

THE NORTHERN LINE



"Behind is a great forest that goes to the Arctic...and here we must draw our line."

~ Gary Snyder, Front Lines



Growing Stewardship

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THE NORTHERN LINE

Environmental News of Arctic and Interior Alaska

The Northern Line is published quarterly by the Northern Alaska Environmental Center (NAEC), 830 College Rd., Fairbanks, Alaska 99701, info@northern.org, www.northern.org. Copyright © 2008 by NAEC. All rights reserved. Subscription rate is \$35 annually and includes membership. We encourage submission of letters and articles for publication. We reserve the right to edit all submissions. The Northern Alaska Environmental Center is a 501 (c)(3) non-profit organization.

MISSION: The Northern Alaska Environmental Center promotes conservation of the environment in Interior and Arctic Alaska through advocacy, education, and sustainable resource stewardship.

The Northern Alaska Environmental Center has 1,055 members.

STAFF

Dan Adams, *Interim Executive Director*
Sara Elzey, *Controller and Assistant Director*
Jessie Peterson, *Local Issues & Energy Coordinator*
Pamela A. Miller, *Arctic Program Director*
Zak Richter, *Clean Water Program Director*
Laenne Thompson, *Communications, Development & Education Director*

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Front Cover:
Arctic Village Thanksgiving Sunset © Pamela A. Miller

Back Cover:
Using Solar & Wind Power in Alaska © Pamela A. Miller

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THANKS to Dan Swift

for the purchase of a shiny new self-propelled Craftsman lawn mower for the Center! And for taking it out for its inaugural mowing trip in the back yard.

Calendar of Events

December 6 2ND Annual Eco-Holiday Bazaar

10:30am-5:30pm @ Alaska Bird Observatory. Shop for locally made crafts, Alaskan books & DVDs, t-shirts and other environmentally friendly gifts! Sponsored by Alaska Bird Observatory, Friends of Creamers Field, Northern Alaska Environmental Center, Arctic Audubon, and Calypso Farms. Free cookies & hot drinks. Free drawing for a handmade bird feeder from North Pole Woodcrafts. Follow the candlelit path to the Creamer's Farm House for the Annual Tree Lighting Ceremony at 6pm. Contact Nicole for more information at 451-7159.

December 9 NAEC Board of Directors Meeting

6pm @ the Northern Center. Meetings are open to NAEC members. Comments are welcome during the scheduled comment period at the beginning of the meeting.

December 11 Northern Voices - John Haines

7pm @ Noel Wien Public Library. The beloved prizewinning author of many books of poetry and essays is a former Poet Laureate of Alaska.

January 8 Northern Voices - Patrick Endres

7pm @ Noel Wien Public Library. A zeal for adventure and travel combined with his love of nature and the visual arts have forged his career in Alaskan freelance photography.

February 12 Northern Voices - Trimble Gilbert

7pm @ Noel Wien Public Library. A Gwich'in elder, Athabaskan fiddler, and Episcopal minister from Arctic Village graciously shares his Native wisdom

New Staff



Dan Adams, *Interim Executive Director*, served on the NAEC's Board of Directors from 2002 until his appointment to the staff in September 2008. As Board President for 2 years, Dan was instrumental in establishing the NAEC endowment fund and in the creation of the NAEC Advisory Board. A resident of Alaska since 1969, Dan has an inter-disciplinary degree in Health Communications from UAF; is an RN and has served on various statewide health committees and boards for the local Tribal Health organization. A resident of Alaska since 1969, Adams has created a bond with the Alaska landscape by living and traveling extensively in the state which is the driving force behind his dedicated volunteer service to the NAEC.



Heidi Chapman Supkis, *Membership Coordinator*, attended University of Arizona and University of Idaho with studies in Forestry, Range and Wildlife and Agricultural Sciences. In her twelve years in Fairbanks, she has been a small business owner and actively involved with Boy Scouts, Fire Department, Sierra Club, and the Association of University Women. At the NAEC she recruits, retains, and energizes our members to be active, contributing, and well-informed to build our organizational capacity and cohesion. Heidi facilitates public, member, and volunteer links with the program staff to bolster our educational mission and advocacy work for wilderness. She joined the Center in September 2008.



Jessie Peterson, *Local Issues & Energy Coordinator*, received a B.A. in Environmental Studies from Carroll College in Helena, Montana. She worked as a Community Organizer on wilderness and energy policy at Montana Environmental Information Center, Montana Wildlife Foundation, Sustainable Obtainable Solutions, Student Advocates for Valuing the Environment, and Montana Legal Services Association, and for social and economic justice for low-income citizens as an AmeriCorps VISTA volunteer. At the NAEC, she focuses on community dialogue to strengthen our common goal for a healthy and vibrant community and sits on the Fairbanks Interior Issues Council focusing on climate change and sustainable economic development. She collaborates with our statewide partners to advance state legislative priorities. Peterson joined the Center in August 2008.

We NEED each other:

Sustaining the Center & Growing Stewardship

By Dan Adams

Interim Executive Director



YOU'RE MOST LIKELY READING THIS newsletter because *your deep personal connection with nature and with Alaska* leads you to take a stand against the environmental ruin that follows reckless development and greed.

For the last 37 years, the Northern Alaska Environmental Center has provided interior and northern Alaska with strong, consistent environmental advocacy and responsible stewardship of this beautiful country.

I am proud to be working with the Northern Center staff, having volunteered to jump from the Board of Directors into the hot seat as Interim Executive Director while we continue our search for a permanent Executive Director. I believe that the totality of the work that our seven staff do for the northern two-thirds of Alaska is so much greater than the sum of its parts and is unequalled in its scope and effectiveness.

As you might expect, these are very challenging economic times for the Northern Center. This critical election cycle, recession fears and the market down-turn have strained people's resources. But modest support for northern Alaska conservation can help solidify your commitment to the environmental work we are so committed to. A \$25 *gift membership*, for example, (half a tank of gas!) for a friend or family member this holiday season will help build our member base and ensure a vibrant future for environmental stewardship. A *small monthly credit card donation* can have a significant impact on our ability to keep the doors open and the lights on. The NAEC's board and staff continually look for ways to cut expenses, such as the retrofit of our office this summer, which has greatly reduced our energy consumption.

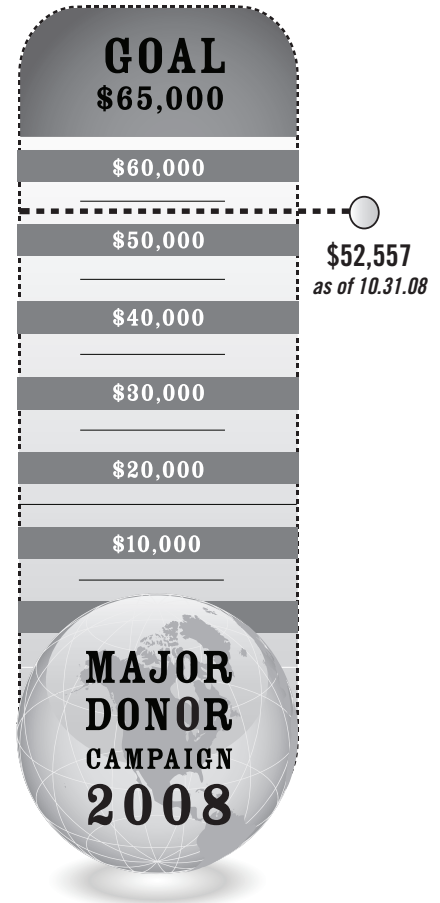
Northern Alaska's environmental challenges are becoming even more intense as our local political leaders echo the public's cry for cheap energy, with the consequences of CO2 seeming to take a back seat. Cheap now may cost us dearly in the not too distant future!

And now with the new President and Congress we will have new opportunities to solve the climate crisis and the first chance to advance wilderness protection for the Arctic National Wildlife Refuge coastal plain.

The natural world connects us all. Giving even a small part of ourselves towards preserving Alaska's natural heritage offers each of us a bountiful personal dividend. ***We at the Northern Center feel privileged to have your support*** in serving this common good and look forward to growing stewardship in 2009.

Sincerely,

Dan Adams, *Interim Executive Director*



Protecting the Arctic: An Exciting New Chapter

By Pamela A. Miller



1002 Area looking toward the Brooks Range. © Pamela A. Miller

Along eight years is almost over! Despite incredible obstacles, the Arctic National Wildlife Refuge remains wild and free.

We have new leadership at this critical juncture in our nation's history to re-frame energy issues from *Drill Baby Drill* to global climate change solutions focused on renewable energy which protect our vibrant American legacy.

In his victory speech, President-elect Barack Obama spoke to challenges ahead for a planet in peril and his commitment to harness new energy. He pledged during the campaign to make the U.S. a leader to slow climate change. His New Energy for America Plan calls for reducing our Greenhouse Gas Emissions 80% by 2050; to be accomplished through an economy-wide cap-and-trade program and the creation of 5-million new green jobs by strategically investing \$150 billion over the next ten years in clean energy. Senator Obama co-sponsored the Arctic Refuge wilderness bill and gave his support for this issue during the campaign.

We are excited to shift to proactive work to seek Wilderness designation for the Arctic Refuge coastal plain. Protecting the biological heart of the refuge is critical to the Porcupine Caribou Herd, the Gwich'in Nation, staging snow geese, and land denning for polar bears threatened by disappearing sea ice. Coastal plain Wilderness designation would complete protections for the largest trans-boundary wilderness in the circumpolar arctic—a land in double jeopardy due to global warming impacts as its inhabitants also face increasing threats of fossil fuel development.

We fought hard for the refuge over the past 6-months.

We need to tell the story across America of our world-class parks, refuges, wild rivers, and wilderness in Alaska.

Newt Gingrich's 527 group's "*Drill Here, Drill Now*" tapped into consumers' shock at \$4 per gallon gas prices and drove the political debate with \$16 million in corporate support. Big Oil spent \$289.6 million in the first 6 months of 2008 on political contributions, lobbying and ads. Over 30 Arctic Refuge drilling bills were introduced in Congress! The Presidential candidates wavered in their past support for the moratoria protecting Atlantic and Pacific coasts from offshore drilling. Sen. McCain switched to support offshore drilling; Senator Obama expressed support for some offshore drilling in the context of a comprehensive energy plan. Because Sen. McCain held firm, however, on protecting the Arctic Refuge from drilling, the Republican leadership deferred to his position. Ultimately, Congress passed a bill that ended the offshore moratoria for the lower 48.

Senator McCain opposes drilling in the Arctic Refuge, "Because it is the Arctic National Wildlife Refuge." His support did not waver despite putting Alaska's Governor Sarah Palin in his vice-presidential slot. When she vaulted onto the

national scene, the media cast a huge spotlight on Alaska.

Alaskans need to tell the story of why our energy future lies not in "*Drill Baby, Drill*" but instead nature's renewable energy. We need to tell the story across America of our world-class parks, refuges, wild rivers, and wilderness in Alaska. On election night, Obama said, "*Change...can't happen without you, without a new spirit of service, a new spirit of sacrifice... let us summon a new spirit of patriotism, of responsibility, where each of us resolves to pitch in and work harder.*" It's time for us to begin! ♪



Black smoke flares at Prudhoe Bay © Pamela A. Miller

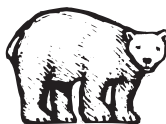
- Burning of fossil fuels (coal, oil and gas) has caused 80% of rise in temperature over the last century (NASA 2008).¹
- Oil and gas industry sources accounted for 73% of Clean Air Act Title V permitted sources of greenhouse gas emissions and were the highest sector at 29% of all statewide emissions in Alaska, (Alaska Department of Environmental Conservation 2008).
- 90 million acres open to oil and gas leasing across America's Arctic (state and federal lands, onshore and offshore).
- 1.5 million acres – the Arctic National Wildlife Refuge coastal plain area proposed for drilling (called “a 2,000-acre plot of land” by Gov. Sarah Palin).

¹ http://www.giss.nasa.gov/research/briefs/kharecha_01/

Celebrate Other Arctic Victories!



Teshkepuk Lake wetlands saw a reprieve from oil leasing by the Interior Secretary's decision for a 10-year deferral for a revised plan which augmented the agency's cumulative impact assessment following NAEC's successful court challenge with Audubon Alaska and others.



Shell Oil's risky oil drilling off the refuge's coast is getting further scrutiny by a court review of the Interior Department's inadequate environmental assessment. NAEC's successful appeal of the EPA's Clean Air Act permit for Shell's offshore rig but had to make a second filing; the revised permit still evades legal requirements to protect clean air and health (the North Slope Borough, Inupiat Community of the Arctic Slope, and Alaska Eskimo Whaling Commission also appealed).



The U.S. Fish & Wildlife Service pushed their final decision on the proposed Yukon Flats Refuge land swap past the Bush Administration due to high public controversy and problems with the land appraisals (the final EIS release is now planned for August 2009).

Attend Alaska Wilderness Week: February 28 - March 4, 2009

Want to do more to protect wilderness in Alaska?

Wilderness Week is a bi-annual activism and leadership conference for future leaders to protect the Arctic National Wildlife Refuge coastal plain.

This is a great chance for Alaskans to get energized to protect their lands!

Join with supporters from across the nation for Arctic Refuge Wilderness designation and stronger protection for Teshkepuk Lake and the Beaufort and Chukchi Seas.

Learn about the industrial threats to these areas and about how global warming already harms wilderness, wildlife populations, and Alaska Native communities.

By attending grassroots, media, and lobby trainings and listening to panels comprised of leaders from the business, religion, and indigenous communities, Wilderness Week attendees develop the skills needed to be a more effective Alaska advocate. We will meet with key leaders on Capitol Hill. Following the training, you will return home equipped with the skills and inspiration to continue taking actions to help protect wild Alaska.

Partnerships with other Alaska Coalition organizations make Wilderness Week possible and through generous contributions of Alaska Wilderness League, Gwich'in Steering Committee, National Audubon Society, Sierra Club, The Wilderness Society, and others.

REGISTER NOW for Wilderness Week

<http://akbriefing.alaskacoalition.org/wildweek/apply.htm>

Since space is limited, it is best to apply soon.

Priority is given to applicants who have never attended an Alaska Wilderness Week.



Photos; (Above) Lindy Alexander
and Sarah James (right) at
Wilderness Week © Pamela A. Miller

What's Fugitive about the Dust at Red Dog Mine?

By Zak Richter

Technically speaking “Fugitive dust” is defined as any dust or particulate matter that enters the environment from activities at the mine, and from transportation of ore concentrate along the DeLong Mountain Transportation System (DMTS). The DMTS includes the road, the port facilities, and the barges that transfer the ore concentrates from the port to the ships offshore. The port facility and 19 miles of the road are found within Cape Krusenstern National Monument through which a 100-year transportation easement was granted by Congressional approval in 1985.

METAL DUST and FOOD

The powder-consistency zinc and lead ore concentrates produced at the Red Dog Mine can contain between 30%-50% of either metal. In addition to zinc and lead the concentrates contain metals such as aluminum, antimony, arsenic, barium, cadmium, chromium, cobalt, mercury, molybdenum, selenium, thallium, and vanadium. Fugitive metals dust resulting from mining activities is transported into the environment primarily by wind carrying the dust particles onto tundra, streams, ponds, lagoons, and the Chukchi Sea.

In these environments, metals from dust may be taken up into plants such as moss, lichen, willow, or berries, and into animals such as muskoxen, caribou, ptarmigan, and fish, some of which may be eaten by people as subsistence foods, or which may be eaten by other animals.

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RISKS of FUGITIVE DUST

In 1999 the National Park Service (NPS) started to find that lichen and other nonvascular plants were being affected along the road corridor and around the port facility within the Krusenstern National Monument. In 2001 work began independently by both the NPS and Exponent, a consultant hired by Teck Cominco, the owner of Red Dog, to characterize the affects of fugitive dust to the environment and assess associated environmental and human health risks. In 2007 the final Risk Assessment for Fugitive Dust completed by Exponent was submitted to the Department of Environmental

Conservation (DEC). In brief, Exponent concluded that the ecological risks associated with transport of ore concentrates along the DMTS were low to aquatic organisms and to area wildlife populations, but in some instances incremental risks could not be discounted for ptarmigan and small mammals nearest the DMTS. Exponent also reported measurable degradation of arctic tundra vegetation communities extending to at least several hundred meters away from the DMTS road and in some

instances loss of lichen cover to distances as far as 2000m. However, Exponent suggested that changes in primary vegetation community structure were limited to within 100m of the road and that the cause of the vegetative damage may have been caused more by general road bed dust and calcium chloride used as a palliative (dust control agent) on the road to reduce dust emissions. Yet, the risk assessment has several deficiencies and uncertainties, such as:

1. Lichens, which are particularly sensitive to metals exposure and are important food sources to many organisms, were not appropriately viewed as receptors.
2. Resident Muskoxen in the Krusenstern, who primarily feed on lichens, were not identified as receptors nor were assessed for possible effects.
3. Loss of lichen cover was not measured to species level or at great enough distances from the road to establish the full spatial extent of effects.
4. Uncertainties in assumptions regarding the bioavailability and food chain transfer of metals, particularly with respect to plant uptake, in which metals may concentrate above concomitant levels in soil or dust.

The results of the NPS studies to date indicate the presence of mine-related heavy metal deposition throughout the



Subsistence fish drying in Kotzebue, south of Red Dog Mine. © Pamela A. Miller



Red Dog Road © Zak Richter

northern portion of Krusenstern National Monument. Metal levels in moss were highest immediately adjacent to the haul road with analysis suggesting that lead is being deposited in an area that extends at least 15 miles north of the haul road to the Kisimilot/Iyikrok hills, and south of the haul road, airborne deposition appears to be constrained by the Tahinichok Mountains. Based on NPS moss studies, metal bioaccumulation in the Krusenstern ecosystem resulting from mining activities appears to be a significant, potential long term threat to the viability of natural habitats and subsistence resources along with the oxidation of metal sulfides.

DUST CONTROL MEASURES

Since the fall of 2001 Teck Cominco has taken several steps to reduce dust emissions. These dust control measures have included both physical and procedural controls. The original truck fleet has been replaced with trucks that have better handling characteristics and have hydraulically closed steel covers and solid sides. Efforts to minimize dust from the road surface include physical and procedural controls that were implemented to limit tracking, removal of metals-containing road material, application of palliatives to road surfaces. Calcium chloride is the primary palliative use to treat the road. Several additional measures have been taken both at the mine and the port including building enclosures and dust

control systems and a seasonal truck washing station.

FUGITIVE DUST RISK MANAGEMENT PLAN

In March 2008 Teck Cominco held a meeting for all stakeholders interested in the development of a Risk Management Plan to address the adverse impacts and risks to human health and the environment. Subsequently, a Risk Management Plan was developed to address dust-related issues. The plan's overall goal is to "minimize risk to human health and the environment in the area surrounding Red Dog Mine and the DMTS road and port, over the life of the mine and post-closure operations," as stated in the plan submitted to DEC this past August. The plan is very vague and is more of a scoping document that discusses the evaluation process and generally identifies goals and objectives. The plan ends with presenting the need to develop 6 individual risk management plans addressing: communication, dust emissions reduction, remediation, monitoring, uncertainty reduction, and a worker dust protection plan. NAEC participated in the March 2008 stakeholder meeting and submitted comments regarding the Risk Management Plan in October. Metals bioaccumulation in the ecosystem containing the Red Dog Mine and the DMTS resulting from mining activities is a significant potential long term threat to the viability of natural habitats and subsistence resources in the region. ♻️

Energy: Ready or Not, It's Time for Change

By Jessie Peterson

Another Fairbanks winter is upon us, which can be viewed as a blessing or a curse, depending on your outlook. Similarly, our community finds itself in a season of energy challenges that leaves us with the choice of embracing new ideas and coming together to meet these needs, or grabbing for past solutions and quick fixes. We have the opportunity to use the current energy uncertainty as a catalyst for positive growth, both locally and globally. Systemic changes to energy policies, coupled with individual acts of energy conservation, will no doubt be challenging. However, history is marked by the resilience of citizens during difficult times, as ingenuity blossoms during transitional periods.

Similar to how watching the Aurora Borealis dance across the clear January night sky can make the cold less burdensome, the NAEC has chosen to embrace the opportunities for positive change brought about by energy complexities rather than wallow in the unknown. As an organization we are committed to our mission: to promote conservation of the environment in Interior and Arctic Alaska through advocacy, education, and sustainable resource stewardship, which reflects an ethos of sustainability.

The staff and board collaborated to create a timely energy policy that outlines the need for renewable

energy technology, conservation, and a systemic decrease in greenhouse gas emissions. These are necessary steps to reduce our impact on the land and to slow climate change. Rather than feeling defeated by the challenges of climate change and high energy consumption, we are reaching out to fellow community members to create a collaborative web of positive ideas and

Short-sighted policies that emphasize further dependence on fossil fuels will not provide viable long-term solutions to our energy demands.

actions. Our own energy retrofit project, for example, has inspired numerous Fairbanksans to conduct retrofits of their own, and others to become more energy-conscious. As the Local Issues and Energy Coordinator, I am actively studying the complexities of Fairbanks' energy challenges by meeting with policy-makers, community leaders, and concerned citizens.

The time for past energy policies and quick-fix solutions is over. During

the 2009 legislative session there will undoubtedly be proposals for new extractive and non-renewable energy projects across Alaska. The NAEC will once again be diligently involved with the legislative process to ensure our political leaders are fighting for the well-being of our state's communities and wild lands. As responsible citizens we must be vigilant and consistently supportive of efforts that will lead us towards the utilization of clean, healthy, and renewable energy sources and away from excessive energy habits.

Alaskans are innovators and pioneers, and as such, we can embrace the current energy challenges and become ambassadors for clean energy and new efficiency standards. Conservation must remain at the heart of our efforts. These efforts coupled with promising new technologies can illuminate the path to a vibrant economy and ecology. Short-sighted policies that emphasize further dependence on fossil fuels will not provide viable long-term solutions to our energy demands. In order to meet northern Alaska's energy needs while maintaining the sanctity of our wild places, we will need invigorating discussion, cooperation, and imagination – all while sipping a cup of tea and embracing the gifts of winter, of course. ☕



Fairbanks Climate Change Task Force

Several members of the NAEC are on the local Climate Change Task Force, trying to identify the potential or current effects of climate change on the area along with strategies for adaptation to and mitigation of those changes. Mayor Whitaker tapped **Sarah Trainor** (UAF), **Luke Hopkins** (FNSB assemblyman), and **Karl Monetti** (NAEC Board) as a steering committee. The group has met regularly since January 2008 with 7 work groups covering Natural Resources (forests, fish and game, mining, air quality, water, soils and energy), Human Resources (Economic development, Health and Human Services), and the Built Environment. The group plans to have a document ready with recommendations for the FNSB assembly to consider by mid-January 2009.

Our Retrofit is Finished!

The final touches are complete and the NAEC is officially energy retrofitted! We are already saving fuel and we'll track our savings and share some results in the spring. We also look forward to the broadcast of the video that was made to document the process in hopes of helping other to follow suit and consume less fossil fuel to heat.

Karl Monetti and **Stan Justice** worked tirelessly throughout this project and we owe them many thanks! Along with **Dan Adams** and **Kaarle Strailey** who helped in the final stretches:

Below are some photos taken throughout the project:



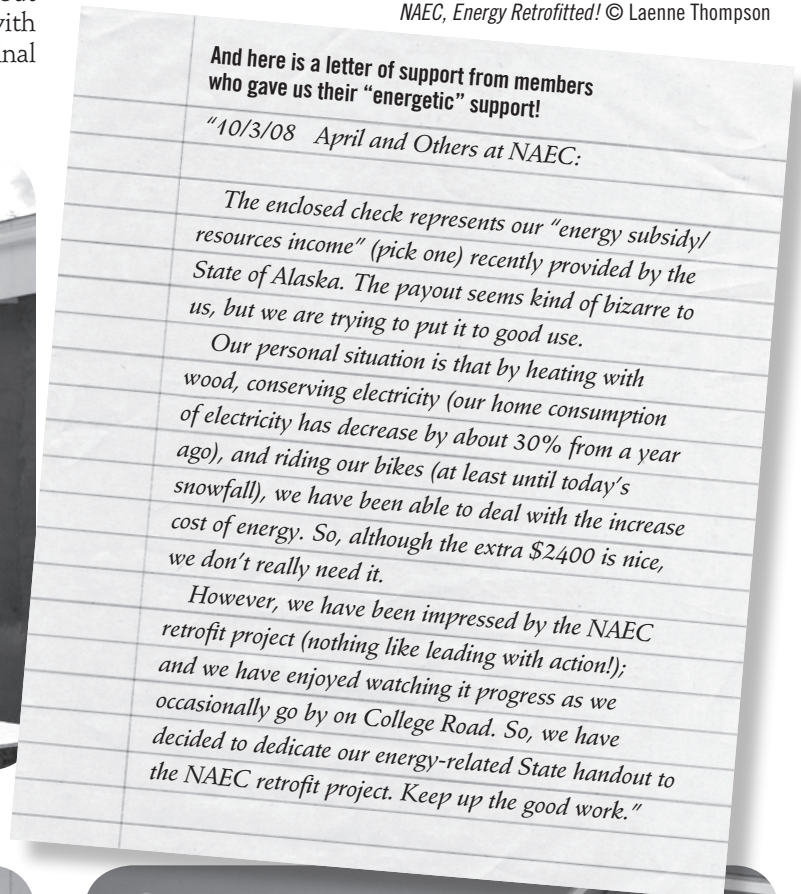
Retrofit Project Lead, Karl Monetti, custom cuts pieces of insulating foam for the exterior retrofit. © Laenne Thompson



Above: Insulating foam is applied. © Laenne Thompson,
Right: Karl Monetti stuccos the front of the building. © Pamela A. Miller



NAEC, Energy Retrofitted! © Laenne Thompson



Counting Sheep: Denali's Dalls

by Anne Beaulaurier, Denali Citizen's Council Board Member

This summer, the National Park Service (NPS) took on an ambitious research effort: a complete Dall's sheep census of 17 units between the Nenana River and the Muldrow Glacier in Denali National Park. According to the park's ecologist, Laura Phillips, the general estimate for sheep in this northeastern area of the park has been about 2,000 individuals since at least the early 1980s. Prior to this summer, the last comprehensive survey of this area was conducted in 1996, resulting in 1,904 individuals within the same 17 units. This year's survey commenced on July 14th, and was scheduled to last one week. The survey design primarily utilized fixed wing flights, augmented by ground counts to get a more accurate breakdown of sex and age classes. The NPS staff conducted ground counts on July 9-10 on Igloo Mountain, Sable Mountain and two on Cathedral Mountain. With rain, wind and low visibility precluding flying on many days, the last aerial survey wasn't flown until August 25th. In the end, the research team surveyed 13 of the 17 units, for a total of 1,526 sheep. While it would be easy to



A shuttle and a tour bus stop to view sheep in Denali near Polychrome Pass. © DCC

look at the numbers from this year and say the population may not have changed much since 1996, there are some considerations: There is currently no standard protocol for sheep monitoring in the park, and variations in data collection may lead to results that are not so easily compared from year to year. To address this concern, the NPS will be working with the Central Alaska Network to develop protocols for monitoring Dall's sheep.

MEMBERS' FORUM:

Can the NAEC Contribute to Food Security?

Submitted by Tom Paragi

The average food item travels 1500 miles from producer to consumer in the U.S. (roughly double that distance to Alaska). In 2006 Cooperative Extension estimated that 95% of food in Alaska is imported, despite our number of gardeners, hunters, and fishers. Rising fuel prices and limited transportation means to Fairbanks and bush communities should give pause when you consider that food inventory in Interior stores is only about 3 days. Food price in our remote state hinges on cheap and reliable transportation, and most imported foods have an embedded cost of petrochemicals.

The mission of NAEC includes education, environmental conservation, and sustainable development, all of which relate to our present level of food security. NAEC members should consider volunteering for and funding programs to educate Interior residents about food choices that can improve our health and security, both of which strengthen society against fear-borne initiatives:

- Design "Welcome to Fairbanks" brochure for displaced villagers—we could work with Tanana Chiefs Conference in education on using the bus system (in contrast to car or taxi) and the location and hours of grocery stores and the Farmer's Market.
- Examine zoning for agricultural lands in the Fairbanks North Star Borough—how much existing and potential farm land is being developed for residential lots?
- Spread basic gardening information to urban dwellers—we could sponsor the cost of a couple Calypso workshops in South Fairbanks to teach the basics of container and community gardening.

If you'd like to submit a piece to the Members' Forum, send a 200-250 word piece that is in good taste and consistent with the Center's broad environmental mission to <mailto:laenne@northern.org>.

15th NAEC Annual Auction Raises Over \$31,000!

Where else would a 10 pound bag of carrots valued at \$15 sell for \$250?! Only at the NAEC 2008 Annual Social and Fundraising Auction, which was our most successful fundraiser ever! Over 150 Fairbanksans came to Wedgewood Resort on November 8th to Celebrate Sustainability: Now and for the Future. Many showed their support by bidding on outdoor gear, certificates for trips, works of art, extravagant desserts, massages, and many other great auction items. Delicious hors d'oeuvres, yummy desserts, and music by the Denali Mountain Boys added to the great time had by all. Thanks to this year's Auction Team, all the volunteers and donors, and the generosity of our guests, this event grossed over \$31,000. We are already looking forward to next year's event!

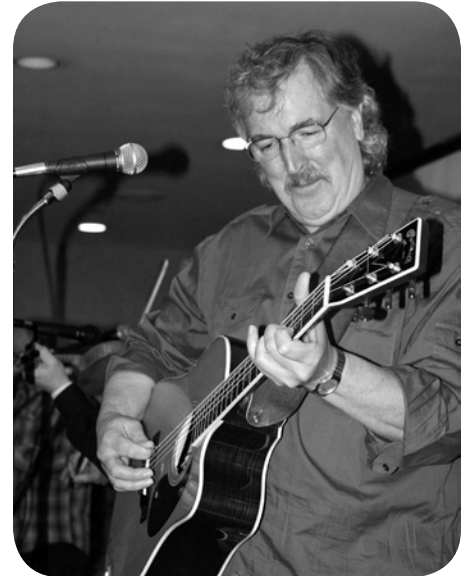


NAEC Member Margaret Eagleton and her \$250 bag of coveted carrots. © Laenne Thompson



Above, Volunteers Marsha Sousa and Susan Campbell smile and sort! © Laenne Thompson

Below, The Denali Mountain Boys capped off the evening with some bluegrass. © Laenne Thompson



THANKS! 2008 Auction Volunteers

Ritchie Musick – Committee Chair, Bill Schneider – Committee Assistant Chair

Jeanne Armstrong, Jane Atkinson, Lou Brown, Cara Brunk, Susan Campbell, Leigh Anne Cox, Jackie D'Auria, Jackie Debevec, Denali Mountain Boys, Margaret Eagleton, Keith Echelmeyer, Kerynn Fisher, Yoriko Freid, Lizanne Hanson, Roger Kaye, Mary Maisch, Fran Mauer, Jeff Merkel, Laurel & Ed McLaughlin, Karl Monetti, Mary Ann Nickles, Miriam Paquin, Carl Roland, Libby Silberling, Marsha Sousa, Charlotte Stark, Katlian Stark, Mary Stark & Mary Zalar



GROW STEWARDSHIP!

This year give friends and loved ones a **Northern Alaska Environmental Center Gift Membership**. Just cut out the gift membership and mail or fax it to us, and we'll send out a welcome letter along with the most recent issue of *The Northern Line* to your gift recipient. If you need more than one, feel free to make copies!

Give a Gift that Grows Lands Protection.

A gift that your children's children will receive...

a gift that promotes sustainability...a gift that matters.

Gift Membership

Membership includes:

- ✦ A subscription to our quarterly journal, *The Northern Line*
- ✦ Notices of local, environmental-related events, and our Annual Members Picnic
- ✦ Optional subscription to one (or more) of our email lists
- ✦ Strong advocacy for the things you care about most

Northern Alaska Environmental Center

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