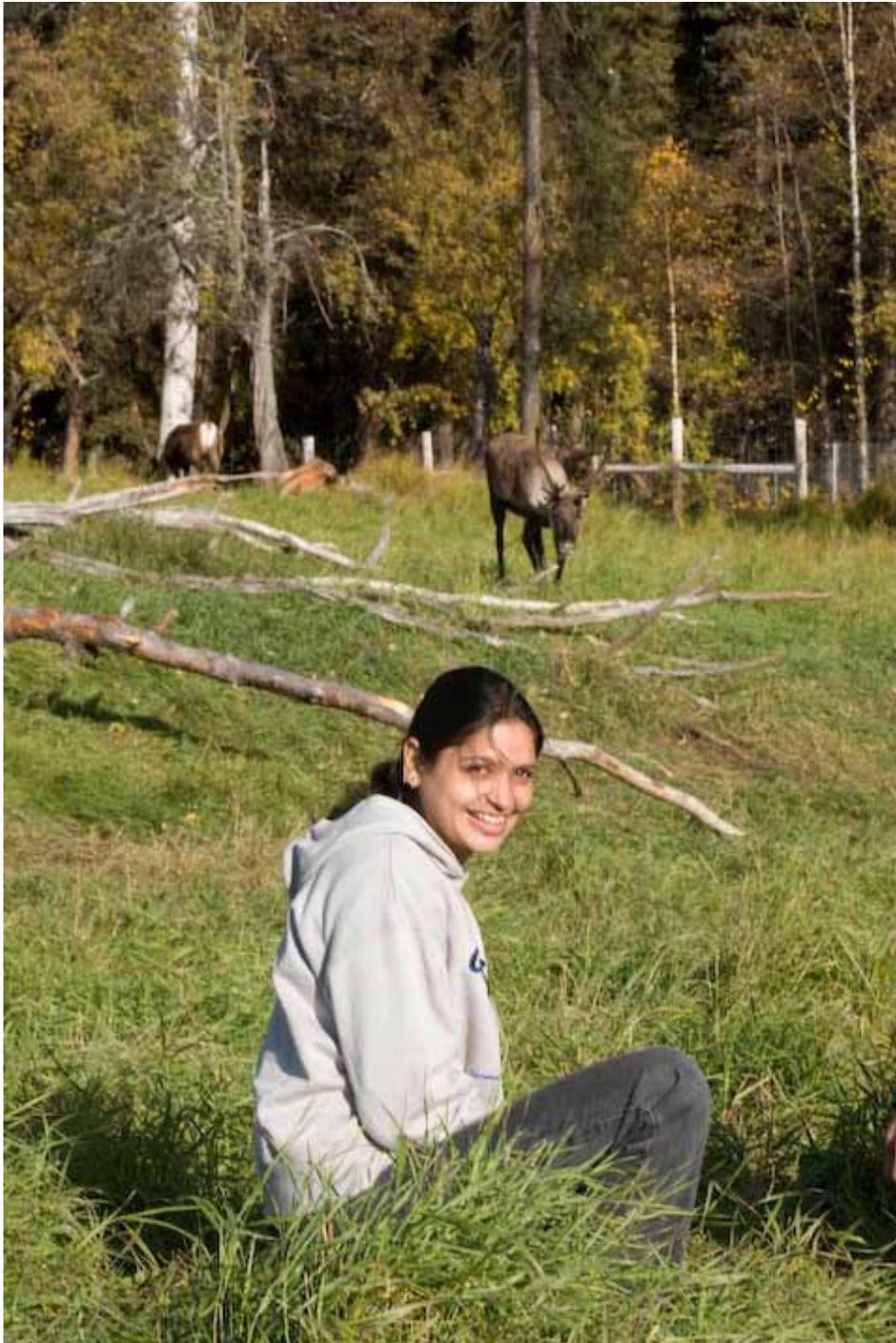


# Natural Resource News

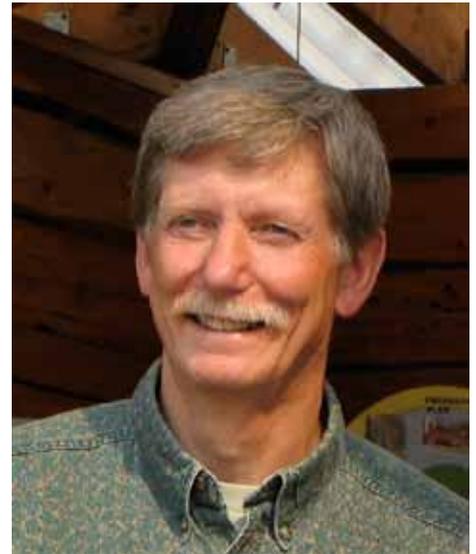
UAF School of Natural Resources and Agricultural Sciences  
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## Bali wins film award

SNRAS doctoral student Archana Bali was the first-place winner of the UA International Polar Year video contest, with her *Voices of the Caribou People*, a film she shot in collaboration with indigenous communities. *Continued on page 2*



Archana Bali at the Robert G. White Large Animal Research Station.  
—Photo by Todd Paris, UAF



## Professor Fox wins Usibelli award

One of the most prestigious faculty awards at UAF has been bestowed upon SNRAS Associate Professor John Fox. As the recipient of the 2009 Emil Usibelli distinguished award for excellence in teaching he will receive \$10,000.

“I hope I have had some positive impact on students, educational programs, and my teaching colleagues at UAF,” Fox stated. His philosophy throughout his 36 years at UAF has been to foster wisdom, not just to share knowledge. “I try to advocate clear thinking,” he said.

Fox grew up in Hartford, Ct., and credits his participation in the Boy Scouts with fostering a love of the outdoors and nature. He started college as a math major, struggling with calculus before switching to biology. He later rediscovered his attraction to math in graduate school. After graduating with a BS in biology from Trinity College in his home town, he headed west to Seattle to attend the University of Washington, where he earned a master of science degree in forest resources and a PhD in forest hydrology.

When Fox started graduate school his goal was to earn a master’s and teach at a high school or preparatory school, but he got hooked on research and stayed to earn his doctorate. He joined the UAF faculty in 1973.

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Bali undertook the project because she wanted to document the knowledge of indigenous people who have a long relationship with caribou. This was part of her dissertation research on the cumulative effects of climate change, industrial development, and disturbance to caribou herds. Bali said, "I wanted to collect information from local people who are making local observations of change, using their own words."

She found that the indigenous people she talked to were eager to share their knowledge and observations. "They wanted to contribute," Bali said, "and I was lucky to be in the right place."

Anaktuvuk Pass in Alaska; Old Crow, Yukon Territory; LutselK'e and Wekweeti in the Northwest Territories; Arviat, Nunavut; and Kawawachikamach, Quebec, were the locations Bali visited over a four-month period in the summer of 2008. She traveled alone and found the journey enjoyable and the people she met kind and extremely hospitable. "These are wonderful people and because of them, it was a great learning experience," she said.

Bali developed the project with her advisor, Associate Professor Gary Kofinas. Funding was provided by the CircumArctic Rangifer Monitoring and Assessment Network, a program of the International Polar Year.

Bali grew up in India and arrived in Alaska in September 2007 to start her studies as a student of UAF's Resilience and Adaptation Program. She has a bachelor's degree in computer science and a master's in wildlife biology and conservation from the National Center of Biological Sciences and the Center for Wildlife Studies in India. She came to UAF as the George Schaller Fellow in conservation studies, and is working on an interdisciplinary PhD in wildlife conservation and natural resources management. Her past work experience includes a stint with Greenpeace.

Before coming to UAF, Bali had no experience with caribou but was interested in climate change and conservation. She has since become fascinated with

caribou research, including the impact of climate change on wildlife habitats. "I didn't know anything about the conditions and I wasn't able to appreciate them," she said. "As a way of getting grounded and starting my research I decided to go to the communities and understand why the caribou are so important." Using video she was able to capture their words exactly the way people wanted to say them.

In some communities the elders did not speak English and she had to work through interpreters. While caribou hunting with local residents, she found herself in the midst of a large caribou herd. "It was very exciting to see caribou moving all around me," she said. "It was incredible."

After shooting 108 hours of video, Bali created a short version of her work—twelve minutes—which she entered in the contest. "Reviewing the tapes and editing the file was a slow process," she said. She doesn't plan to let the rest of the footage go to waste, and will create a short film based on interviews in each village and produce a final consolidated documentary that can be used to communicate people's voices to researchers and decision makers. All the interviews will be made available in public domain via the internet, for people interested in the human-caribou systems of the North. "Video is a powerful tool to reach out to the outside world," Bali said.

[www.carmanetwork.com/display/public/Voices+of+Caribou+People](http://www.carmanetwork.com/display/public/Voices+of+Caribou+People)

## SNRAS unveils new logo

The School of Natural Resources & Agricultural Sciences commissioned a new logo this spring. The logo will appear on the website and all official publications and communications from the school.



*Marilyn Childress presents a cake to Fox and his granddaughter at a picnic held to celebrate his receipt of the Usibelli Award.*

*Continued from page 1:*

Fox teaches watershed management, environmental ethics, and a graduate course in biometeorology. Other courses he has taught include forest management and resource inventory and measurements. He finds that teaching is a great way to learn. "If you are teaching something you better understand it yourself," he said. An advantage of teaching is that constantly interacting with young people keeps a person invigorated. "It's great to share what you know with them and, in turn, learn from them," he said.

Over the years, Fox has seen amazing changes in technology but has kept abreast of new developments, creating simulations of random sampling, mark and recapture population estimation, strip-flush census, solar and net radiation fluxes as a function of slope, azimuth, and latitude, and of the local water balance. He also developed simulations of uneven and even-aged forest growth and harvest, and financial analysis of forest management options. These programs are designed to involve the student in decision-making where the consequences of their decisions can be experienced and the dynamic nature of the systems can be appreciated.

The changes he has seen in students include the present generation's technological savvy and their higher expectations that the university should meet

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their needs. He would like to see students work a little harder. “I don’t want them to bleed but it wouldn’t hurt them to sweat a little,” he said. Even though Fox has taught children of his former students he said most of the differences in the student body have been subtle. “They don’t get my jokes any more,” he laughed.

What he hopes most for his students is that they gain enthusiasm for learning and a sense of continuing to be curious about the world beyond the classroom. The three key components he tries to foster are critical reflection, empirical inquiry, and intellectual honesty. Challenges of teaching include addressing the wide range of students’ backgrounds and their varying levels of enthusiasm, Fox said.

The professor’s goals are to continue to be relevant and to accomplish more in the research arena of his appointment. His research focuses on water levels at Harding Lake and incorporating frozen soils into hydrologic models. “Linking frozen soils and hydrology in models is now popular because of climate change, but I think I was one of the first to do that in a watershed and land-use context,” he said. “This provided a starting point for others to build upon.” He also strives to elevate and clarify the role of ethics in natural resources management and to “be there for students, colleagues, the public, UAF, and SNRAS.”

Fox was a member of UAF’s Interdisciplinary PhD review committee for several years, is a faculty representative for the Society of American Foresters, and for six years has served, by appointment of the chancellor, as UAF’s NCAA faculty athletics representative.

In his spare time, he loves to play basketball and spend time with his wife Sheila and their four children and two grandchildren.

A nomination from Fox’s colleague, Associate Professor Dave Valentine, stated that from his first days at UAF he picked up a wonderful strategy for teaching from Fox. “He views the job as creating a space for learning. He takes a thoughtful, scholarly approach to education.”



*Dr. Andres Soria, fueling up the Mission Arctic Circle test truck with Permaflo. The Indiana Soybean Alliance had a Twitter feed for the duration of the trip, which can be viewed at [www.indianasoybean.com](http://www.indianasoybean.com).*

## SNRAS and innovative biodiesel testing

Cold weather testing of soy biodiesel conducted by Purdue University, the Indiana Soybean Alliance, and UAF occurred in March. Purdue scientist Bernie Tao couldn’t have been happier. “I knew this stuff would work,” he said. Tao was excited to see firsthand how well his creation, Permaflo biodiesel, worked in Alaska.

Tao, along with Indiana farmers and Indiana Soybean Alliance representatives, rode in UAF diesel vehicles fueled with Permaflo from Anchorage to Fairbanks on March 5 and from Fairbanks to the Arctic Circle on March 7 for an overnight camping trip. At the seminar, Tao thanked UAF Assistant Professor Andy Soria for helping the group survive the cold weather and road conditions.

While there are many biodiesel products on the market this one is specially designed to work in cold temperatures. Tao had tested the product in his lab but this was a chance to see how it worked on the road and in the camp.

The process of making Permaflo is efficient and simple, Tao explained. He predicted economic benefits for Fairbanks if a similar biodiesel can be created and used here. UAF Associate Professor Mingchu Zhang highlighted his canola

research to the audience. He hopes to develop a canola industry in Alaska in a similar manner to what Indiana has done with soybeans.

ISA spokesman Ryan West said he was very proud of the way the product performed in Alaska. “We put 1,300 miles on a pickup truck using pure Permaflo B100 biodiesel with no additives and no indoor storage,” he said.

Doug Morrow, president of ISA, said it’s not often the growers get to see a product tested. “To be able to come up here and work with the University of Alaska has been great for us,” he said. “It has been beyond belief.”

Soybean farmer Mike Yoder said renewable energy in the Lower 48 is a “nice thing to do,” but in Alaska it could be a matter of survival. “I applaud you for your work,” he said.

Dr. Soria researches woody biomass for UAF and is considered a pioneer in the alternative energy arena. While most of his work is done in a lab at the Palmer Research and Extension Center, Soria said he was thrilled to spearhead the Alaska road test for soy biodiesel. “I commend ISA for understanding the value of research,” he said.

# 2009 Outstanding Students

## Hannah Harrison

### Natural Resources Management

A lifelong Alaskan raised in Homer, Hannah Harrison chose to attend UAF and join the SNRAS program because it ranked highly nationally for the degree programs offered. "I have been very happy with my choice, and enjoy being a natural resource management major with an emphasis in resources," Hannah said.

"This year I'm a senior, and looking back at my collegiate career I feel I've experienced some very uniquely Alaskan jobs, classes, and have interacted with some sensational faculty in SNRAS. Being at UAF has afforded me many opportunities to be involved in the academic community."

Harrison worked for the art department, the Museum of the North, and as an RA for Residence Life. She earned several scholarships, including the Chancellor's Talent Grant. "I am greatly honored to be chosen for this award for my department," she said.

After graduation, she will decide whether to pursue the Peace Corps, a master's degree, a nursing certification, or law school. She explored her interest in politics by working as an intern for the Alaska State Legislature. She has one more semester at UAF to complete her degree.

## Ellen Hatch

### High Latitude Agriculture

Raised in Albuquerque, N.M., Ellen Hatch wanted to attend UAF because she had romantic notions about Alaska. "They all turned out to be true," she said. "It's been everything I thought it would be; I love it here."

A senior, Hatch has spent her college years at UAF except for exchange studies she did in Hawaii, Norway, and Scotland.



*Above: Hannah Harrison, 2009 Outstanding Student in Natural Resources Management.*

*Below: Ellen Hatch, 2009 Outstanding Student in High Latitude Agriculture.*



In the past she received the chancellor's award and the Usibelli Award.

She will continue pursuing master's and doctorate degrees and ultimately hopes to attend medical school. She is greatly interested in helping Alaska become more independent in food production. Her other passions are geothermal energy and climate change.

In her free time, she enjoys mountaineering, ice climbing, backpacking, soccer, ultimate Frisbee, jazz music, and reading.

"I am so grateful to the numerous professors in High Latitude Ag who have provided intellectually stimulating classes and inspired me with their enthusiasm," Hatch said.

Hatch received the Chancellor's Annual Giving award and the John B. and Mae M. Hakala award in 2008-09, the SAF Tindall and Usibelli Honors in 2007-08, Usibelli Honors in 2006-07, and the Chancellor's Tuition Waiver for 2005-06.

## Matt Sprau

### Forestry



Matt Sprau came to UAF in 2005 because he'd never been to Alaska before and wanted to check it out. A senior studying forestry, Matt grew up in Harvey's Lake, Pa. He earned an associate's degree

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in general studies at Luzerne County Community College before heading north.

As a student, Sprau has worked as a laborer for the university and as a forestry technician at Fort Wainwright. His goals are to gain experience in all aspects of forestry and some day volunteer for international work. He enjoys skiing, playing the guitar, and cooking.

## Alice Orlich

### Geography



Alice Orlich came to Alaska in 1993 as a volunteer for the US Forest Service. Hailing from Milwaukee, Orlich spent the years after high school traveling the world, including five trips to Antarctica, and she has lived in remote areas of Alaska. Geography was her chosen field because it encompasses her various interests. "I enjoy traveling and working in the field in polar regions yet I also like to study human interactions," she said. She is also the recipient of the 2009 Marion Frances Boswell Memorial Award (see article on page 6).



*Above: Group graduate photo of SNRAS students. Back row, left to right: Jessica Guritz, Kandace Krejci, Nelson Crone, Kristin Shake, Conor Brennan, Alice Orlich, Larsen Hess, Jennifer Kapla. Front row: Lorene Lynn, Cody Maxwell, David Ellsworth, Eli Sonaf Frank.*

*Right: UAF photo of Annie Blue by Todd Paris.*



## SNRAS graduates

The University of Alaska Fairbanks conferred 1,179 degrees on 1,121 students during its 87th commencement ceremony Sunday, May 10 at the Carlson Center.

SNRAS awarded 22 baccalaureate degrees and six master's degrees.

**Geography graduates** were Cameron Baird, Brennan Conor, Nelson Crone, Andrea Devers, Keith Forte, David Hamm, Kandace Krejci, Alice Orlich, Kristen Shake, Nicholas Toye, Chris Van Dyck, Jesse Wells. Devers earned two degrees, both a BA and a BS in geography and earned student leadership honors. Crone, Maxwell, and Orlich received Golden Key Honor Society recognition. Orlich graduated cum laude.

**Natural Resources Management grads** were David Ellsworth, Jessica

Guritz, Larsen Hess, Jennifer Kapla, Cody Maxwell, Ronald Norman, Mia Peterburs, Cassidee Hall Plunkard, and Eli Sonaf Frank. Guritz graduated magna cum laude.

**Master's graduates** were Erin Kelly, Lorene Lynn, Douglas Smart, Quinn Tracy, Sarah Runck, Noreen Zaman.

Among the three honorary degrees UAF awarded during the commencement ceremony was a doctorate in humane letters to Yup'ik elder and storyteller Annie Cungauyar Blue, who has worked closely with the Math in a Cultural Context program for many years.



## Maher awarded fellowship

Kimberley Maher, a doctoral student working with Professor Glenn Juday, has been awarded a 2009-2010 EPSCoR graduate fellowship.

Maher earned a master's degree from SNRAS, with a thesis project that involved interviewing the producers and documenting the production process for birch syrup, and examining ecological controls of birch sap. Maher used automated chemistry analyzers at the Palmer Research and Extension Center, installed a sophisticated soil and air temperature sensor array in several birch study stands, and developed a working relationship with the Alaska Birch Syrup Producers' Association.

In her PhD program, Maher is conducting an integrated and interdisciplinary project to examine non-timber forest products in interior Alaska. Her study involves harvest traditions, ecological controls, and management implications. She has focused on food products, including their cultural and community-building aspects, and important access and valuation issues that will secure these resources on a sustainable basis. Her project addresses the ecology of production, and the history, potentials, and problems of use and marketing in the blueberry harvest system as well as birch sap.

Maher was previously awarded a 2007 Berkeley Community Forestry Fellowship in a nationally competitive program.



## SNRAS student earns Boswell Award

Alice Orlich was the recipient of the Marion Frances Boswell Memorial Award, which recognizes the outstanding graduating senior woman at UAF. Orlich is known among her UA Geography Program professors not only for her academic abilities but also for her leadership among fellow students and her willingness to help her peers understand academic concepts. Orlich has received multiple awards and scholarships during her undergraduate career, in addition to working as a student research assistant. She is the author of a chapter on field logistics and safety in the book, *Handbook of Sea Ice Field Research Techniques*, which will be used in future UAF courses.

Orlich came to Alaska in 1993 as a volunteer for the US Forest Service. Hailing from Milwaukee, Alice spent the years after high school traveling the world, including five trips to Antarctica, and she has lived in remote areas of Alaska, including Stevens Village, Anaktuvuk Pass, and Wiseman. Geography was her

chosen field because it encompasses her various interests. "I enjoy traveling and working in the field in polar regions yet I also like to study human interactions," she said.

Orlich has worked for two years as a student research assistant with Dr. Jennifer Hutchings at the International Arctic Research Center. Orlich studied ice caps during the summers of 2007 and 2008, collecting field data on the sea ice extent, distribution, type, and thickness at several locations along the track followed by Canadian Coast Guard Service *Louis S. St. Laurent Icebreaker* in the Beaufort Sea. She is currently considering graduate school, and hopes to find a project involving research in both polar regions, climate change, and the cryosphere. She loves one-way ticket traveling, diving, testing her survivalist skills, and learning how to do anything new.

Alice was also the geography department's outstanding student for 2008-2009.

## Second Peace Corps student in the field

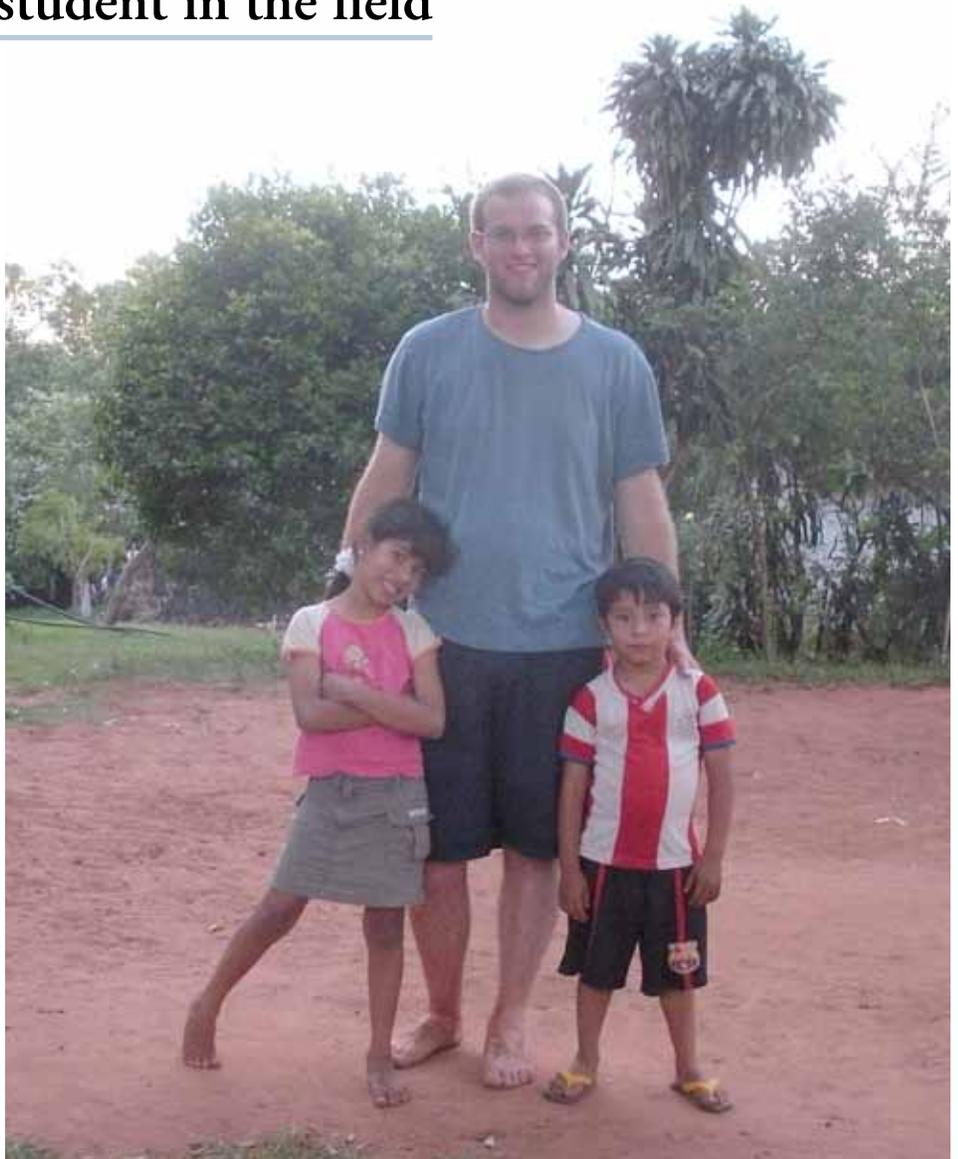
Even though he has faced the worst drought to hit Paraguay in years, Matthew Helt is adjusting to life in a new country. Helt is a SNRAS graduate student enrolled in the Peace Corps Master's International program. Helt is the second student from the school to participate in the cooperative master's degree program that allows students to integrate graduate studies with international development experience. The first, Erin Kelly, graduated in May.

After months of intensive Peace Corps training in Paraguay Helt is now assigned to a village of 150 people outside Ybycui. In e-mail messages to Associate Professor of Resource Planning Susan Todd, Helt expressed satisfaction that his village has a working farmers' group, youth group, and women's group. "I am truly excited to spend the next two years working on community development and empowerment in this community," he wrote.

During his training period, Helt learned to deal with cold water showers and to request more vegetables for dinner. (Even though surrounded by lettuce fields, his host family was more accustomed to serving meat dishes.) Helt attended sessions on agroforestry, crops, beekeeping, and environmental education, and he went to workshops on culture, health, safety, music, religion, and learning styles. He has grafted citrus and mango, planted a garden, and worked on a tree nursery. Because the drought has made agricultural endeavors nearly impossible, Helt has shifted his focus to working with youth groups and is teaching the youngsters American-style football.

Helt noted that deforestation is a major problem in Paraguay, with large plantations growing cotton, soybeans, and sugar cane for export on land that used to be forests. His assignment is to work with the local farmers who only have a few acres.

On Dec. 5 Helt was sworn in as a Peace Corps volunteer at the US Embassy in Asunción. "It's not every day that one



*Matthew Helt with local children in Paraguay.*

is able to do such a thing so it was rather exciting for most of us," he said. "To put icing on the cake, at the end of the ceremony the Charge D'Affairs extended us an invitation use the pool when we're in Asunción on business."

Helt earned a BA from George Mason University before enrolling in graduate studies at UAF.

Students may pursue several areas of interest within the UAF Natural Resources Management MS degree, including horticulture, soil science, agronomy, animal science, forest ecology, silviculture, resource economics, land planning, parks/recreation management, and resource policy. The university provides a six-credit tuition waiver for Peace

Corps Master's International students, and allows them to maintain their active student status during their assignment. Contact Susan Todd at [sktodd@alaska.edu](mailto:sktodd@alaska.edu) or Tony Gasbarro [ffafg@uaf.edu](mailto:ffafg@uaf.edu) for more information.



## PASS department becomes HLA

The Department of Plant, Animal, and Soil Sciences, or PASS, received a new name in December 2008 – High Latitude Agriculture.

Professor Milan Shipka, department chair, said most people did not understand what PASS meant or what activities and research were included in the disciplines contained in the department. “With the concept of global climate change looming large in Alaska, it is most appropriate to have the word agriculture in a department name at UAF,” Shipka said. “Our faculty members are the primary force of agriculture at UAF.”

After the PASS faculty voted in September for the name change, it was approved by SNRAS Dean Carol Lewis, Provost Susan Henrichs, Interim Chancellor Brian Rogers, and President Mark Hamilton.

High Latitude Agriculture provides statewide education, research and outreach in agriculture, soils, revegetation, and bioremediation through UAF at the Fairbanks Experiment Farm, Georgeson Botanical Garden, the Palmer Research and Extension Center, the Matanuska Experiment Farm, the Delta Junction Field Research Site, Nome, the Seward Peninsula, and other locations across the state. The Department of High Latitude Agriculture faculty provide instruction in Fairbanks and Palmer, as well as through the Bristol Bay Campus, for undergraduate and graduate degrees in Natural Resources Management with an emphasis on concepts based on agricultural sciences. Non-credit short courses are also offered through the Georgeson Botanical Garden.

### Examples of High Latitude Agriculture research include:

- reindeer research at Nome and Fairbanks
- reproductive performance in domestic ruminants
- the role of light in high latitude

## Science association honors Dr. Sparrow

Dr. Elena Sparrow, professor of resources management, has been named the 2008 Emma Walton Distinguished Service Award winner by the Alaska Science Teachers Association. The award recognizes educators who make extraordinary contributions to the advancement of science education.

Sparrow, who established the GLOBE program in 1996, is the Alaska GLOBE Program director. The program promotes collaboration between students doing inquiry-based investigations of the environment and the earth system. She has trained teachers from over 60 Alaska schools. Sparrow is the grant writer and director for the National Science Foundation Seasons and Biomes Program. This program provides teacher training and student data collection about the seasons. It also provides an opportunity for students who live in similar biomes around the world to link up and share their observations and conduct research investigations. She directs the Schoolyard Long Term Ecological Program. SLTER provides an



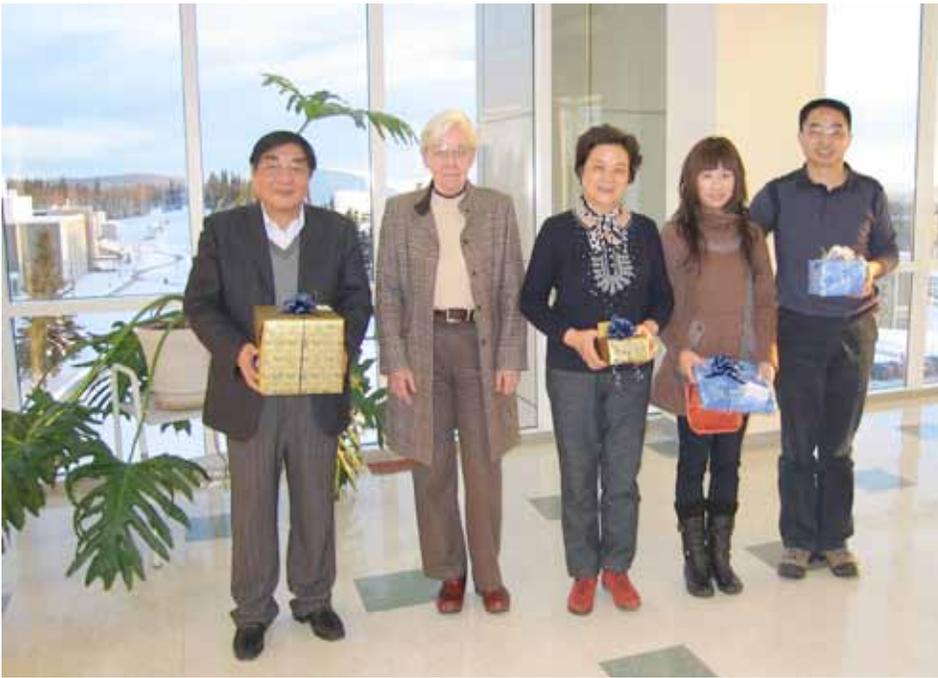
opportunity for rural students to spend six weeks working with a researcher at the University of Alaska. She also directs the Education Outreach program of the National Science Foundation-funded Alaska EPSCoR program, providing professional development workshops for teachers and giving rural high school students an opportunity to conduct genetics research on Alaska animals or conduct environmental science investigations.

Sparrow has been active in integrating the scientific knowledge of Alaska’s Native people into the K-12 curriculum. At the collegiate level, working with the Association for Polar Early Career Scientists, Sparrow has been involved in training scientists just starting their careers, teaching them how to write proposals for their research or education outreach projects. At UAF, she teaches science research and earth science education. She is co-principal investigator of the GK-12 Teaching Alaskans, Sharing Knowledge program which works to enhance learning in Title One schools by partnering University of Alaska science, mathematics, or engineering students with K-12 classrooms. Sparrow is director of the University of the Arctic International Polar Year Higher Education Outreach Office and education outreach director of the International Arctic Research Center and Center for Global Change. She is also the president and founding member of the Association for Women in Science - Alaska Chapter.



*HLA Department Chair Milan Shipka.*

- crop production
- controlled environment plant growth
- cultivar selection of vegetables in Alaska
- potato disease
- management practices for forage and turfgrass
- peony cultivation and marketing
- arctic and subarctic soils.



*Chinese Academy of Sciences delegation with the SNRAS dean, December 2008 in the Institute of Arctic Research Building on West Ridge, UAF campus. From left to right: Professor Guodong Cheng, SNRAS Dean & AFES Director Carol Lewis, Youfen Zhang, doctoral student Ruixia He, and Professor Huijun Jin. The group paused in their discussions of an exchange program to exchange gifts and to pose for the photo.*

## UAF collaborates with China

Representatives from the Chinese Academy of Sciences in Beijing visited UAF in December 2008 to plan a student and faculty exchange and research program.

Two professors and a doctoral student from the Cold and Arid Regions Environment and Engineering Research Institute met with representatives of the School of Natural Resources and Agricultural Sciences and the College of Engineering and Mines. The visiting academic delegation members' disciplinary focus is in geocryology, the study of frozen soils. They conferred with UAF soil scientists as well as visiting some local sites that demonstrate road stability research. The UA Museum of the North, a permafrost tunnel, and the Trans-Alaska Pipeline were also on the itinerary.

The Chinese Academy of Sciences, China's comprehensive research and development center in natural sciences and high-tech innovation, attaches great importance to the academic exchange and cooperation with international science

and technology communities. The center works with more than 60 countries, carrying out various kinds of collaboration with its foreign partners, such as joint investigations, ventures, laboratories, young scientist groups, workshops, training courses, and seminars.

International cooperation has made significant contributions to the improvement of science and technology standards, training of talents, upgrading of experimental conditions, acquisition of foreign investment, and exchange of information, according to the CAS website.

UAF Professor Chien-Lu Ping, who was involved in the proceedings, is internationally known for his soils research. UAF Associate Professor Mingchu Zhang and UAF Assistant Professor Jingjing Liang, both originally from China, are involved in the process also.



## Hanscom retires

Jan Hanscom has used her passion for science and growing things throughout her 33-year career with UAF and now that she has retired will use it still.

Hanscom, who retired April 30 as an agriculture lab assistant at the Georgeson Botanical Garden, is ready to become a peony grower. Over the years she assisted with researching the flowers and became interested in growing them for profit on her own land.

Raised in Maine, Hanscom helped her father and grandfather on the family farm. After earning a biology degree from the University of Maine, Orono, she and her husband headed north. Her career with UAF included stints with the Institute of Marine Science, the Geophysical Institute, AFES, the publications office, and SNRAS greenhouses. She worked at GBG since 2000.

"Jan's greatest contribution to the garden has been her ability to bring people together to learn and enjoy gardening," said Professor Pat Holloway, GBG director. "How many hundreds of children have been taught to enjoy growing vegetables by Jan? How many volunteers has she worked beside? How many times has she led bus loads of visitors through the garden for a peek at life in Alaska? ...all have seen her smile, enjoyed her wit, learned a few tidbits here and there, and shared great times. What a wonderful colleague, mentor, and friend she has been."

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*Jan Hanscom in the greenhouse at the Georgeson Botanical Garden.*

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Before she started working at GBG, Hanscom volunteered to help build the pond there. She has been a 4-H leader for 18 years and built children's gardens at local schools. Gardening and children are the perfect combination for Hanscom. "There are some real city kids in Fairbanks who may not get to spend time outdoors," she said. She likes nothing better than getting their hands into the dirt. In fact it is the children's garden that she names as her proudest accomplishment on the job, and she plans to continue with the project as a volunteer. Holloway credits Hanscom with the idea and perseverance for making the children's garden a reality.

While the work was hard, Hanscom found it extremely rewarding. "You work out there all summer long and think you didn't get anything done, then you look at the photos and see what we've accomplished," she said. And while many other botanical gardens have bigger staffs, much of the work at GBG is done by volunteers. "We depend on volunteers and I worked hard to build up and acknowledge our volunteers," she said. "I wanted our volunteers to know they were appreciated and make sure this was a positive experience for them." Hanscom coordinated hundreds of volunteers and over the years oversaw ten Eagle Scout projects at the garden.

Of course the seasons dictated her role at work, with spring and summer geared around designing gardens, running the children's program, leading tours and educational programs, planting, weeding, harvesting. In the fall she collected data for publications and year round did photography, newsletters, the GBG website, helped with graduate student projects, and solicited donations.

When she began thinking about retirement, Hanscom was pulled toward research she had been involved

in—peonies. "I decided five years ago I wanted to grow peonies," she said. She even traveled to New Zealand to study the crops there. "I'm a farmer at heart," she said. Besides concentrating on her Polar Peonies project, Hanscom's other plans include traveling, fishing, knitting, reading, and spending time with family.

Holloway called Hanscom irreplaceable. "She is a very dedicated, top-notch employee," Holloway said. "She is a great organizer; she loves educating children and getting them involved in gardening. She is a good scientist and is incredibly creative. We're going to miss her a lot."

A picnic was held in Hanscom's honor June 7 at the GBG pavilion. Co-workers and friends gathered to thank her for her years of service and to wish her well. Hanscom was presented with a scarecrow to enhance her peony garden. Attached to the straw-stuffed character were greeting cards, checks, and cash. "We know she wants to travel so we thought she could use a little spending money," Dr. Holloway explained. Holloway also presented Hanscom with a deluxe-edition world atlas.

Meanwhile, the summer season finds Hanscom teaching the Junior Master Gardeners' course, still digging in the dirt, still spreading the joy of growing things.

*Jan Hanscom, right, with her parting gifts at the farewell picnic held for her June 7 at the Georgeson Botanical Garden pavilion. She received a scarecrow with her face, and with cash and cards attached with clothespins.*



# The Matanuska Experiment Farm's new superintendent

Judson Scott, new manager at the Matanuska Experiment Farm, first fell in love with Alaska when he did research here as a college student. He volunteered in 1993 for a summer internship with the Student Conservation Association through the Kenai Fisheries Office of the US Fish and Wildlife Service. He conducted surveys of anadromous fish populations in each of forty streams and rivers on the island of Naval Station Adak. He took electroshock samples, gill net samples, conducted visual counts, and did rod and reel surveys. He collected water quality data for each stream, recorded GPS data for the mouth and upper barrier of each stream, took species, sex, weight, length data, and took otolith bone samples from fish, aged fish from otoliths, and recorded geographic data on the streams themselves. He also conducted sonar topography mapping of several lake bottoms on the Kenai Peninsula.

He is responsible for the field operations, physical plant operations, and administrative functions necessary to meet the needs of research, instruction, and outreach at the farm. His goals for the farm are to continue to diversify its research to match the changes occurring in Alaska and to “really bring the valley to know and support the work we’re doing here.”

Raised in Wyoming and Colorado, Scott earned a BA in environmental conservation at the University of Colorado at Boulder and a BS in landscape horticulture with an emphasis in turfgrass management at Colorado State University. His career has focused on golf course construction, maintenance, and management, including a six-year stint at Settlers Bay golf course in Wasilla. While there, he helped with turfgrass variety trials and installed two research putting greens. In cooperation with the Palmer Research and Extension Center, he constructed two putting greens at Settlers Bay, both used for variety trials research of northern latitude adapted turfgrass species. Up to sixteen varieties of turfgrass have been in the green at one



time, and the plots are still being used for research today. He also worked two years on the North Slope.

Scott and his wife Tanya have two children. In his free time Scott enjoys hunting and fishing and would like to get back to flying bush planes as soon as time allows.

The Matanuska Experiment Farm was established in 1917 and became part of UAF's Agricultural and Forestry Experiment Station in 1931. With 260 cultivated acres and 800 acres of forest, it is used for research in sustainable agriculture, land reclamation, and environmental issues.

## Soil research and managing crops for sustainable agriculture emphasize:

- Plant breeding, especially developing small grain varieties adapted to northern latitudes
- Forage quality including developing alternative forages with

superior nutritional qualities for high latitudes

- Soil science involving classifying arctic and subarctic soils, carbon cycling in arctic soils in relation to global change, cooperative Russia-Alaska research on permafrost-affected soils in Alaska and eastern Siberia
- Range science and research ecology on reclaiming and revegetating lands disturbed by oil and mining development

## Horticulture research focuses on:

- Evaluating potato varieties suitable for Alaska's growing conditions
- Assessing and controlling potato diseases
- Evaluating alternative organic fertilizers
- Evaluating lettuce varieties for disease and tip burn resistance
- Evaluating alternative vegetable crops

# Notes

## Faculty news

**Jan Rowell** was promoted from research scientist to assistant professor in February. Rowell had been a researcher at UAF for nine years.



Calling Rowell an accomplished biologist and animal scientist, Professor Milan Shipka, chair of the Department of High Latitude Agriculture, said, "We are very happy she decided to pursue the research faculty position."

After earning a PhD at the University of Saskatchewan, Canada, in 1991, Rowell began studying muskoxen for the National Museum of Natural Sciences (now called the Canadian Museum of Nature), collecting information on muskox behavior. With funding from the USDA National Research Initiative, and in collaboration with Shipka, Rowell has focused on muskox and reindeer husbandry, including bull behavior, breeding seasons, female estrus synchronization, gestation length, and ultrasonography. "In the future, we will continue to pursue sustainable agriculture in Alaska, with an emphasis on farming indigenous species. The potential of using reindeer antlers as a biomedical model is also something that needs to be explored. The mouse model has been overused," Rowell said. "Reindeer are a great example of an agricultural species with unique potential for biomedical research."

Congratulations to **Norman Harris**, who has been promoted to associate professor. A range ecologist at Palmer, Harris examines and



models animal distribution patterns with emphasis on thermal and social influences. He also monitors and quantifies range vegetation, primarily using near-Earth remote sensing.

Congratulations to Associate Professor **Mingchu Zhang**. Effective July 1, Zhang will be the department chair for High Latitude Agriculture. At UAF



for five years, Zhang's research encompasses the relationship of soil fertility to plant nutrition and soil environmental chemistry, the effects of manure and compost on soil quality and crops, heavy metals from municipal composts, phosphorus runoff, and greenhouse gases emission.

Best wishes to all faculty being recognized by UAF with longevity awards:

- 30 years: Professor **John Yarie**
- 20 years: Professor **Pat Holloway**, Professor **Meriam Karlsson**
- 15 years: Professor **David Verbyla**
- 10 years: Research and Extension Instructor **Hans Geier**
- 5 years: Instructor **Jodie Anderson**, Assistant Professor **Valerie Barber**, Associate Professor **Mingchu Zhang**

SNRAS is well represented on the UAF Faculty Senate. Assistant Professor **Julie Lurman Joly** was elected to the Senate this spring, joining Assistant Professor Jingjing Liang, who is serving his second year on the Senate. Associate Professor

*Natural Resource News* is written and edited by Nancy Tarnai, public information officer, and Deirdre Helfferich, managing editor.

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**Dave Valentine** is the new alternate representative. Concerns addressed by the Faculty Senate include course and program development and change, policies related to academic procedures, academic freedom, faculty rights and responsibilities, and quality of teaching, research, and service.

## Staff news

Best wishes to all staff being recognized by UAF with longevity awards:

- 30 years: Research Professional **Tim Quintal**, Lab Technician **Laurie Wilson**
- 25 years: Research Forester **Tom Malone**
- 20 years: Fiscal Technician **Gidget Wensel**
- 15 years: HR Technician **Rhonda Wadson**
- 5 years: **Brian Charlton**, research technician

## New hires: Welcome!

- **Kathleen Buchholz**, administrative assistant, Georgeson Botanical Garden
- **Loria Chaddon**, administrative assistant, Math in a Cultural Context
- **Katie DiCristina**, horticulture research technician, Georgeson Botanical Garden
- **Shawn Freitas**, research technician for Assistant Professor Andy Soria in Palmer
- **Tom Kurkowski**, network programmer for SNAP
- **Cynthia Steiner**, administrative assistant, UA Geography Program
- **Nancy Tarnai**, public information officer for SNRAS and AFES
- **Kahlil Wilson**, GIS technician for SNAP