiaq, are the largest whitefish found in northwest Alaska. They spawn in late fall in the upper Kobuk and Selawik rivers before traveling downstream to winter in Kobuk and Selawik lakes. They are long-lived, reaching up to 35 years old. Subsistence fishermen net and hook sheefish wherever they are found, relishing the sweet meat and tasty eggs.

The preliminary estimate of the 2005 population of spawning sheefish in the Selawik River was a whopping 46,472 fish (±46%). The 2004 estimate was slightly more than 23,000 fish (±45%). In 1995 and 1996, fewer than 5,200 sheefish spawned in the Selawik River. That is quite a difference over 10 years!

Ray Hander of the U.S. Fish and Wildlife Service, Fairbanks Fish and Wildlife Field Office, led the 2004-05 study. Local Selawik residents Frank Berry, Jr., Lawrence “Bob” Foster, Sr., Elvie Stoney, and Artemus Coffin participated in the field work, providing critically important knowledge of the local area and conditions. Catching fish for the study proved to be unexpectedly challenging because a large landslide in the upper Selawik River in 2004 muddied the normally clearwater river. (See story on page 1.)

Scientists know little about the long-term cycles of sheefish or their complex life history. They have far more questions than answers and few biological clues as to what might account for the population explosion in the Selawik River. Is the same increase in spawning sheefish happening elsewhere? Was the 1990s population estimate unusually low, or is the more recent one unusually high? Is this increase related to climate change?

Biologists hope that a combination of further research and observations by local subsistence fishermen might help shed light on these questions. If you have any thoughts to share about the numbers of sheefish in our region, we’d love to hear from you!

Sheefish in Tagragvik River?

Iñupiaq elders have long known that sheefish aren’t found in Tagragvik River (a major tributary of the Selawik), so it was surprising to learn that sport fishermen were catching them there this fall. If this were true, why and when did sheefish move into this area? With the help of Selawik residents, Fish and Wildlife Service staff plan to investigate this next summer.
Good News from Bird Flu Testing

Last summer Fish and Wildlife Service tested swans and ducks in the Northwest Arctic region for avian influenza, commonly called the “bird flu.” The results are now in and the news is good! We are happy to report that all the tests were negative for the bird flu virus everyone is concerned about (the highly pathogenic H5N1 virus).

We tested 128 swans last summer from the Noatak and Kobuk River deltas, Taggagvik River, Baldwin Peninsula, and the Buckland River mouth. We also tested 45 pintail ducks from the Kauk River north of Buckland. Two of these ducks tested positive for a mild form of bird flu that is no threat to humans.

More than 20,000 birds were tested throughout Alaska, and no evidence was found of the bird flu virus everyone is concerned about (highly pathogenic H5N1). As of February 2007, this bird flu virus has not been found anywhere in North America, in either wild or domestic birds.

It is likely that the bird flu testing projects in our region will continue again next year. We should soon know more about our 2007 plans.

We appreciate everyone’s effort in keeping informed about the bird flu. Thanks to all of you for being the “eyes and ears” for anything unusual near your villages!

Launching a bird flu testing project on short notice was no easy task. We’d like to thank the Buckland IRA Council and temporary hire Percy Ballot for making it possible. They helped us locate a suitable camp, move gear and equipment, and keep the community informed of our activities.

Ten Buckland high school students visited the field camp in August to learn more about waterfowl, bird flu, and the testing project. The visit was part of a culture-science camp run on a volunteer basis by Sherry Swan and other Buckland residents. Thanks to Sherry and Percy for bringing the students by and making this a great experience for all!

A male northern pintail duck (kurugaq). Pintails were one of the priority birds for bird flu testing because they feed in agricultural areas in winter and some migrate between Alaska and Asia.

Biologist Tina Moran explains the bird flu testing project to Buckland students last August.

The Kauk River area north of Buckland (right) was selected as one of the sites for bird flu testing in 2006 because of the large number of pintail ducks that gather here in the late summer and fall. Biologists set up their camp (above) about two miles up the river.
See Anything Unusual Lately?

Strange animals occasionally appear in northwest Alaska and last year was no exception.

For instance, last summer Selawik residents spotted a never-before-seen bird in their village. Clyde Ramoth snapped its photo and biologists identified it as a ruff, a type of large shorebird found mainly in Europe and Asia and rarely in Alaska. During the breeding season, the male attracts a female by showing off its “ruff”—colorful upright feathers that ring its neck. Selawik residents enjoyed watching this unusual migrant for several days before it moved on.

Along the Kobuk River several people reported catching an unfamiliar fish, which turned out to be a lake trout. Kobuk River elders and biologists both say this fish is uncommon but not unheard of in the Kobuk River. What is unusual is how frequently it has been caught in recent years. No one knows for sure why.

If you see any unusual animals, we’d enjoy hearing about it! Please feel free to call or stop by our office to share your observations.

View from the Village

by Clyde Ramoth, Refuge Information Technician, Selawik

Hello from Selawik! My name is Clyde Ramoth and my Iñupiaq name is Algan after my grandfather from my father’s side. My parents are Ralph and Emma Ramoth of Selawik. I have five beautiful children—three boys and two girls—here at Selawik.

I’ve been employed with the Selawik National Wildlife Refuge since October 2001. I really enjoy my job as a Refuge Information Technician. It is challenging which makes it fun and keeps me busy when I am not at home helping raise our five children.

In addition to my job, I am also the Tribal Council President for our Village IRA Council. We have over one thousand people enrolled in our tribe. I am also Vice-President of our local Advisory School Council. The reason I enjoy helping is because I was raised to help our people the best way I know how. I chose to get involved with local and regional issues to help our people in important areas like hunting regulations, user conflicts, traditional laws, conservation, and learning to work with others.

My job duties include attending meetings, coordinating our annual Science-Culture Camp, visiting the Selawik School for the Migratory Bird Calendar Contest, assisting in steel-shot clinics, driving boats and snowmachines, maintaining our equipment, and assisting in outreach activities. Recently I assisted in a harvest survey on birds, fish, and wildlife here at Selawik.

I really enjoy talking to people about conserving our natural resources for the future generation. I also enjoy visiting our elders and listening to their concerns and their wisdom. Their advice is always welcome. I would like our next generation to enjoy the peace and quiet at camp and the wonderful country we have within our Refuge.

I have an office in Selawik next to McCoy’s Store and my phone number at work is 484-2118. Anyone is welcome to stop by or give me a call. I look forward to hearing from you!

Selawik Refuge Staff

- Lee Anne Ayres
  Refuge Manager

- Patrick Snow
  Wildlife Refuge Specialist, Supervisory

- Tina Moran
  Wildlife Biologist

- Nate Olson
  Wildlife Biologist

- Susan Georgette
  Outreach Specialist

- Clyde Ramoth
  Refuge Information Technician

- Mary Jane Scherer
  Administrative Technician

- Shawn Nelson
  Maintenance Worker

- Kevin Whitworth
  Wildlife Refuge Specialist
“Fish That We Eat” Now Available

A new book called *Iqaluich Nigiñaqtuat: Fish That We Eat* is now available. This intriguing book honors traditional Inupiaq knowledge about gathering, storing, and cooking fish. It briefly describes each fish in northwest Alaska and presents recipes for its preparation and use. The recipes give as much detail as possible so readers can continue to create and enjoy these highly nutritious foods long into the future. Many photos, sketches, and personal stories enrich the text.

The book’s author, Anore Jones, lived in the Ambler and Sisualik areas from the 1960s to the 1980s. She became fascinated with Native foods, learning the traditional ways from elders and from living on the land herself. *Fish That We Eat* follows Anore’s well-known first book *Nauriat Nigiñaqtuat: Plants That We Eat* published by Maniilaq Association in 1983. *Plants That We Eat* has long been out-of-print but is now scheduled to be reprinted by the University of Alaska Press.

The U.S. Fish and Wildlife Service, Office of Subsistence Management, funded Anore’s writing of *Fish That We Eat*. The Selawik National Wildlife Refuge printed 200 copies of the book to distribute to schools, tribal offices, local organizations, and individuals who contributed to the project. Limited copies are still available from the refuge office. An on-line version can also be downloaded from the Office of Subsistence Management website at [http://alaska.fws.gov/asm/fisindex.cfm](http://alaska.fws.gov/asm/fisindex.cfm). Please contact us at 907/442 3799 for more information.

Counting Moose

Packed with willows, sloughs, ponds, and islands, the Kobuk River delta is a dream-come-true for moose. Yet despite its importance as moose habitat, biologists had never obtained an estimate of the moose population in this area. Last spring they set out to correct this.

For seven days in March 2006 biologists from four agencies counted moose from low-flying airplanes. They covered an area bigger than some of the Lower 48 states—from Ambler downstream to the Kobuk delta and up most of the side rivers along the way. Moose are easiest to count in the early spring when they congregate in willow thickets along rivers and stand out against the white snow and bare branches.

The results of this successful survey showed that an estimated 2,245 moose inhabit the Kobuk River delta, or about one moose per square mile. This is one of the most densely populated areas for moose in our region.

In March 2007, biologists hope to count moose again, this time in the entire Selawik River watershed and the Kauk River area northeast of Buckland. The long-term plan is for the agencies to cooperatively count moose on a rotational basis in the different areas of the region. In 2008, for instance, effort will shift to the Noatak River drainage, then to the Seward Peninsula in 2009, and back to the Kobuk River area in 2010. An approach like this efficiently uses time and money.

During the March 2007 moose count, staff will be based at the Fish and Wildlife Service cabin near the mouth of Kuugruak River on the Selawik Refuge. They hope to complete the count in two weeks or less.

Biologists participating in this project include Jim Dau (Alaska Department of Fish and Game), Nate Olson (Selawik National Wildlife Refuge), Brad Shults (National Park Service), and Kyle Jolly (Bureau of Land Management).

We welcome any comments or suggestions about this newsletter. Please contact Susan Georgette at 907/442 3799, toll-free at 800/492 8848, or e-mail susan_georgette@fws.gov.
More Landslide Photos. . .
The enormous scale of the landslide on the upper Selawik River can best be seen from the ground (above left). If you look carefully, you can spot a person (Frank Berry, Jr. of Selawik) wearing a green jacket to the upper right of the photo’s center. The slide has muddied the Selawik River, which now flows in sharp contrast to its clearwater tributary, the Tagragvik River (above right). Read more about this story on page 1.