

Conservation Biology Graduate Program Weekly Newsletter

26 February 2007

A weekly newsletter of the Conservation
Biology Graduate Program

<http://www.consbio.umn.edu/newsletter/>

Submissions to coop0162@umn.edu



Editor's Corner



"If you really want to reduce the amount of oil that you consume, you have to reduce the amount of gasoline you use," Bush said on a road trip to push energy initiatives he announced last month in his State of the Union address.

NY Times 22 February 2007

Keen insight.

Anne Cooper

Lectures/seminars on campus

Conservation Biology Seminar

Date and time: 26 February (Monday) 4:00-5:00pm

Location: Please note that the location for seminar has changed again this semester: we will be meeting Mondays from 4-5 in 335 Borlaug.

Title: Social learning and the creation of Communities of Understanding: A case study in Community Wildfire Protection Planning

Presenter: Rachel F. Brummel, Conservation Biology Program

Notes: Collaborative planning is increasingly embraced as a legitimate form of management in complex natural resource systems. This model strives to engage stakeholders in environmental decisions and facilitate the integration of multiple interests. But how do groups come to a shared understanding of the wildfire problem given the ecological complexity of the resource and the social complexity of the decision making landscape? One hypothesis maintains that social learning is essential for groups to wade through relevant science and incorporate multiple interests into their planning. Here, I examine social learning in the context of Community Wildfire Protection Planning (CWPP) groups mandated through the 2003 Healthy Forest Restoration Act (HFRA). CWPPs are a multi-objective planning process that bring together a diversity of agency- and community-level stakeholders and thus provide a particularly rich system in which to investigate social learning. For this case study, we conducted 16 in depth, semi-structured interviews with planning participants in Lake County, Minnesota as a part of the Joint Fire Science Program Research CWPP Project. We found this CWPP group enhanced the complexity of their collective understanding of social and ecological systems related to wildland fire through the planning process. Through influencing understanding in the planning group and often in organizations, social learning in the CWPP process contributes to the creation of larger "Communities of Understanding" in wildfire management across scales.

Title: Predicting indirect effects in ecological risk assessments: The case of secondary pest outbreaks in Bt-cotton

Presenter: Adam Zeilinger, Conservation Biology Program

Notes: Insect-resistant transgenic cotton (Bt cotton) has, in general, increased yield and reduced insecticide use by successfully eliminating primary pests. However Bt cotton has not eliminated all pest problems. In the southeast US, outbreaks of stink bugs on Bt cotton have become increasingly serious, requiring more insecticide sprays. Such outbreaks represent significant risks in their potential to erode the economic and ecological benefits of Bt cotton. Understanding the ecological mechanisms driving stink bug outbreaks will improve attempts to predict and mitigate other secondary pest outbreaks. In this talk, I will outline my experimental plan to test if release from competition with primary pests is driving outbreaks of stink bugs in Bt cotton. I will also describe how this work could be used as a case study to improve ecological risk assessments in general.

Job talks on biological anthropology

Date and time: Monday, February 26, 2007, 2:30pm

Location: Blegan Hall, West Bank

Presenter: Karen L. Baab*, Ph.D. candidate (anticipated 2007) City University of New York

Title: The implications of cranial shape for the taxonomy and evolution of /Homo erectus/: A 3D geometric morphometrics approach

EEB Pre-thesis Seminar

Date and time: Wednesday, February 28, 9 a.m.

Location: 150 Ecology

Presenter: Dustin Haines

Title: Leafy spurge, soil biota, and herbivores: The cause of native flora recruitment limitation?

Notes: Interactions of plants with herbivores and soil biota are drivers of change in many plant communities, but the nature of these relationships is not well known, especially with regard to non-native invasive plants. Plant community composition is determined, in part, by mutualistic and pathogenic interactions between plants and soil biota, and soil biota, in turn, are highly influenced by root exudates. Invertebrate herbivores can mediate these plant-soil biota relationships: plants frequently change the quality and/or quantity of their root exudates following herbivore attack. I will investigate the interaction of leafy spurge (*Euphorbia esula*), an invasive non-native plant, with soil biota and introduced biocontrol flea beetles (*Aphthona* spp.) to understand native plant recruitment limitation in areas formerly dominated by leafy spurge. I hypothesize that leafy spurge reduces native plant recruitment indirectly through changes in soil biota, which are mediated by leafy spurge root exudates and herbivory from flea beetles. I will explore this hypothesis by conducting seed bank assays and experimentally testing the effects of leafy spurge root exudates on native plant recruitment and soil biota. My research will elucidate the ecology of plant-soil biota-herbivore relationships, and directly influence invasive plant management in the Great Plains.

EEB Weekly Seminar

Date and time: Wednesday, February 28, 2007, 4pm

Location: 335 Borlaug Hall

Presenter: Dr. Alexandra Basolo, University of Nebraska

Title: Using a Multi-level Approach to Studying Sexually Selected Traits in Swordtail Fish

Notes: To more fully understand trait evolution, a multi-level approach, combining both proximate mechanisms and ultimate causation, is most informative. Proximate mechanisms include the underlying genetic, physiological, and environmental determinants of trait development and expression. Ultimate causation includes the evolutionary history of the trait and how selection acts on trait variation. I will use my laboratory and field studies on poeciliid fishes to illustrate how these approaches can be integrated to produce a deeper understanding of living systems. Specifically, I will discuss my work investigating the evolution of a preexisting bias that appears to have influenced the evolution of male morphology in swordtails.

Host: Mark Bee

Coffee, Tea, Cocoa and Cookies will be served outside 100 Ecology at 3:30.

Brown-bag talk

Date and time: 1 March 11:30am - 12:30

Presenter: Dr. Stephen Bortone, Director of Minnesota Sea Grant

Title: Sanctuaries and Artificial Reefs as Ecosystem Management Alternatives in the Great Lakes"

Location: Room 505 Ecology, 1987 Upper Buford Circle, St. Paul Campus

<http://www.seagrant.umn.edu/about/steve>

Water Resources Seminar

Date and time: Wednesday, February 28, 12:00 PM to 1:00 PM

Location: 365 Borlaug Hall, St. Paul Campus

Title: Effluent-dominated Streams and Emerging Contaminants

Presenter: Dr. Bryan W. Brooks, Department of Environmental Studies, Center for Reservoir and Aquatic Systems Research, Baylor University

Notes: Dr. Brooks is an Assistant Professor of Environmental and Biomedical Studies at Baylor University in Waco, Texas. Current research projects focus on aquatic impacts

of emerging aquatic contaminants (e.g., pharmaceuticals and personal care products, harmful algal toxins) and other water quality aspects of watershed and reservoir linkages, particularly in rapidly urbanizing and effluent-dominated systems.

Host: Richard Kiesling, FWCB, rkies@umn.edu, 763-783-3182; 612-817-2826

Environmental and Resource Economics Seminar

Date and time: Monday, February 26 from 12:00-1:30 p.m.

Location: Room 230 Classroom Office Building

Presenter: Steve Taff, Department of Applied Economics

Title: "Designing an Industrial Strength Cellulosic Biomass Energy System: The Case of Rock-Tenn"

Notes: What would it take for cellulosic biomass to meet the energy needs for a large center-city industrial user? What are the principal cost elements in the decision calculus? Who gets to decide? What are the policy overtones? Real people, real models, real decisions. And pictures!

Announcements

Upcoming CB Seminar—Related Opportunities

Monday March 5th, the conservation biology seminar series will be hosting our outside speaker, Dr. Fikret Berkes. He will be here all day and evening on Monday and will be available to meet with interested students and faculty. I have attached a brief summary of his talk and his biography and research interests, along with some publications that I believe do a good job summarizing his orientation towards environmental and conservation issues. The MacArthur program will be sponsoring a breakfast with Dr. Berkes on the West bank and the CB program will be hosting a graduate student lunch that day. If you are interested in meeting with Dr. Berkes in some capacity during his visit, please contact me at: richm051@umn.edu

We're here to help

CV/RESUME BUILDING AND FORMATING FOR ACADEMIA AND INDUSTRY

Date and time: Tuesday, March 6, 2007, 2:00-4:00 p. m.

Location: 3-115 Electrical Engineering, East Bank

Map: <http://onestop.umn.edu/Maps/EECSsci/EECSsci-map.html>

Presenters: Dr. Deborah Wingert, Instructor, Center for Teaching and Learning; Terri Spillers, Counselor, Office of Human Resources

This workshop is for graduate students and postdocs, at all stages of their programs or careers, planning to seek faculty positions or careers in industry and private organizations. The presentation will cover the difference between CV/résumé writing and building; what employers are looking for; essential components of a CV/résumé and competitively packaging your skills.

Click to register: <http://www.grad.umn.edu/career/workshops/register.asp?id=133>

EFFECTIVE INTERVIEWING SKILLS FOR JOBS IN INDUSTRY

Date and time: Wednesday, March 7, 2007, 3:00-4:30 p.m.

Location: 140 Nolte Center, East Bank

Map: <http://www.onestop.umn.edu/Maps/NCCE/NCCE-map.html>

Presenter: Patty Bales, Counselor, Office of Human Resources

The presentation will cover how companies determine who to interview; how to prepare for an interview; handling difficult questions and different interview formats.

Click to register: <http://www.grad.umn.edu/career/workshops/register.asp?id=144>

GETTING WHAT YOU WANT: TIPS FOR A SUCCESSFUL INFORMATIONAL INTERVIEW

Date and time: Tuesday, March 27, 2007, 5:00-7:00 p.m.

Location: 231 Smith Hall, East Bank

Map: <http://onestop.umn.edu/Maps/SmithH/SmithH-map.html>

Presenter: Dr. Kathryn Hirsh, Co-founder of Hirshworks, a consulting company that specializes in career development and coaching for the past 19 years.

Notes: The goals of this workshop are to share a model of personality, based in the Myers-Briggs Type Indicator®, that will help inform your approach to informational interviewing and to offer strategies for attacking the informational interview process that are tailored to your personality preferences. By becoming more aware of your own preferences - your style of interacting, making decisions, gathering information, and structuring your environment - you will be able to ask better questions and receive needed feedback in your quest to discover the career path that uniquely suits you.

Click to register: <http://www.grad.umn.edu/career/workshops/register.asp?id=138>

WRITING FUNDABLE GRANT PROPOSALS--ALL DISCIPLINES

Date and time: Thursday, March 29, 2007, 5:00-7:00 p.m.

Location: 102 Fraser Hall, East Bank

Map: <http://onestop.umn.edu/Maps/FraserH/FraserH-map.html>

Presenter: Dr. Jeanine Ferguson, Grants Coordinator, Office of the Executive Vice President for System Academic Administration

Notes: This presentation is aimed at graduate students and postdoctoral associates/fellows planning to apply for research grants or fellowship funding in all disciplines. Strategies for developing successful grant proposals will be highlighted, along with an overview of resources for prospecting grant sources within federal, state, private and University funding pools. Dr. Ferguson has been teaching grant writing at the U of MN for 20 years. She opened two research/sponsored project development offices in CLA and CEHD and assisted in securing over \$40 million in external funding for projects.

Click to register: <http://www.grad.umn.edu/career/workshops/register.asp?id=141>

News You (Grad Students) Can Use

Resolution: *Council of Graduate Students – University of Minnesota*

Date: February 21st, 2007

Authors: Geoff Hart and Jason Wilde

Topic: Parking for graduate students on nights and weekends.

Whereas graduate students play a major role in the University of Minnesota's goal to become one of the top research universities in the country;

Whereas many graduate students' work necessitates that they work nights and weekends;

Whereas more inexpensive transport/parking options would benefit current graduate students and attract new graduate students;

Whereas access to closer parking facilities on the Minneapolis and St. Paul campus would decrease the risk (assault, cold, etc.) to individuals currently parking farther away for financial reasons;

Whereas many city buses run less frequently or not at all on nights and weekends, so graduate students who normally bus must drive in to the university;

Whereas the Parking and Transportation department could generate a new revenue stream through a Graduate Student Nights and Weekends Parking Program (outlined below);

Be it resolved COGS respectfully requests that the Parking and Transportation Services department consider the following proposal for a Graduate Student Nights and Weekends Parking Program¹:

- Issue a mirror hanging/card permit that gives access to parking ramps/lots in the evenings (4:30 PM – 7:30 AM) and weekends/holidays at a low cost (~\$10 per semester).
- The cost of the window hanger/card would be covered by the fee (\$1 to \$4 respectively).
- This program would be open to both contract and non-contract holders.
- Parking Areas that would be accessed by graduate students:
 - East Bank Campus:
 - § Oak St. Ramp
 - § East Road Garage
 - § 4th Street Ramp *
 - § Washington Ave Ramp *
 - § *Not available if a sporting event is happening.
 - St. Paul Campus:
 - § Gortner Avenue Ramp
 - § Lots:
 - East of Gortner Ave / North of Buford Ave
 - SC102, SC161, SC173, SC186
 - East of Gortner Ave / South of Buford Ave
 - SC150, SC153, SC156
 - West of Gortner Ave / North of Buford Ave
 - SC109, SC169, SC175
 - West of Gortner Ave / South of Buford Ave
 - SC151
 - State Fair Lot (SC108)
 - West Bank Campus:
 - § 21st Ave Ramp

Courses

Are you interested in advanced training in assessment and management of forest resources? The following three field courses may be of interest to you. The courses are taught at the Cloquet Forestry Center from May 13 - June 8. As the courses are taught separately, it is possible to take one, two, or all three classes. For additional information

¹ This program builds upon the current 'Free Night and Sunday Parking Program.' We also recognize that some St. Paul campus lots are available in the evening for contract holders who may wish to "move up" to a closer lot.

about any of the courses, please contact the instructor(s), see course Information at <http://fr.cfans.umn.edu/courses/index.html> and Advanced Field Session information at <http://fr.cfans.umn.edu/courses/fieldsession/advanced.html>.

FR 5615 Field Remote Sensing and Resource Survey (2 cr) – Field applications of remote sensing, sampling/measurement methods to inventory/mapping of forest and other natural resources. (Marv Bauer mbauer@umn.edu, Alan Ek aek@umn.edu, and Brian Loeffelholz loef0018@umn.edu instructors) May 13 – 19.

FR 5611 Field Silviculture (2 cr) – Collection of field data to prepare/write silvicultural prescriptions for regeneration, thinning, and harvesting in the context of landscape, watershed, and wildlife habitat issues. Field exercises in forest entomology, pathology, tree improvement, and non-timber forest products. Tree planting. Marking stands for harvest. (Grant Domke, instructor; gmdomke@umn.edu) May 21 – May 31.

FR 5621 Field Timber Harvesting and Road Planning (2 cr) – Design, layout, and administration of timber sales. Forest road planning and design. Protecting residual trees during harvesting operations. Dealing with protesters. Field trips and on-site evaluations of timber harvesting systems. Timber appraisal, forest management guidelines. Road location and profiling. Planning/layout considerations. (Charlie Blinn, instructor; cblinn@umn.edu) June 1 – 8.

Charlie Blinn

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E-mail: cblinn@umn.edu

Date Saver

Ada Comstock Distinguished Women Scholars Lecture

Presenter: Professor Catherine French, Civil Engineering

Title: “Shake, Rattle, and Roll: Testing Structures to Their Limits”

Date, time and location: **March 22**, 2007, 7:30 p.m., Cowles Auditorium, Hubert H. Humphrey Center

Reception follows lecture.

FREE. RSVP: 612-625-9837 or women@umn.edu

This program is co-sponsored by the Office of the Vice President and Provost for Academic Affairs, the Office for University Women in the Office of the Vice President and Vice Provost for Equity and Diversity, The Graduate School, and University Libraries

What's for Dinner?' features author Michael Pollan

Date and location: Thursday, **April 19**, 2007, 9:00 a.m. - 2:30 p.m.

Location: MacMillan Auditorium

Keynote: Michael Pollan, author and journalist

Conference: \$100 member / non-member (conference includes keynote, panel and special luncheon discussion)

Morning Session only: \$35 member / non-member

Co-sponsored by the University of Minnesota's Program on Agricultural, Food and Environmental Ethics and the Minnesota Institute for Sustainable Agriculture (MISA)

Notes: The University of Minnesota Landscape Arboretum presents What's for Dinner? The Ethics and Aesthetics of Eating, featuring Michael Pollan, author of "The Omnivore's Dilemma." Pollan will present the keynote address, followed by a panel discussion including Allen Levine, CFANS dean, as well as regional experts, growers and distributors. The event is presented by the arboretum's Public Policy Program and sponsored by the [University of Minnesota's Program on Agriculture, Food and Environmental Ethics](#) and the [Minnesota Institute for Sustainable Agriculture](#). For more information and to register, call the Arboretum's Education Office at 952-443-1422 or go to <http://www.arboretum.umn.edu/education/adult/publicpolicy.htm>.

Conferences and Meetings

Minnesota Chapter of the American Fisheries Society 2007 Annual Meeting Call For Papers

The meeting will be on **March 19-21, 2007**, at the Holiday Inn Hotel and Suites, St. Cloud. Are you a student member? We have a new process for allotting Student Travel Awards for the annual meeting. Don't be shy - the Minnesota Chapter strongly supports student attendance, for both graduate and undergraduate students.

The American Society of Naturalists (ASN)

The annual meetings of The American Society of Naturalists (ASN) <http://www.amnat.org/>, Society of Systematic Biologists (SSB) <http://systbiol.org/>, and the Society for the Study of Evolution (SSE) <http://www.evolutionsociety.org> are scheduled to be held June 16-20, 2007 at the Christchurch Convention Centre, Christchurch, New Zealand. Saturday June 16 is the arrival day (pre-conference tours, council meetings and opening reception), Sunday June 17 through Wednesday June 20 (scientific sessions) with closing awards banquet scheduled for the evening of Wednesday, June 20. Thursday June 21 is departure day. Full details on this combined meeting are available at the Evolution 2007 web site, www.evolution2007.com On line conference registration and talk/poster registration is now available at this site. Delegates intending to present a talk or display a poster at Evolution 2007, must first register through the on line registration process.

PLEASE NOTE THE FOLLOWING DEADLINES For submission of talk/poster titles- **April 15, 2007** For early bird discounted registration rates - **March 31, 2007** Delegates can register early and submit titles no later than the deadline above. Information on travel to New Zealand and accommodation options for the conference can be found on the conference web site.

American Fisheries Society Annual Meeting

We invite you to California as the American Fisheries Society (AFS) convenes its 137th Annual Meeting at the Marriott Hotel in downtown San Francisco September 2-6, 2007. The theme of the meeting is "Thinking Downstream and Downcurrent: Addressing Uncertainty and Unintended Consequences in Fish and Fisheries." At the interface between the Sacramento-San Joaquin River drainage and the Pacific Ocean, San Francisco provides an outstanding venue to think about managing whole ecosystems, advance your professional networking, and to keep current on emerging ideas in fisheries science and management. San Francisco also provides a world class location for a personal or family vacation. Dozens of must-see cultural, historic, and natural points of interest are located only minutes away from the Marriott. Experience a wide array of outdoor activities both locally and within a few hours drive from the "The City". Climb aboard a cable car to visit Fisherman's Wharf, take a ferry to Alcatraz, or

walk along the bayside Embarcadero. Drive across the Golden Gate Bridge to hike through giant redwood groves, meander up the Pacific Coast Highway, or discover the delights of the Napa/Sonoma wine country. Cast a line for salmon, rockfish, and halibut or fly fish for trout in the myriad Sierra Nevada streams from Lake Tahoe to Yosemite. We hope you join us in San Francisco to stimulate scientific thinking and let the Golden State stir your senses.

Deadlines

02 March 2007 - Deadline for symposium presentation abstracts

Managing Incidental Findings in Human Subjects Research: From Imaging to Genomics

This full-day conference is sponsored by the University of Minnesota in partnership with the Consortium on Law and Values in Health, Environment & the Life Sciences. This conference is supported in part by a grant from the National Human Genome Research Institute, National Institutes of Health, grant #1R01HG003178-01A1.

Tuesday, **May 1, 2007** . Cowles Auditorium, Hubert H. Humphrey Center . University of Minnesota. Register at www.lifesci.consortium.umn.edu/conferences/if.php or email lawvalue@umn.edu.

This conference will present the recommendations from an NIH-funded project developing standards for the management of incidental findings identified during research with human subjects. Incidental findings are defined as unexpected findings beyond the domain of key interest in the research that have potential clinical significance. Presentations will focus on obtaining feedback from the public, researchers, research subjects, and regulatory bodies such as IRBs on a position paper outlining consent form language and IRB protocols.

For more information, visit our conference website: <http://www.lifesci.consortium.umn.edu/conferences/if.php> Or contact the Consortium office at: Email: lawvalue@umn.edu, Telephone: 612-625-0055

Funding opportunities

Graduate Fellows and Environmental Biology, an NSF-funded GK-12 Project

To: Graduate Students in Ecology, Evolution & Behavior; Entomology; Natural Resources Science & Management; Plant Biology; Fisheries, Wildlife & Conservation Biology; and Water Resources Science

From: Drs. Lesa Covington Clarkson (Curriculum and Instruction), Scott Lanyon (Bell Museum of Natural History and EEB), Karen Oberhauser (FWCB), Susan Weller (Entomology and Bell Museum); and Kevin Williams (Bell Museum)

Re: 12-month graduate fellowship opportunity (July 1, 2007 – June 30, 2008).

Join fellow Environmental Biology graduate students in this NSF-funded project! Work with K-12 teachers and UM faculty and staff engaged in K-12 activities as you translate your research expertise into a K-12 learning environment. The goal of this project is to encourage science graduate students to connect with K-12 teachers and students throughout their careers. Benefits include experience in inquiry-based pedagogy that will be effective in university teaching, working with graduate students and faculty from across the University, and helping young students become engaged in science.

Fellows will engage in summer workshops, work in Minneapolis and St. Paul Schools, and on campus activities

To apply: by February 28 fill out the on-line form at www.gk12.umn.edu and ask your advisor to fill out the recommender's form at www.gk12.umn.edu

There are a number of important fellowship opportunities and deadlines coming up soon
CB Summer Fellowships - The CB program will provide summer support for at least 5 first or second year students (first year students are the higher priority). You can only receive this award once. First year students must have convened their committee and have received program approval for their degree program to be eligible; second year students must have a degree program approved by the Grad School. Also, note that if you are on a GS Fellowship, MacArthur, or other award where this support was part of your offer letter at admission, you still need to submit a proposal (and have your degree program submitted). **Due Monday March 19** (see details below).

Global and Environmental Change Graduate Fellowship- This is a new opportunity available to students in the 5 environment-related graduate programs in CFANS (note- your advisor does not need to be in CFANS-all CB students are eligible). The priority students for this fellowship are mid-program PhD Students (i.e., those who will be at the right stage to apply for a Doctoral Dissertation fellowship a year from now). **Due Date: March 1. Send me an email by Feb. 16** if you plan to apply.

Let Sue know if you have any questions- lots of great opportunities!

New Funding for International Scholarly Activities

The following are new funding programs to promote a global network of scholarship and engagement and encourage interdisciplinary and transnational partnerships. The programs are administered and funded by the Office of International Programs. Guidelines and application materials:

<http://www.international.umn.edu/funding/strategic.html> Questions: Karen Brown, 612-624-0832 or kbt@umn.edu

Funding for Graduate and Professional Degree Students

- OIP Doctoral Fellowships for International Research and Writing Deadline noon on **March 9, 2007**

More information on guidelines and application forms is available at: <http://www.international.umn.edu/funding/strategic.html>

Graduate Fellows and Environmental Biology, an NSF-funded GK-12 Project

Join fellow Environmental Biology graduate students in this NSF-funded project! Work with K-12 teachers and UM faculty and staff engaged in K-12 activities as you translate your research expertise into a K-12 learning environment. The goal of this project is to encourage science graduate students to connect with K-12 teachers and students throughout their careers. Benefits include experience in inquiry-based pedagogy that will be effective in university teaching, working with graduate students and faculty from across the University, and helping young students become engaged in science.

Apply by February 28

- Fill out the on-line form at www.gk12.umn.edu
- Ask your advisor to fill out the recommender's form at www.gk12.umn.edu

Please contact Karen Oberhauser with questions or comments: oberh001@umn.edu

Torske Klubben (The Cod Club) Fellowship for Minnesota Residents

Students currently registered for credit in the University of Minnesota Graduate School who are official state-of-Minnesota residents may apply. The award is open to individuals who have an interest in or connection with Norway and/or its culture. Applicants should have a strong, mature, and clearly defined career interest in a specific field, with a sound research or study plan. Applicants must be able to demonstrate outstanding leadership skills and high academic achievement. Preference

will be given to students who earned their undergraduate degrees from a Minnesota college or university, or from a college founded by or associated with Norwegian-Americans, such as Luther College in Decorah, Iowa, and Augustana College in Sioux Falls, South Dakota. A stipend of \$10,000 for the academic year. For recipients without another source of tuition support, such as an assistantship, the Graduate School Fellowship Office will provide a Tuition Scholarship for full-time study for the academic year. Torske Klubben is interested in supporting students of high academic achievement who show great promise of becoming leaders in their chosen profession and/or in the Norwegian- American community, who have a deep and abiding cultural and/or professional interest in Norway (in a historical or present-day context), and who convey a sensitivity to the future of Norway and Norway-America relationships. Need may be taken into account, all other factors being equal. Complete Fellowship description, application form, and instructions are available on the web at http://www.grad.umn.edu/fellowships/forms/tk_mn_residents.pdf or from the Graduate School Fellowship Office gsfellow@tc.umn.edu Deadline: **March 1, 2005**

National Wildlife Refuge System Centennial

Scholarship Program-Deadline: April 13, 2007

In honor of the National Wildlife Refuge System Centennial, the Walt Disney Company (<http://www.disney.com/>), the U.S. Fish and Wildlife Service <http://www.fws.gov/>, and the National Fish and Wildlife Foundation <http://www.nfwf.org/> are supporting the 2007 National Wildlife Refuge System Centennial Scholarship Program. The NWRS Centennial Scholarship Program seeks to support students whose research will contribute toward improved management and understanding of the diverse fish, wildlife, and plant resources found on National Wildlife Refuges <http://refuges.fws.gov/>. Under this competitive scholarship program, a minimum of ten one-year scholarships will be awarded to support students' research expenses, tuition, fees, books, and room and board.

Undergraduate, master's, and juris doctorate students are eligible to receive a one-time award of \$5,000; Ph.D. and D.V.M. students are eligible to receive a one-time award of \$15,000.

To be eligible, a student must be a U.S. citizen or legal resident enrolled in an accredited institution of higher education in the U.S. pursuing a graduate or undergraduate degree (sophomores and juniors in the current academic year only) in environmental science, natural resource management, biology, public policy, education, geography, political science, or related disciplines. Only those students working on a National Wildlife Refuge or whose work is directly applicable to resource management on a National Wildlife Refuge(s) are eligible. Visit the NFWF Web site for complete program details and application instructions.
