

# Conservation Biology Graduate Program Weekly Newsletter

16 January 2007

A weekly newsletter of the Conservation  
Biology Graduate Program

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

Submissions to [coop0162@umn.edu](mailto:coop0162@umn.edu)



---

## Editor's Corner

Welcome to winter everyone! It finally snowed in the Twin Cities and it looks like it is here to stay! It's just beautiful outside. Today is also the first day of classes. There are plenty of options for CB students, from Sustainable Aquaculture to Environmental Communication. This is the last newsletter to include course descriptions so take a look today and register before its too late.

In this newsletter there are *many* opportunities listed for upcoming conferences and meetings. Two meetings sure to be of interest to CB students and faculty are the Minnesota Chapter of the American Fisheries Society (MN AFS) and the Minnesota Chapter of the Society for Conservation Biology (MN SCB) annual meetings and retreats. I've attached the registration/scholarship forms for both of these meetings to the newsletter for easy access.

The MN AFS is holding their annual meeting March 19-21 at the Holiday Inn Hotel and Suites in St. Cloud. Abstracts and student applications for travel awards are due January 22, 2007. See <http://www.mnafs.org/> for more details. Please note that MNAFS has changed is student travel award system this year.

This year the MN SCB will meet separately from AFS, TWS etc., at the Audubon Center of the North Woods in Sandstone Minnesota from the 23-24<sup>th</sup> of February. The meeting's theme will be Conservation and Working Lands. Instead of contributed paper sessions, the meeting will break out into four sessions in which we hear from critical thinkers and spend at least 1/2 the time in discussion of the topics (see Conferences and Meetings section below for more details).

Welcome back!

*Anne Cooper*

p.s. Send me any announcements or suggestions by Monday at 11am and I'll try to include them in the newsletter each week.

---

## Lectures/seminars on campus

Conservation Biology Seminar  
Seminars begin next week.

---

## Announcements

### Welcome Weekend Volunteers

Welcome back from break. With the CB Welcome Weekend rapidly approaching (January 18-21) we are still in desperate need of volunteers to pick-up (Thursday, 1/18) and drop-off (Sunday, 1/21) prospective students at the airport. We currently do not have anyone scheduled to drop-off people on Sunday.

Please contact me if you are able to help pick-up and/or drop-off prospectives.

Thank you to everyone who has already volunteered their services.

- Albert [carbo017@umn.edu](mailto:carbo017@umn.edu)

---

## News you can use

**StarTribune.com** | MINNEAPOLIS - ST. PAUL, MINNESOTA

STEGER011407

Last update: January 14, 2007 – 12:43 PM

### **“Will Steger: Out of the Wilderness”**

*Will Steger is on a mission to make Minnesota a leader in the fight against global warming. He has left the North Woods to campaign nonstop around the Twin Cities.*

by Rene Sanchez

Before dawn, on the big river where he first found a taste for adventure, Will Steger wakes up tired and alone.

Another 18-hour day rushing around the Twin Cities awaits, more stops on a new quest unlike any other in his career.

The famed Minnesota explorer has forsaken his solitary home in the North Woods, his refuge for decades. Now he's navigating crowded freeways and blitzing churches, schools, Rotary clubs -- any group willing to listen to his pleas to take the growing threat of global warming seriously and rethink how we live.

Can one man going flat-out for a cause somehow change the world -- or at least his home state? Steger is upending his life to find out.

And so here he comes through the clanging gate outside his houseboat docked near downtown St. Paul, looking ragged but resolute, in faded jeans and muddy clogs, his wild heap of hair blowing in the wind as he lugs a backpack bulging with a banged-up laptop, old books, loose files and lord knows what else.

City lights twinkle over the Mississippi. "Let's go," he says.

He drives a rusting Toyota wagon with a missing hubcap and a radio he rarely uses, preferring silence. He packs oatmeal into a 32-ounce water bottle for the road some days because he gets too busy to stop for meals.

He brought a kayak when he settled on the river a year ago, hoping to stay connected to the life he left. But he has only had time to put it in the water once. Rugged and graying at 62, and with his historic expeditions to the North Pole and across Antarctica more

than 15 years ago now distant memories, Steger is on a single-minded mission he has had to start from scratch.

"I've never worked in Minnesota like this before," he said. "I had no idea what to expect." Michael Noble, executive director of Fresh Energy, an environmental group in St Paul, remembers the Sunday afternoon two years ago when his cell phone flashed with a call from someone in Ely: "He said, 'Hi, I'm Will Steger, and I've decided to dedicate the rest of my life to raising public awareness on global warming.'"

The two had never met. But their talk set in motion the roughly 200 events Steger has headlined around the metro and the state in the past year, appearances that often draw overflow crowds of hundreds of people.

He speaks to groups awed by his exploits and alarmed by his eyewitness accounts of what climate change in the Arctic portends -- how it could wipe out the polar bear, alter the rhythms of life in Minnesota and harm the American economy. He also stands before audiences that hardly know who he is and sound puzzled by or doubtful of what he says. "Are we all going to die in 20 years from global warming?" a student at Lincoln High School in Lake City asked him after he concluded a recent talk there.

The school auditorium fell silent as Steger thought for a moment on stage.

"No," he gently told the teen. "Human beings will always adapt. But our lifestyles will be changed." Then he added, "This problem will dominate your life as long as you live."

Even where he gets a hero's welcome, Steger sees signs of the struggle ahead. When he spoke at Pax Christi Catholic Community in Eden Prairie last fall, a crowd of 1,000 people gathered inside the gleaming church gave him a standing ovation. Then some hopped into their gas-guzzling SUVs and drove away.

"Some people still don't believe this is happening," Steger said a few days later. "And the even bigger danger is that some think we can't do anything about it."

Check out the rest of the article on this inspiring man and what he's doing to raise awareness and action about global climate change at:

<http://www.startribune.com/10147/story/932123.html#introEnd>

---

## **TARShips**

### Teaching assistantship Biol 3411- Animal Behavior

Contact Claudia Neuhauser immediately if you would like to be considered for this position.

### FWCB Problem Solving Course this spring (FWCV 4071)

I will be teaching the FWCB Problem Solving Course this spring (FWCV 4071). This course is required for all seniors in the program and is designed to give them a capstone experience in which they explore the professional world, work on their resumes etc. and most importantly, work with MN professional societies to prepare and present position papers on conservation issues.

This year students will be working with the MN chapter of the American Fisheries Society to consider threats to stream habitats in MN, and with the MN Society for Conservation Biology to look at the impact of landscape level change related to biofuels. As indicated above, I am looking for a student friendly and intellectually capable TA who would be able to take a leadership role in helping students to craft and present these topics to a professional audience.

The course is a 2 credit course and comes with a 15% TA position. This position could be used to gain partial tuition relief, or could possibly be more of a job in which you were just paid on an hourly basis (more than the hourly TA pay I suspect).

Please let me know right away if you have any interest in this position!

Julia [jnerbonne@HECUA.ORG](mailto:jnerbonne@HECUA.ORG)

---

## Funding opportunities

### 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](http://www.gk12.umn.edu)
  - Ask your advisor to fill out the recommender's form at [www.gk12.umn.edu](http://www.gk12.umn.edu)
- Please contact Karen Oberhauser with questions or comments: [oberh001@umn.edu](mailto:oberh001@umn.edu)  
The University of Minnesota is an equal opportunity educator and employer.
- 

Please be aware that February 19th is the deadline for the following fellowships offered through the Bell Museum and Ecology, Evolution and Behavior.

<http://www.cbs.umn.edu/eeb/graduateprogram/fellowships/daytonwilkie.shtml>

#### The Florence Rothman Fellowship

[/eeb/graduateprogram/fellowships/daytonwilkie.shtml](http://www.cbs.umn.edu/eeb/graduateprogram/fellowships/daytonwilkie.shtml) provides support for students working with Bell Museum faculty or doing field work in EEB (deadline: February 19, 2007).

#### The \*Huempfnr Ruffed Grouse

[/eeb/graduateprogram/fellowships/daytonwilkie.shtml](http://www.cbs.umn.edu/eeb/graduateprogram/fellowships/daytonwilkie.shtml)\* fund supports graduate students researching ruffed grouse and their habitat (deadline: February 19, 2007).

#### The \*Dayton and Wilkie Natural History Funds\*

[/eeb/graduateprogram/fellowships/daytonwilkie.shtml](http://www.cbs.umn.edu/eeb/graduateprogram/fellowships/daytonwilkie.shtml) is administered by the Bell Museum of Natural History. Funds can be used for laboratory supplies and equipment to support field studies that are directly related to the student thesis project (deadline: February 19, 2007).

#### The Frank McKinney\*Fellowship

[/eeb/graduateprogram/fellowships/daytonwilkie.shtml](http://www.cbs.umn.edu/eeb/graduateprogram/fellowships/daytonwilkie.shtml) provides support for students working in Avian Behavior (deadline: February 19, 2007)

\*If you have questions, feel free to contact Bob Zink ([zinkx003@umn.edu](mailto:zinkx003@umn.edu)).

-----

### 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](mailto:kbt@umn.edu)

### Funding for Faculty, Staff, and Colleges/Departments

- Interdisciplinary International Institutional Partnership Grants Deadline noon on Jan. 29, 2007
- Interdisciplinary International Research Circle Grants Deadline noon on **Jan. 29, 2007**

### Funding for Graduate and Professional Degree Students

- OIP Doctoral Fellowships for International Research and Writing Deadline noon on **March 9, 2007**
- OIP International Pre-Dissertation and Small Grants Competition Deadline noon on **Jan. 29, 2007**

OIP International Internship Awards Deadline noon on **Jan. 29, 2007**

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

### 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](http://www.grad.umn.edu/fellowships/forms/tk_mn_residents.pdf) or from the Graduate School Fellowship Office [gsfellow@tc.umn.edu](mailto:gsfellow@tc.umn.edu) Deadline: **March 1, 2005**

### Foreign Language and Area Studies (FLAS) Fellowships Scholarship Funding

Opportunities for Graduate/Professional Students Funding available: Summer 2007 (\$2500 stipend + tuition and selected fees) and 2007-08 Academic Year (\$15,000 stipend + tuition and fees) FLAS fellowships promote the study of modern foreign

languages within graduate and professional schools. The awards are available on either a 9-month academic year or summer term basis. The fellowships are primarily available to graduate and professional school students studying less commonly taught languages, but students of other languages are also welcome to apply. For more information, see <http://igs.cla.umn.edu/grad/>

The Udall Foundation Applications are being accepted for the 2007

The Udall Foundation is accepting applications for the 2007 Environmental Public Policy & Conflict Resolution Dissertation Fellowship. We hope that you will forward this information to qualified Ph.D. students.

The Udall Foundation awards two one-year fellowships of up to \$24,000 to doctoral candidates whose research concerns U.S. environmental public policy and/or environmental conflict resolution and who are entering their final year of writing the dissertation. Previous fellows' fields of study include political science; economics; government; environmental science, policy and management; ecology; environmental justice; regional planning; geography; natural resource policy; and environmental analysis and design. Interdisciplinary projects are particularly welcome. Fellows must be U.S. citizens, U.S. nationals or permanent residents, and their dissertation research must pertain to U.S. environmental policy.

Program details, information and applications are available at [www.udall.gov](http://www.udall.gov) . If you have questions, please contact Dr. Jane Curlin at [curlin@udall.gov](mailto:curlin@udall.gov) . Thank you!

Deadline: **Feb. 21, 2007**

---

## Conferences and Meetings

### INVITATION TO A PUBLIC CONFERENCE ON RISK AND RESPONSE TO GLOBAL ENVIRONMENTAL CHANGE: Lessons from Cross-National Social Science Research

Date and Time: Thursday, **January 25** ~ 7:00 – 9:00 PM, Friday, January 26 ~ 8:30 – 5:00 PM

Location: Cowles Auditorium – [Humphrey Center](#) 301 19th Avenue S. West Bank Campus

FFI: Institute for Global Studies, 612-626-1844, [igsevent@umn.edu](mailto:igsevent@umn.edu)  
<http://igs.cla.umn.edu/research/conferences.html>

Notes: The threat of global climate change looms over the entire planet. Why do some nations' governments take action while others deny that the problem even exists? The scientific facts of global warming are well known, but the more basic social science question is seldom addressed: what social institutions and conditions help governments and the public trust science, admit risks more clearly, and respond effectively to fix global warming? The conference will bring together social scientists from around the world to investigate that very question. Leading scholars will present conclusions from their global and comparative cross-national research projects.

#### CONFERENCE HIGHLIGHTS

Thursday, January 25, 7:00 PM ~ Introduction & Keynote Address

Introduction: Walter Mondale, former Vice-President of the United States and Ambassador to Japan.

Keynote: Leslie King, "Findings from the Institutional Dimensions of Global Environmental Change Project: a progress report and synthesis"

Dr. King is the dean of the Clayton H. Riddell Faculty of Environment, Earth, and Resources at the University of Manitoba and she serves as the Synthesis Coordinator

of the Institutional Dimensions of Global Environmental Change-IDGEC- of the United Nations.

Friday, January 26 ~ Presentations and panels on  
The Comparative Politics of Climate Change;  
Implementation of the Montreal Protocol;  
International Environmental Policies;  
EU and US Climate Change Policy Making processes; and many more.  
For a complete conference schedule, see the web site.

### Greenlight

The student-led sustainable design workgroup at the College of Design, is hosting it's annual sustainable design workshop on **January 19th-20th**. To create a more sustainable future, we need people from all different facets of life and all levels of experience to step forward and join us in this stimulating workshop. The workshop is free, but meals and refreshments will be provided, so please RSVP if you plan to come. Please see the attached flyer for more information.

We hope to see you soon!

Christina Jenson, on behalf of Greenlight

### Second Annual Wetlands Summit

Institute for Global Studies, Department of Sociology, Institute for Advanced Study, UM Graduate School Intercollegiate Research Grant, Institute for Research on Energy and the Environment, ICGC, Department of Political Science, UM Climate Change Network, Humphrey Institute, Institute on the Environment

Location: Normandale Community College Bloomington, Minnesota

Date and Time: February 3, 2007 8:00 AM to 5:30 PM

THEME: Cultivating a Minnesota Land Ethic

The Wetlands Summit is an outgrowth of the Rally for Ducks, Wetlands and Clean Water. The rally called for holding Wetlands Summits to review current programs and problems, identify corrective measures needed, and to help establish a common ground between the wetland conservation and agricultural communities.

Registration is \$25.00 per person, with a reduced fee of \$15.00 for students. The fee includes a continental breakfast, morning and afternoon refreshments and a noon lunch in the College cafeteria. Free parking is available.

Pre-registration is advised. The deadline for pre-registration is **January 26, 2007**. All interested persons are encouraged to attend. Request a registration form by emailing or go to [Summit Announcement & Registration](#) to download the announcement and form.

### 2007 MN SCB ANNUAL MEETING & RETREAT: FEB 23-24, 2007

Greetings MNSCB members and friends -

We are excited to see you at the annual meeting this February! This year we will be flying solo (without AFS, TWS etc), and meeting at a smaller venue: the Audubon Center of the North Woods in Sandstone Minnesota. Our theme will be Conservation and Working Lands. Instead of having contributed paper sessions, we will have 4 sessions in which we hear from critical thinkers, but spend at least 1/2 the time in discussion of the topics (see below). We hope to use this time to deepen our chapter's capacity to take action on issues of critical concern. If you have ideas about these sessions, please contact Julia right away, and she will put you in touch with the organizers. We especially need contributions of papers and discussion items for a session on water.

We are also excited to introduce what we call “fireside papers”, an opportunity for our members to do short presentations on their research questions and then get feedback from or work on networking with other professionals. Unlike traditional contributed papers, the focus will be on deepening the conversation about issues that you are working on.

On Saturday we will continue to discuss the role of MN SCB in advocacy work and hold a series of facilitated conversations on our strategic role in MN conservation efforts. Please open and complete the registration form with a check made out to MN SCB and mail it back by **February 9th** to:

Julia Nerbonne  
HECUA  
2233 University Ave. W. #210  
St. Paul, MN 55114

Thanks, and we look forward to seeing you in Sandstone.  
Julia Frost Nerbonne, Erika Rivers, and Brian Stenquist  
Conference Organizers

#### 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. Get your abstracts in to Dan Isermann by **January 22, 2007**. For details on submitting your abstract, see the December RYBA.

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. Check out the announcement and application in the December RYBA, or download your application here: [2007 Student Travel Awards](#)

#### 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.

Subject: Mississippi River Research Consortium Annual Meeting, La Crosse, Wisconsin, on April 12 and 13, 2007.

The MRRC is composed of scientists, river managers, teachers, students, and individuals from private business and the general public who want to encourage both pure and applied research on the water and land resources of the Mississippi River and its watershed. A private, non-profit organization, the MRRC is supported by its members and by cooperating agencies, institutions, and corporations. Membership in the MRRC is open to all interested parties, and the organization promotes organized research efforts on the Mississippi River and encourages communication among river scientists with the wider scientific community and public. Annual meetings of the MRRC provide river researchers, managers, and students with the opportunity to hear and present research results to and from a diverse, multidisciplinary group. Presentations at MRRC meetings range from basic aquatic and terrestrial ecology, fisheries management, malacology, floodplain-forest ecology, to hydrology and fluvial geomorphology.

There are three particularly exciting aspects to this year's meeting. First, the MRRC is offering student travel scholarships to selected graduate and undergraduate students presenting platform (oral) presentations at the annual meeting (see attached application). Each successful candidate will be provided a \$200 scholarship to defray travel and lodging expenses. Additionally, successful candidates will have membership dues waived in the year of their successful candidacy and will become full-ranking members of the MRRC. Second, we are hoping to attract presentations for a special section on ecological responses to riverine draw downs. Finally, Dr. Richard Sparks will present our key note address entitled "Costs and Benefits of Naturalizing Developed Floodplains: an Integrated Analysis." Dr. Sparks is a well known expert in river-floodplain ecology.

Please forward this message to any parties you feel might be interested in joining the MRRC. I have attached our first call for papers (abstracts due **January 19, 2007**), the application for the student travel awards, and a power point file with a poster advertising the MRRC (please post in your department).

Thank you for helping to spread the word about the MRRC.

John H. Chick, Ph.D.  
Director  
Great Rivers Field Station  
Illinois Natural History Survey  
8450 Montclair Ave.  
Brighton, IL 62012  
Phone: (618)466-9690  
<http://www.inhs.uiuc.edu/staff/index.php?action=list>

#### CALL FOR PROPOSALS: Spring teaching and learning conference

Faculty and staff are encouraged to submit presentation proposals for this. On Monday, April 23, 2007 the Academy of Distinguished Teachers, the Center for Teaching and Learning (Twin Cities), and the Digital Media Center (Twin Cities), with support from the Bush Foundation, are sponsoring a conference Enhancing Student Learning: Conversations about Research and Practice in the McNamara Alumni Center on the Twin Cities campus.

The conference key note speaker, Dr. Eric Mazur, holds a triple appointment as Harvard College Professor, Gordon McKay Professor of Applied Physics, and Professor of Physics at Harvard University. An internationally recognized scientist and researcher, he leads a vigorous research program in optical physics and devotes part of his research group's effort to education research and improving science education.

Information about the conference call for proposals (**due January 29th**), the key note speaker, and general conference information, can be found at the conference web site at <http://www.adt.umn.edu/conference07/>. Online registration will open in early March. For more information, contact Karen Zentner Bacig, [kbacig@umn.edu](mailto:kbacig@umn.edu) or 612.624.5082. Submit your proposal today!

#### NOAA Fellowships with the National Estuarine Research Reserve System

The National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management, Estuarine Reserves Division, in collaboration with NOAA's Coastal Services Center and Office of Oceanic and Atmospheric Research, Climate Program Office, are offering fellowships for masters and doctoral students to conduct social science research within the National Estuarine Research Reserve System. Five fellowships will be available to students whose research focuses on the social, cultural, economic, or policy aspects related to one of the following topics: Community resilience (e.g., individual and community vulnerability; resistance, response, and adaptability to continuous or episodic natural and anthropogenic stressors; risk perception)

Ecological restoration (e.g., human behaviors; advocacy and volunteerism; responses to social and ecological change; personal and societal value orientations) Ecosystem-based management (e.g., collaborative decision-making; motivations or preferences for resource uses or management practices; ways in which people affect or are affected by natural resource management decisions; cultural history)

Landscape or seascape change (e.g., current or potential effects on or threats to the traits, patterns, or structure of a specific geographic area of the terrestrial or aquatic environment, including its biological, physical, and anthropogenic attributes; population and demographic change; coastal urbanization and habitat fragmentation)

Climate variability and change (e.g., sea level rise; extreme weather events; seasonal or interannual climate fluctuations; effects on water resources, living marine resources, agricultural productivity, delivery of ecosystem services, or public health and safety)

At least one fellowship must address climate variability and change. The amount of the fellowship is \$30,000 and requires a 30% match. For more information on application guidelines and participating reserves, please visit <http://www.nerrs.noaa.gov> or <http://www.grants.gov> [www.grants.gov](http://www.grants.gov).

---

## **Spring Semester 2007 Courses**

### Applied Economics 5711: International Environmental Policy Challenges

C. Ford Runge, Department of Applied Economics

B-26 COB

M/W/F 11:45 a.m. – 12:35 p.m.

This is a course in the economics of the international environment. It begins with an introduction and overview. Part I then considers the international environment in a broad context, looking at past and present environmental challenges. Part II presents lay economic concepts useful in analyzing these challenges and applies some of these concepts to current issues and problems.

Grading will be based on three exams and a final. Each exam is worth 25 percent of your grade. The final is a take-home, and will be due on the day an in-class final would be taken (May 12).

There are three main texts:

Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed*, Penguin Books, 2005.

Charles S. Pearson, *Economics and the Global Environment*, Cambridge Press, 2000.

Todd Sandler, *Global Challenges: An Approach to Environmental, Political and Economic Problems*, Cambridge Press, 1997.

In addition, other readings may be assigned and placed on reserve.

#### Water Resources: Individuals and Institutions WRS 5101/CE 5581

Instructor: Dr. Lawrence Baker Minnesota Water Resources Center

Time and Dates: Spring 2007 Semester Tuesday and Thursday, 3:00 – 4:15 pm

This is a core course in the Water Resources Science program but we welcome students in Environmental Engineering, Urban and Regional Planning, Public Policy, Soil, Water and Climate, and other programs. The course requires only a basic technical background.

Goals of the course are:

- (1) Learn about major laws and policies affecting water quality and quantity at the federal, state and local levels, and the interactions among these policies;
- (2) Understand how policies are formed;
- (3) Develop an understanding of how policies evolve in the context of technological, cultural, economic and biophysical drivers;
- (4) Develop basic understanding of policy analysis;
- (5) Examine global water problems and policies.

Dr. Baker is a Senior Fellow in the Minnesota Water Resources Center and an independent environmental consultant. His research examines human ecosystems, at scales from households to urban regions, with the goal of developing novel approaches for reducing pollution that are more effective, cheaper and fairer than conventional approaches. He has also conducted dozens of studies on other aspects of water quality and has played a key role in science syntheses to inform policy. For more information about the instructor, go to <http://wrc.umn.edu/aboutwrc/staff/baker/index.html>

The course text is *Water Use, Management and Planning in the United States*, by Stephen Thompson, augmented by about 30 key papers, many written by the world's leading policy scholars and practitioners. Grading will be based on analyses of the readings, two tests, and an independent research paper (with presentation). The course is intended primarily for graduate students but serious undergraduates are welcome to attend with permission of instructor.

#### RHET 3404: Environmental Communication

Instructor: Chris Russill

Time: M/W/F: 10:40-11:30

Place: Magrath 8

This course examines the emergence, development, and immense proliferation of communication on environmental issues with special attention to the globalization of environmental discourse over the last 30 years. We begin by discussing the problem of how best to conceptualize the pervasive conflicts between expert knowledge and public participation in the environmental realm from the perspective of communication theory. This problem has been addressed through a number of discursive frameworks and we

will examine several of the more influential ones to investigate how these frameworks shape problem formulation and solutions. Our focus on this problem will be decidedly contemporary and pragmatic. It will be grounded in equal measures of theory, research, and practical application, with students focusing their efforts on the aspects of that mix interesting them most. In the second half of the course, we will examine the implications of different styles of environmental communication in multiple realms of social practice including politics, policy, journalism, mass media, indigenous knowledge, scientific knowledge, and popular culture. Students will gain practical experience through scenario exercises designed for applying principles of environmental communication to real world phenomena and engage in a public communication project.

For more information, contact Professor Russill at 612 625 7681 or [russill@umn.edu](mailto:russill@umn.edu) <<mailto:russill@umn.edu>>

### Biology, Ecology, and Conservation of Large Mammals FW 8576 / Spring 2007

Credit: 2 credits, A-F Prerequisites: Graduate standing in a biological science; if space is available, undergrads may be accepted with instructor permission. Co-Instructors: Peter Jordan & Pete Cutter

Schedule / Time Requirements: One 2-hour session per week (time to be agreed among prospective students for maximum scheduling convenience), assigned readings, one class presentation, probably one weekend field-trip

Meeting Room: To be announced

Course Objective: To provide a critical overview of the biology, ecology, management, and conservation of large mammals, much in the form of case studies by experts with world-wide research experience.

Students are expected to become familiar with all of the large mammals of

North America. Overview: This is a graduate-level course providing a conceptual and practical framework for understanding large-mammal biology and ecology and how conservation of these species has been and is being addressed. Topics covered in readings and discussions include: •taxonomy

•ecological physiology •environmental ecology •predation •plant-animal interactions •parasites and diseases •social dynamics and other behavioral aspects •large mammal roles in ecosystem processes •management / conservation challenges and approaches •capture / immobilization •current research / monitoring techniques Meetings combine lecture and discussion.

Geographic scope of taxa considered is global, including terrestrial, marine, and freshwater biomes.

Taxonomic and topical emphases will reflect expertise and current research of both speakers and students. The co-instructors cover some subjects, but the majority of topics are addressed by guest speakers. The last time the course was offered (Spring 2005), invited speakers included Glenn DelGiudice, Dave Garshelis, Craig Packer, Dan MacNulty, Sam McNaughton, Dave Mech, Don Siniff, Dave Smith, and Tony Starfield. We anticipate that many of these guests will be with us again along with several new ones. Approximately one quarter of each student's effort is a review of the natural history, distribution, and conservation status of a taxonomic group of large mammals of his/her choice (within the constraints of having these selections represent a wide taxonomic and geographic sample). As in past years, the course may include a weekend field trip to northern Minnesota to visit one or more active research project(s). Requirements and Evaluation:

- Attendance at all meetings and active participation in class discussions
- 20-40 pages reading per week •Natural history / status review of a large-mammal taxon with a class presentation and written summary

- In past years there has been a verbal, round-table final exam, emphasizing North American large mammals or other species discussed. This would not, however, count for any more than a small part of the final grade.

If you are interested or would like to learn more, please contact either Peter Jordan (ph: 612-624-9281 / email: [pajordan@umn.edu](mailto:pajordan@umn.edu)) or Pete Cutter (ph: 612-626-1213 / email: [cutt0016@umn.edu](mailto:cutt0016@umn.edu) ). We will also be able to direct you to students who have taken the course.

#### Analysis of Mark-recapture Data FW 8200 Seminar

Dr. Todd Arnold is teaching this seminar (Tuesday evenings, 5:00-8:00 pm, 20 Feb to 27 March). Mark-recapture (or mark-resighting) data can provide a powerful means of estimating population size and important vital rates like survival, natality, and immigration, but the statistical programs for analyzing these data can seem daunting at first. In this 6-week seminar, we'll take a whirlwind tour of Program MARK and use it to analyze various forms of mark-recapture data, examining everything from population size based on live-trapping data to adult survival based on telemetry data. Contact Todd Arnold for more information on this course ([arnol065@umn.edu](mailto:arnol065@umn.edu)).

#### Science and Policy of Global Environmental Change EEB/FR 5146

T, Th, 10:15- 11:30 am

Instructors: Sarah Hobbie, Ecology, Evolution and Behavior, [shobbie@umn.edu](mailto:shobbie@umn.edu), Steve Polasky, Applied Economics and Ecology, Evolution and Behavior, [spolasky@appec.umn.edu](mailto:spolasky@appec.umn.edu), Peter Reich, Forest Resources, [preich@umn.edu](mailto:preich@umn.edu) Course Description: Through readings, lectures, discussions, and presentations this course will introduce the critical issues underpinning global environmental change and its biological implications. The course will examine current scientific literature in exploring evidence for human-induced global change, including changes in biodiversity, land use/land cover, the global N cycle, the global C cycle and climate change. We will also discuss the potential effects of these global changes on a wide range of biological processes. In addition, we will examine some of the economic drivers, economic consequences, and political processes related to global change, including local, national and international laws and policies that impact global change. Please feel free to contact any of the instructors with questions about the course!

Sarah E. Hobbie, Associate Professor and Director of Graduate Admissions Dept. of Ecology, Evolution, and Behavior University of Minnesota

1987 Upper Buford Circle

St. Paul MN 55108

ph: 612-625-6269

FAX: 612-624-6777

Office: 502 Ecology, St. Paul Campus

Research Web Page: <http://www.cbs.umn.edu/labs/shobbie/>

EEB Graduate Program Web Page: <http://www.cbs.umn.edu/eeb/graduateprogram/>

#### Sustainable Aquaculture FW5455

How can we make the world's fastest growing food sector environmentally and socially responsible? Dr. Anne Kapuscinski is teaching this 3 credit course (MW 4:30-5:45, 490 Hodson Hall) this spring. There is also an optional hands-on lab section where you can learn to raise fish (FW4292, section1). <http://fwcb.cfans.umn.edu/courses/fw5455>. This course meets the Environment and International Perspectives Themes and it is now an elective for the new Sustainability Studies Minor [www.sustainability.umn.edu](http://www.sustainability.umn.edu).

Graduate Seminar in Climatology (GEOG 8270)

Spring 2007

Topic: Climate Models and Modeling

Date and Time: Wednesdays from 2:00-4:30 p.m. (West Bank)

Instructor: Katherine Klink

Preparing Future Faculty Program (PFF)

PFF offers graduate students and post-doctoral fellows opportunities to develop teaching skills, understand ways in which students learn, explore faculty roles in higher education, and prepare teaching as well as job search materials with colleagues and mentors. Read on to discover how our Retreats and Classes might help you prepare for your future career--and increase effectiveness in your current teaching and learning roles on campus.

*January 2007 Retreat:* If you're interested in finding out more about Preparing for a Job Search, Using PowerPoint for Active Learning, Developing a Syllabus that Works for You and Your Students, or Finding an Academic Position that Fits, please join us on January 11, 2007, for the Preparing Future Faculty Retreat. As a participant, you'll be able to attend workshops that on these topics and ask faculty from local colleges and universities about finding an academic position that's right for you. A \$10 registration fee includes food and workshop materials. We hope to see you there if you want to know more about teaching in higher education and the job search process. Your early registration allows us to prepare materials for a smooth retreat -- and to assure you a seat at the retreat.

For Retreat Registration: <http://www1.umn.edu/ohr/teachlearn/pff/retreat/index.html>.

*Spring 2007 Courses:* Brief descriptions of the Spring 2007 PFF core courses (GRAD 8101 and GRAD 8102 are listed below. To find out more about PFF, begin at <http://www1.umn.edu/ohr/teachlearn/pff/index.html>. Please note, we also offer several one-credit special topics courses (GRAD 8200) for individuals with teaching experience or who have completed a PFF or departmental teaching course course. The Spring 2007 one-credit/8200 courses will be: Teaching With Technology, Job Search Strategies in Language and Literature Disciplines, and Multicultural Teaching and Learning Across the Disciplines. Registration information for all courses is listed at OneStop under the Graduate School's GRAD designator. **\*\*GRAD 8101: Teaching in Higher Education (3 credits)\*\*** This course is designed to help graduate students and post-doctoral fellows become more effective teachers as they develop an understanding of teaching and learning in higher education. Participants practice teaching and draft the essential documents of a teaching portfolio. Courses are co-taught by a member of the PFF staff and a faculty member who is recognized for teaching excellence. Spring 2007 Mondays 5-8 pm / Minneapolis Tuesdays 2:30-5:30 pm / Minneapolis Thursdays 2:30-5:30 pm / St. Paul Fridays 9:05-12:05 / Minneapolis **\*\*GRAD 8102: Practicum for Future Faculty\*\*** (3 credits, prerequisite GRAD 8101 or equivalent department teaching course; e-mail [pff@umn.edu](mailto:pff@umn.edu) for permission number) Under the guidance of the course instructor and a faculty mentor from a local university, participants will plan for their future careers and consider how best to structure the remainder of their graduate education or post-doctoral appointment for future success in the job market. Activities include examining a variety of institutional contexts in higher education, gaining valuable teaching experience at a host institution, exploring the faculty role beyond the classroom, and creating a job search portfolio. Spring 2007 Mondays 2:30-5:30 pm / St. Paul Thursdays 2:30-5:30 pm / Minneapolis **\*\*GRAD 8200: Teaching and Learning Topics in Higher Education\*\*** (1 credit; may be repeated) Spring 2007 Fridays, 10:10 am - 12:05 pm. Class meets six times. Teaching

With Technology - Practices, Problems and Promises Tuesdays, PACE Program for CSOM students. Contact Steven Huchendorf. Fridays, 9:05 am - 12:05 pm. Class meets five times. Language and Literature Job Search Strategies Mondays, 5 - 7:30 pm. Class meets five times. Multicultural Teaching and Learning Across the Disciplines.

---