New horticulturist

Jeffrey Smeenk has joined the Cooperative Extension Service as extension horticulture specialist and the SNRAS faculty as assistant professor of horticulture. He is based at the AFES Palmer Research and Extension Center. Smeenk came to Alaska from Michigan State University (MSU), where he worked as a research agronomist since 1995. He has a doctorate in sustainable agriculture from MSU and a master’s degree in plant pathology from Pennsylvania State University. The appointment is allocated 75 percent to extension work and 25 percent faculty work.

“I had visited Alaska in 1979 and knew that I would love to come back to further explore this beautiful state,” Smeenk said, “but I wouldn’t have convinced my family to move here for just any job. The fact that one opened up that combined many of my interests was almost too good to be true.” Smeenk’s interests include vegetable production, marketing, sustainable agriculture, value-added products, small scale farming, and extension education. “I also appreciate the opportunity to be a generalist within the field of commercial horticulture,” he said.

Smeenk, who has been in Alaska for about three months, said he was still learning how Alaska horticulture differs from his prior experience. “I anticipate that in time I can combine some of the interests listed above into a solid research program for the Alaska horticulture industry.”

Most of Smeenk’s teaching will be thorough the Extension Service and outside of the classroom. “I anticipate opportunities to guest lecture in on-campus courses using the distance education system that we have here at Palmer,” he noted.

New program links Peace Corps, UAF, and SNRAS

A cooperative master’s degree program new to the University of Alaska Fairbanks provides an opportunity to integrate graduate study with international development practice through Peace Corps field experience in natural resources management or rural development. The Graduate School of the University of Alaska Fairbanks administers the program.

Established by a memorandum of cooperation as the Master’s International Program, the program aims to advance both Peace Corps and university goals as they pertain to international understanding and training. Individuals who have been accepted as Peace Corps volunteers can work toward either a master of science degree in natural resources management or, through the College of Rural Alaska, a master of arts degree in rural development.

To qualify, the prospective student must meet Peace Corps requirements for volunteer service and the admission requirements for the master’s degree program chosen. In some cases, enrolled students will be able to apply to the Peace Corps as program applicants during their first semester of graduate study.

Each participating university has its own requirements and awards credit for Peace Corps service accordingly. At UAF, students will receive a tuition waiver so they can maintain their active student status during their two-year Peace Corps assignment, and up to six credit hours will be granted for Peace Corps service. The course work for study in Natural Resources Management non-thesis option requires 35 credit hours, including three credits for research.

A student will take two semesters of graduate coursework on the UAF campus and then enter the Peace Corps for twelve weeks of pre-service training. If this training is successfully completed, the student will become a Peace Corps volunteer and begin a two-year tour of service in the country of assignment. During the first year, a student in resource management will complete research methods for natural resource management, resource management planning (or forest health and protection), political economy of the global environment (or statistics), two graduate seminars, advanced silviculture (or international law and the environment), simulation and modeling in resource management (or natural resource applications of remote sensing) and an elective.

After this coursework, students will complete the Peace Corp training and begin their assignments. In year three the students complete a graduate seminar, two electives and eleven credits of thesis and research, six of which can be granted for the Peace Corps work. In year three they will also complete the second and final year of their Peace Corps assignment.

Tony Gasbarro is the UAF coordinator for the program. He can be reached by e-mail (ffafg@uaf.edu) or by phone (907-474-5190). Over forty schools nationwide participate in Masters International, which was established in 1987. For more information from the Peace Corps, contact Master’s International Program: VRS/DP/MIP, Peace Corps, 1111 20th Street, NW, Washington, DC 20526; Phone: (202) 692-1812; Fax: (202) 692-1801; e-mail: mastersinternational@peac corps.gov. The Peace Corps website is at peacecorps.gov.
Forest group fosters cooperation, collaboration

People interested in sharing information about Alaska’s northern forest can join with others through the Alaska Forest Cooperative, a group formed last year to promote information exchange among forest scientists, forest managers, and forest landowners in northern Alaska. The “northern forest” includes boreal forest and taiga extending over much of mainland Alaska, but excludes the coastal spruce-fir forest.

“The cooperative was formed because landowners and forest managers often lack current information on how to best manage their forested lands for economic development, subsistence products, or other values,” said co-chairperson Tom Paragi. “Our group is designed to help interested parties exchange information and define information needs. We have a technical focus, while recognizing that nontechnical or traditional knowledge has value in forest management and that learning occurs by collaboration among scientists, landowners, and forest managers.”

The group not a political or advocacy organization. Members represent various entities in Alaska, including private landowners, government (federal, state, local), Native corporations, and the University of Alaska. They meet twice a year in spring and autumn to conduct business, and at least one annual workshop or field trip that is separate from the meetings. During business meetings members exchange information, review progress on existing projects, discussing new projects, and plan workshops or field trips.

Conference on boreal forest ecosystems set for May

Warming during the last thirty years has been associated with permafrost warming and melting, changes in growth rates of dominant trees, increased area burned, insect outbreaks, and changes in vertebrate populations. What are the causal links among these changes and their implications for the functioning of the boreal forest and the region’s inhabitants? “Climate-Disturbance Interactions in Boreal Forest Ecosystems,” is the subject of an international science conference scheduled for May 3–6 at the Fairbanks Princess Riverside Lodge. The meeting is sponsored by the Bonanza Creek Long Term Ecological Research Program at UAF and the International Boreal Forest Research Association (IBFRA).

The conference aims to explore the current scientific understanding of climate-disturbance interactions in the circumboreal region and the ecological, economic, and social conditions that influence management decisions regarding disturbance, climate change effects, and adaptation to climate change. The meeting’s sponsors also aim to bring a circumpolar perspective to research initiatives and foster collaboration and an exchange of ideas among countries in the circumpolar boreal forest.

As the second most extensive terrestrial biome on earth, the boreal forest represents a wood resource of global significance that is an important part of the cultural and economic wealth of northern countries. Researchers seek a better understanding of how the forest’s structure and functioning determines and is influenced by its disturbance regime, which includes such important disturbances as fire, insect outbreaks, timber harvest, and flooding.

The conference registration fee is $400 for the entire meeting and includes conference attendance, one afternoon tour, food at receptions, and one copy of the abstract book. The Wednesday evening dinner banquet with guest speaker ($25) is optional. There is a 50 percent discount for students with current, valid student identification. Students willing to work for further reduced conference fee should contact Nancy Fresco (fnmf@uaf.edu). Those not wishing to register for the entire conference may attend on a $100 per day basis. The conference coordinator is Monika Calef (fnmpc@uaf.edu). For up to date information visit http://iter.uaf.edu/IBFRA/default.cfm

Contact us for information on subscriptions to our science magazine, Agroborealis, or to receive our other publications.
Wilmking awarded postdoc

A research proposal on climate warming and the northern forest has earned recent Ph.D. graduate Martin Wilmking a postdoctoral fellowship from the Postdoctoral Program in Climate and Global Change of the National Oceanic and Atmospheric Administration. The appointment is for one year, renewable for a second year based on performance and program funding. He will be working with Dr. Roseanne D’Arrigo at Lamont-Doherty Earth Observatory, Columbia University, and Jennifer Harden of the U.S. Geological Survey, Menlo Park, California.

Wilmking completed his Ph.D. this winter under forest ecology professor Glenn Juday. His new project is titled “Land-cover change as the driver for carbon budgets at northern treeline in Alaska—from isotopic signatures in trees and soils to local and regional vegetation feedbacks to the global climate system.”

Global warming strongly affects tundra and boreal forest ecosystems, which feed back to climate. There are two important feedbacks to climate. One is the advance of forest into tundra, which can lead to further warming through changes in albedo, the fraction of light that is reflected by surface. For example, the normal albedo of snow is nearly 1.0, whereas that of charcoal is about 0.04. The second feedback, carbon storage, is important to atmospheric carbon dioxide concentrations. In the Arctic as elsewhere, carbon is stored in soils and vegetation, but the future of the high-latitude carbon sink is uncertain.

Forest cover and density are important factors that influence both albedo and carbon storage. Wilmking will study treeline dynamics and above- and belowground carbon storage along transects of decreasing forest cover across the northern treeline in the Brooks Range, Alaska. At the plot level, he will identify carbon pools in trees, shrubs, and soil. Tree rings, stable isotopes, and historic photographs will be used to estimate recent change in vegetation cover at landscape level, and ultimately the results will be scaled up to regional level using IKONOS/Quickbird imagery.

“This combination of different approaches promises spatially explicit results of present and future treeline dynamics and carbon storage in northern Alaska,” Wilmking said. He will be looking at field sites along the Sheenjek River Valley to Fort Yukon, and to the west in the Noatak River drainage.

The award, which includes salary, benefits, and some travel, is administered by the University Corporation for Atmospheric Research (UCAR). Wilmking, whose interdisciplinary degree is in landscape ecology and earth system science, did his doctoral research on the effect of recent climate warming on tree growth of white spruce at treeline sites in the Alaska and Brooks Range.

Brackley introduces forest products program

The creation of rational products is the challenge faced by the forest industry in Alaska, according to associate professor Allen Brackley, director of the university’s Special Forest Products Program in Sitka. During a March visit to Fairbanks, Brackley gave a presentation on the program’s history and future direction. It is funded by special grants through the Cooperative State Research, Education, and Extension Service, U.S. Department of Agriculture.

The program’s long-term objective is to help Alaska become competitive in the value-added forest products industry by providing specific technical, business, and marketing assistance, along with the creation of a facility where promising new projects can be developed and tested. Proposals for new markets and new value-added products that are economic to produce have to take into account such economic factors of high labor and transportation costs.

In the area of research and technology development, the program’s focus is on primary and secondary manufacturing and processing technologies, wood finishing and preservation, and wood engineering. Other areas of interest are marketing, economic feasibility studies, careful demonstration projects, and special forest products such as herbs, shrubs, and Native carvings.

During the 1990s, a downturn in the pulp wood industry significantly affected the economy of the southeast region of Alaska. A 1993 pulp mill closure resulted in the loss of 400 direct and 500 indirect jobs. When the Ketchikan mill closed in 1997, another 200 direct and 1800 indirect jobs were lost. In a region with a population of 60,000, these are significant numbers.

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Brackley anticipates the development of a center for the research and design of new materials, processes, and product opportunities that is accessible entrepreneurs and small startup business interests. The facility would be capable of taking an initial concept through prototype development, pilot production and pre-commercialization.

Brackley, an associate professor of forest business, holds a degree from the University of Maine. He can be contacted at the University of Alaska Southeast Sitka Campus, 1332 Seward Ave. Sitka, AK 99835; 800-478-6653, ext.752 (ph); 907-747-7753 (fx); or by e-mail at allen.brackley@uas.alaska.edu.
Several SNRAS/AFES employees are included in this year’s UAF longevity awards recognizing service to the university. From the Fairbanks staff were soil lab technician Timothy Quintal (25 years), forestry research assistant Thomas Malone (20 years), Reindeer Research Program administrative assistant Rhonda Wadeson (10 years), and research associate in resources management, Hans Geier (5 years). Recognized in Palmer were fiscal technician Gidget Wensel (15 years), laboratory manager Rudolph Candler (15 years), and research technician Greg Terry (5 years).

Jenifer Huang McBeath, professor of plant pathology and biotechnology, was recently awarded a U.S. State Department Embassy Science Fellowship. She is based at the U.S. embassy in Beijing through May 31, where she is working with the U.S. Department of Agriculture to improve conditions for exporting U.S. agricultural products to China.

The Canadian Studies program committee sponsored Canada Days in early March. Events included showing of the films Fast Runner (exploring the themes of love, revenge, and survival among the Inuit of the Canadian Arctic) and Totem: The Return of the G’psgolox Pole, the story of the 1929 theft of a totem pole from the Haisla people of northwestern British Columbia, its discovery sixty years later in the National Museum of Ethnography in Stockholm, Sweden, and the repatriation of this artifact. Visiting professor Laurie Meijer-Drees of Malaspina College in British Columbia presented the lecture, “How First Nations have Affected the State of Canada.” Graduate students giving panel presentations on their Canadian research topics were Ross Coen, Galia Kirsanova, and Linda Johnson in Northern Studies, and IGERT student Chanda Meek.

SNRAS students receiving the UAF 2004 Outstanding Student Award are Cody Burgess, Forest Sciences; Karen Tilton, Geography; Cody Peterson, Plant, Animal, and Soil Sciences; and Curtis Knight, Natural Resources Management.

Talk highlights civilian Iraqis

The UAF Geography Department, in cooperation with No Nukes North and Alaskans for Peace and Justice, sponsored a talk and slide show in March by Dahr Jamail on his travels in Iraq. Jamail, an independent journalist from Anchorage, Alaska, went to Iraq this last December and January to find out for himself what was happening there. His dispatches describe the effects of war and military occupation on everyday Iraqis, and expose a side of life in postwar Iraq that is not often shown in the news media. Instead of concentrating on press conferences, Iraqi officials, and the U.S. military’s actions, Jamail decided to focus on the human side of life in a war-disrupted society.

Traveling through the country with an interpreter and sometimes with fellow journalists, Jamail interviewed Iraqi citizens about their living conditions and experiences with the occupation forces. His dispatches range in subject from a children’s art therapy school to water-borne illness to treatment of detainees to the Iraqi police. The talk at the UAF campus was well attended, with perhaps a hundred people in the audience.

Jamail returned to Iraq in April to continue his work there. His dispatches are available on line at several websites, including www.newstandardnews.com and electroniciraq.net.


News is written and edited by Doreen Fitzgerald, science writer, and Deirdre Helfferich, managing editor.

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