# ENVIRONMENTAL NEWSLETTER

MARCH/APRIL 2012

#### **Native Village of Kalskag**

## **IGAP Update**

The Igap dept. has a busy year ahead of us. We will be hosting 2 trainings this summer at the multifacility. The first one will be on Household Hazardous Waste, which will be approximately 3 days. The tentative dates are June 21-23. All residents of Kalskag and Lower Kalskag are welcome to attend. We will be inviting other IGAP dept. around our area to attend. And we will start collecting Household Hazardous Waste after the workshop.

The 2<sup>nd</sup> one will be on Oil Spill Response. Kuskokwim Watershed will be providing this training to anyone that is interested. We are still in the planning stages, and once we get the agenda finalized we will send it out to the surrounding villages. The tentative dates for this training is June 25-27.



#### Wood Burning Info

Smelling smoke may smell good, but it's actually bad for you. Smoke can reenter the house dwellings. People are most Vulnerable if they have asthma, diabetes, heart and lung disease. There are gases and particles especially particles are linked to causing health problems such as increased respiratory symptoms, irritated airways, coughing and having trouble breathing, decreased lung function, aggravated asthma, development of chronic bronchitis, irregular heartbeat, nonfatal heart attacks and premature death in people with heart or lung disease.

#### March 2012

By IGAP Dept. BillyJean Stewart Elias Alexie and Sharay Alexie

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## Mercury and Fish



Fish and other traditional foods are very nutritious and are usually an excellent choice for a healthy diet. However, some fish may not be safe for women of child-bearing age and young children to eat in large amounts because they contain mercury. The Alaska Division of Public Health has provided a fact sheet on mercury in burbot (lush) and pike from the Middle Kuskokwim River area. It includes preliminary consumption advice for women and children who eat pike, burbot, and burbot liver caught in the Mid-Kuskokwim River and nearby streams. The guidance is preliminary, meaning that it will be updated with final numbers and additional guidance for dried pike and pike of different sizes when we have completed the testing. For example, large pike (those longer than 2 feet) generally have higher mercury concentrations than small pike, even if they are from the same area. If you have any questions about this fact sheet or Alaska's fish consumption guidelines, please contact the Environmental Public Health Program at (907) 269-8000. Thank you.

Mercury Concentration mg/kg weight	mg wt	kg wt	How much to eat
Burbot (lush) liver Mid-Kuskokwim River	0	0.15	unlimited
Burbot & Pike liver George river, Stony river, & Mid-Kusko	0.15	0.32	16
Burbot meat from the Mid-Kuskokwim River	0.32	0.4	12

#### **Wild Chinook Salmon Declining**

The Chinook salmon, Oncorhynchus tshawytscha, is the largest species in the pacific (Oncorhynchus) salmon family. Chinook are an anadromous fish native to the North Pacific Ocean and the river systems of western North America ranging from California to Alaska.

Scientists have found that only about ten percent of the fall-run Chinook salmon spawning in California's Mokelumne River are naturally-produced wild salmon. A massive influx of hatchery-raised fish that return to spawn in the wild is masking the fact that too few wild fish are returning to sustain a natural population in the river.

The study, published in the online journal PLoS ONE, highlights the danger of relying on ordinary census For this study, the researchers were able to identify hatchery fish by using a novel technique to detect traces of a hatchery diet preserved in the ear bones of adult fish. A copy of the full article is available at techniques to evaluate the health of wild salmon populations and their habitats. http://bit./z03jzH







## Scientists Find no Radiation in Alaska's Sick Ringed Seals



#### **Energy Wise Info**

The wattage rating tells how much electricity a bulb uses, not how bright it is. Compact fluorescent light bulbs are a bright idea. They use less electricity and last up to 10 times longer than incandescent bulbs. Fluorescent light bulbs use 75 percent less energy then incandescent bulbs. With 100 -watt incandescent bulb produces the same amount of light as two 60-watt bulbs and uses less energy. Standard incandescent bulbs use only 5 to 8 percent of their energy to produce light. The rest is dissipated as heat. Lamps placed where their light can reflect off at least two walls, such as in a corner, provide the most light for your money.

Many devices can help save energy on lighting. Look for automatic timers, motion sensors and dimmers. Linear fluorescent tubes are suitable for your kitchen, bathroom and utility area, and come in all sorts of styles and lengths. A halogen lamp is like an incandescent lamp with a special reflector to improve light focus. Outdoor halogen lighting is great for gardens and pathways, and it uses much less energy than standard incandescent lights. Halogen lighting has light output that is similar to a regular incandescent bulb but uses up to 40 percent less energy. These are some ways to save energy.

Radiation does not appear to be causing the mysterious affliction that has sickened and killed scores of Arctic ringed seals, according to NOAA and US Fish and Wildlife Service

Scientists have conducted preliminary qualitative screening of a few tissue samples from both healthy and sick seals involved in this unusual mortality event for possible radionuclide exposure. Because of the timing and scope of the March 2011 Fukushima Daiichi nuclear power plant accident in Japan, radiation exposure was one of many factors assessed. However, no radiation levels were found in these samples that would directly cause the symptoms seen in the seals. Test results show radiation levels are within the typical background range for Alaska.

An international team of scientists continues to investigate the cause of the 2011 unusual mortality event. Drs. John Kelley and Douglas Dasher, who are the leads for the radiation assessment, are working with the University of Alaska Fairbanks' School of Fisheries and Ocean Sciences and College of Natural Science and Mathematics Engineering, Science and Technology Experiment Station on this investigation.

Any finding of radiation levels that exceed human food consumption guidelines would be immediately reported to the Alaska Public Health authorities, subsistence hunters and their communities.

A copy of the news release is at

http://go.usa.gov/Upf

Information on the seal assessment progress and findings can be found at http://go.usa.gov/UpG

## Recycling 101

Recycling is one of the most feel-good and useful environmental practices around. The benefits go way beyond reducing piles of garbage -- recycling protects habitat and biodiversity, and saves energy, water, and resources such as trees and metal ores. Recycling also cuts global warming pollution from manufacturing, landfilling and incinerating.

Recycling means a lot more than bringing your newspapers and cans to the curb. Truly successful recycling involves minimizing waste along the entire life cycle of a product, from acquiring raw materials to manufacturing, using and disposing of a product. Most environmental impacts associated with the products we buy occur before we open the package, so buying products made from recycled materials is just as important as sorting waste into the right bins. And when we reduce the amount of stuff we buy in the first place, and reuse what we can, we reduce the environmental harm associated with acquiring raw materials and manufacturing.



## **Bon Appétit**

#### **PICKELED PIKE**

Recipe by: Grandma Connie Samuelson

- 1. Skin and fillet the pike
- 2. Salt the fish for 3 or more months
- 3. Cut into cubes
- 4. Steep for 2 days

1/4 cup pickling spice

- 2 cups Vinegar
- 2 cups apple cider vinegar
- 1 cup water
- ½ cup sugar
- 1/2 tsp dill weed
- 1 small onion sliced
- 1 cup wine optional
- 5. Soak for 3 days in a closed container
- 6. Stir once or twice a day
- 7. Then eat

#### **DUMP CAKE**

- 1 can of pineapple
- 1 can of cherry pie filling
- 1 box of dry cake mix
- 1 stick of butter
- 2 cups of walnuts

Grease pan.

Put ingredients in that order.

DO NOT MIX THE CAKE MIX.

Cook it for 45-50 minutes at 350 degrees, cool off.

It's your choice to add whipped cream on top.

The easiest cake you will ever make. Experiment with different fruit ingredients.

Hope you enjoy.

#### **Disease Vector Pathogens**

By: Sharay Alexie

Disease vectors are very common around the world and are the most contaminant disease carriers. Disease vectors can infect any living organism, such as: people, animals, insects and birds. Vectors are organisms that transmit infections to one host to another. There are different types of disease vector cycles. The most common vectors would be blood born insects, human wastes and dump sites.

Blood born insects carry parasites in their body system. For example, a mosquitoes' parasite is located in their salivary glands; when a mosquito inserts its mouth into the skin of the host, the parasite enters the blood stream of the host, the host is now infected with the mosquitos' parasite, and the parasite can be infected with malaris or west nile. Most parasites in mosquitoes are harmless and could only cause redness in the skins surface. Disease infected mosquitoes would depend on the number of hosts it has fed from.

The second most common vector would be human wastes. A human waste contains a massive amount of germs and bacteria. The cycle for this vector is very simple to contaminate another. The proper thing to do is to wash your hands after bathroom use to avoid becoming a vector for this cycle which could contaminate everything that person has touched. Another problem would be human wastes contaminating a certain area; for example, human wastes spotted in any area of the land could easily contaminate to any living organism or object just by passing through that infected area. This would be a vector for any disease a human carries or lime disease.

The third vector pathogen is dumpsites. The area of a dumpsite contains all kinds of contaminants; human wastes, oil, insects, birds, battery acids, mixed chemicals, plastics, led, iron, and etc. Any living organism such as birds, humans, animals, and insects that pass through a dumpsite is infected with the contaminants the dumpsite holds. Also vehicles such as: cars, trucks, snowmobiles, 4-wheelers and tractors would be contaminated passing through the dumpsite. All these living organisms and objects can pass the contamination to another object or living organism just by touching another. The vector for this cycle would be carrying all kinds of diseases the dumpsite holds.

## The Time it Takes Litter to Decompose

Paper 2-5 months

Orange 6
Peels months

Milk Cartons 5 years

Cigarette Butts 20 years

**Plastic** 15-20 **Bags** years Leather 25-40 Shoes years **Nylon** 30-40 Cloth years 150-200 **Plastic** Containers years

Aluminum 80-100 years

Styrofoam NEVER

#### What we recycle:

- ~Aluminum cans
- ~All types of batteries
- ~All brands of ink cartridges
- ~Lightbulbs/fluorescent lights
- ~Electronic Waste:

(tv's, computers, fax machines, cell phones, i-pods, anything electronic)

CALL 471-2322 IF YOU WOULD LIKE US TO PICK UP YOUR RECYCLABLES

#### **BEAR CONTROL**

The Board of Game voted unanimously to take steps to increase the moose population in the middle Kuskokwim River area by establishing a bear control program. The approved bear predation control area is located in some of the best moose habitat along the middle Kuskokwim River, which previously supported high levels of harvest for hunters throughout the Kuskokwim drainage and elsewhere.

"The moose population is very low, and local people depend on moose meat. About half of the unit is closed to moose hunting, and the other half is open only to very limited Tier II hunting," said Board Chairman Cliff Judkins. "This program will allow moose numbers to rebound much faster than they can now. "Suitable habitat is available to support a larger moose population. Predation has been identified as a leading factor limiting moose production. A wolf control program has been in effect since 2004 in Unit 19A, and the wolf population has been reduced to a low, sustainable level by qualified members of the public, but bear predation on moose calves in spring and summer is likely slowing moose population recovery. The Board approved a program in which Department of Fish and Game staff will attempt to reduce the black and grizzly bear population in a small portion of Unit 19A as low as possible for two consecutive Spring periods. The entire subunit encompasses about 10,000 square miles, but bears would be killed only within the 540 square mile management area. Department staff will shoot all bears from helicopters.

The Unit 19A program is modeled after a successful program near McGrath in 19D, where reduction in both wolf predation and bear predation resulted in timely and measurable growth in the moose population. As a result, a moose hunting season has been reestablished in the area after a five year closure. A research program conducted in the McGrath area of Unit 19D in 2001-2007showed that bear predation was the primary mortality factor on moose calves. Department staff reduced bear predation by capturing black and grizzly bears and moving them to other parts of Alaska. A similar situation exists in the approved Unit 19A bear control area, which is less than 100 miles from the McGrath research area. Moving bears was not approved in the Unit 19A program due to concerns from residents of other parts of the state who voiced opposition to translocating bears to their locale and the high cost. Reducing bear predation on moose in the proposed control area is expected to substantially increase the rate of recovery in the moose population. Without a bear control program, the moose population would likely take more than a decade to grow back to the level needed for local moose harvest. Department staff will salvage as many bear carcasses as possible and distribute bear meat to local communities.

The program will be in effect during spring of 2013 and 2014

## Did You Know?

- Each person in the United States throws away an average of one ton of garbage per year.
- The cities and county create 170 million pounds of house hold garbage and waste water sludge each year.
- We use more than 67
  million tons of paper each
  year which works out as
  about 580 pounds per
  person.

Each pound of aluminum makes 32 cans. About 90% of the contents of our bins could be REUSED or RECYCLED.

Think twice before throwing the trash into dustbin. You can REDUCE the use of some items, can reuse some of them like paper and cardboard and take some of them (cans, plastic, bottles, batteries, lights, and ink cartridges) to recycle center.

Daily soda drinkers better keep exercising! To burn off 250 calories in a 20 ounce bottle of regular soda, a 135 pound person would have to:

- Walk 3 miles in 45 minutes
- Play vigorous basketball for 40 minutes; and/or
- Bike vigorously for 22 minutes

## Activities For March/April

## March 2012

Sun	Mon	Tue	Wed	Thru	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12 Sewing 4-8pm	13 Sewing 4-8pm	14 Sewing 4-8pm	15 Sewing 4-8pm	16 Sewing 4-8pm	17
18	19 Sewing 4-8pm	20 Sewing 4-8pm	21 Sewing 4-8pm	22 Sewing 4-8pm	23 Sewing 4-8pm	24
25	26 Sewing 4-8pm	27 Sewing 4-8pm	28 Sewing 4-8pm	29 Sewing 4-8pm	30 Sewing 4-8pm	31

## **April 2012**

Mon Sewing R-8pm	Tue 3 Sewing	Wed 4	Thru 5	Fri 6	Sat 7
Sewing	Sewing	-	5	6	7
	_	Cowing			,
	4-8pm	Sewing 4-8pm	Sewing 4-8pm		
)	10	11	12	13	14
	Sewing 4-8pm	Sewing 4-8pm	Sewing 4-8pm	Sewing 4-8pm	
6	17	18	19	20	21
Sewing I-8pm	Sewing 4-8pm	Sewing 4-8pm	Sewing 4-8pm	Sewing 4-8pm	
23	24	25	26	27	28
Sewing I-8pm	Sewing 4-8pm	Sewing 4-8pm	Sewing 4-8pm	Sewing 4-8pm	
30					
Sewing I-8pm					
30	6 ewing -8pm 3 ewing -8pm 0 ewing	10 Sewing 4-8pm 6 17 ewing 8pm 4-8pm 3 24 ewing 8pm 4-8pm 0 ewing ewing	10	10 11 12 Sewing 4-8pm 4-8pm 4-8pm 4-8pm 4-8pm 4-8pm 4-8pm  6 17 18 19 Sewing 4-8pm 4-8pm 4-8pm 4-8pm 4-8pm 4-8pm  3 24 25 26 Sewing 4-8pm 4-8pm 4-8pm 4-8pm  0 ewing 8-8pm 4-8pm 4-8pm 4-8pm	10

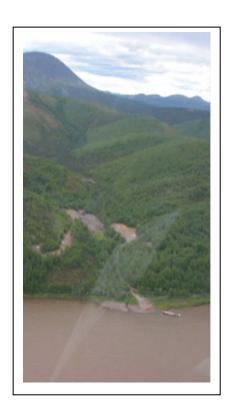
"The difference between animals and humans is that animals change themselves for the environment, but humans change the environment for themselves." By Ayn Rand

#### **RED DEVIL MINE CLEAN UP UPDATE**

The DEC has been working with the EPA to oversee the BLM's Remedial Investigation work. Field work for the Remedial Investigation and Risk As-Mine tailings are shown adjacent to the settling pond in an August 2009 photo. Alaska Department of Environmental Conservation – Spill Prevention and Response Division – Contaminated Sites Program October 2011 assessment were conducted to a limited extent in 2010and more extensively in 2011. The purposes of the Remedial Investigation are to determine:

If the tailings and soil at the site exceed state screening levels, and if so, where and at what concentrations. If the sediment and surface water in Red Devil Creek exceed federal and/or state screening levels for metals, and if so, where and at what concentrations. If the groundwater at the site exceeds federal and state cleanup levels, and if so, where and at what concentrations. If the sediment in the Kuskokwim River exceeds federal screening levels, and if so, where and at what concentrations.

If free-phase mercury is present outside the hazardous waste monofill and if the monofill is an appropriate long-term solution to the storage of that material. The concentrations of naturally occurring metals in the background media. How the contaminants migrate through the soil and groundwater to Red Devil Creek and the Kuskokwim River. The BLM will also conduct both a Human Health and Ecological Risk Assessment to calculate the risk from the contamination at the site to humans, animals (terrestrial, avian and aquatic) and plants. Both the Remedial Investigation and Risk Assessment Report are scheduled to be finalized in the summer of 2012. The BLM plans to prepare a Feasibility Study in late 2012 that will evaluate different cleanup options. The DEC and EPA will be working with the BLM to select appropriate cleanup alternatives to evaluate.



#### NEW IGAP ASSISTANT: ELIAS ALEXIE

Hello community readers! My name is Elias Alexie and I started working for IGAP in November 2011 and went to 3 trainings. So far, I went to the ATCEM Conference, B.I.A. Provider's Conference and the IGAP training in Anchorage. There was a lot of information I learned going to these trainings and learning from different villages how they back haul, recycle, and keep their dumps in good condition. At the ATCEM training it was very interesting, some villages throw their garbage into a lake or a creek and not knowing there are many toxins that can affect people and wildlife. At the B.I.A. conference, people mentioned it's getting harder to fish and hunt due to strict regulations. The fish are declining and so are the moose in our area. I look forward in protecting our subsistence lifestyle, and keeping our community clean and healthy for future generations to come.



## RAVEN AMERICORPS MEMBER Sharay Alexie

My name is Sharay Alexie, and I've recently been hired by RurAL Cap to be a part of the new 2012-13 RAVEN AmeriCorps Program. The mission statement for this program is to empower low income Alaskans through advocacy, education, affordable housing and direct services that respect our unique values and cultures. The direct role for my job is Community Development: Identifying environmental issues or problems with the community, working with the tribal council, clinic, schools and other entities to improve awareness and understanding of community environmental problems or culture.

I work with IGAP to improve the recycling program and project sites. I also help plan and conduct healthy activities for the youth and community. I work Monday-Friday 9am-5pm. If you need to contact me, call 471-2322.



"You must be the change that you wish to see in the world." -Mahatma Gandhi

#### Teacher's Needed!!! Sewing/Craft Nights

We are looking for talented Youths and Adults to teach specific Traditional Activities starting in March and end in April. Crocheting, beaver hats, quilting, guspuk, trapping, slippers, beaver gloves, beading, head dress, dancing fans, mukluks, knitting gloves and hats. Call Bonnie or Denise 471-2207 for more info. See calendar for schedule.

## WINTER PRECAUTIONS

You are never too careful when it comes to traveling during the winter and the slightest mishap could be devastating. Whether you are going out ice fishing, gathering woods, hunting, or recreational activities outside of town, you'll need to:



- 1.) Tell someone where you are going and when you will return.
- 2.) Once you've returned contact everyone that you've notified that you're back so that they'll know you're safe.
- 3.) Bring enough food to last a few days.
- 4.) Bring thermos full of hot beverages.
- 5.) Bring spare gas.
- 6.) Bring extra clothing.
- 7.) Always travel in groups and never travel alone.
- 8.) Always bring VHF, GPS, and spare batteries.
- 9.) Always have an emergency kit with you.
- 10.) Always travel on the trails.
- 11.) If you break down, don't leave your snow machine unless you are near a village.
- 12.) Always bring flares, glow sticks, and flashlight with you so that it can be used as a beacon.
- 13.) Don't travel with a snow machine that is in poor condition. Always maintain it so that it won't have any problems during your travel.
- 14.) Check the weather forecast before you decide to travel and always look for any changes of weather.
- 15.) Don't travel on thin ice or where open water is present.
- 16.) Always look for signs of cold exposure such as hypothermia or frostbite. If you or someone is suffering from cold exposure, return back home immediately to treat the victim
- 17.) Wear clothing that has reflective tapes on them so that others can easily see or find you.
- 18.) Bring tools and spare parts.
- 19.) Never drive under the influence of drugs or alcohol.
- 20.) Bring a tarp and rope.

Native Village of Kalskag P.O. Box 50

Kalskag, AK 99607

PLACE STAMP HERE

BOXHOLDER KALSKAG, AK 99607