

December 2002 Issue 3

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# Path-breaking Agreement with the U.S. Department of the Interior

In recent years, governmental personnel involved in land or water resource management have faced extraordinary challenges that in many situations have required them to abandon traditional single-agency methods of doing business and adopt

some form of collaborative approach.
Solutions to resource problems increasingly involve larger scale, cross-media planning, management and restoration.
These efforts require the involvement of many different landowners, agencies and interests in order to build the understanding

needed to make wise decisions. Effective implementation requires coordinated action and a sense of shared ownership in problems and solutions. In many situations, government personnel are being asked to support, facilitate and/or participate in collaborative efforts to carry out their missions.

In late September, a cooperative agreement was

signed between EMI and the Office of the Secretary of the US Department of Interior to enable us to support their efforts to promote collaborative ecosystem management. This is the first

time that the DOI Secretary's Office has negotiated a cooperative agreement with an academic institution. The agreement will serve as a vehicle to offer midcareer training short courses, develop web-based cases and assist with policy-level evaluation of how to better achieve collaborative conservation.

We expect to offer the first of 3 week-long courses on collaborative conservation next Spring. Initial target sites are the Missouri River Basin, Western Colorado and Puget Sound. If you are interested in bringing a training opportunity to your region, please let us know.

### **Web-based Case Studies Debut**

Ecosystem Manager

**Learning from Experience** 

EMI presented a prototype database titled "Learning

from Experience: A National Resource for Collaboration and Partnerships" on Capitol Hill December 10th at a reception hosted by the National Forest Foundation. Reception attendees included members of Congress, representatives from the U.S. Forest Service, Society of American Foresters, the International Wood Products Association, the Pinchot Institute, American Forests, U.S. Department of the Interior, Ducks Unlimited, and others. The database is an

exciting new website of case studies of collaboration and partnerships in natural resource management. It

is designed to inspire and inform people devel-

oping community-based partnerships and enable them to achieve healthier communities and ecosystems.

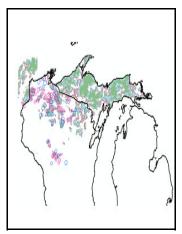
The first phase of the database development was funded by the Forest Service using the DOI agreement as a vehicle for cooperative work. The work is led by Professors Steven Yaffee and Julia Wondolleck, based on ten-years of work designed to improve people's ability to collabo-

rate across boundaries.

Lessons Learned

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EM-CB Team meets to share research ideas



Current range of the gray wolf in Wisconsin and Michigan





Dean Bierbaum gives introduction at October symposium

# **Expanding Ecosystem Management Agenda**

EMI is helping SNRE expand ecosystem management as a core component of the school. An Ecosystem Management and Conservation Biology (EM-CB) theme group has been established to

build on the school's interdisciplinary strengths. EMI is taking the lead in coordinating this effort. The EM-CB team will work together during the winter 2003 term to identify research opportunities that cut across disciplines and produce applied science that will have lasting effects on the ground.

## **Masters Projects Satisfy Clients' Needs**

Over the years, EMI has sponsored several master's projects that have developed valuable products for nongovernmental or government clients concerned with conservation and restoration. (For more information about these projects, please visit the EMI website at www.snre.umich.edu/emi/pubs/projects.htm).

This year EMI is supporting three master's projects which are being displayed on the EMI website throughout the lifetime of the project. Visitors to the site can follow the progress of each of the projects and interact with the students via email if

they have comments or questions. The web pages boast colorful pictures of the landscapes being studied and the teams of students working to make a difference.

The Gray Wolf Range Conservation in Michigan and Wisconsin master's project is conducting an extensive spatial analysis linked to wildlife population models to evaluate whether the gray wolf (Canis lupis) under the federal Endangered Species Act will require additional conservation activities at the state, local or private landowner level.

The master's project titled Enhancing Coordination of Protected

Areas Management in the Maya Mountain Marine Corridor, Belize is assessing the challenges and opportunities for greater coordination of management efforts in Belize's protected areas through the lens of a regional case study.

The Shiawassee River Project is providing the community surrounding the Shiawassee River with a range of practical options and a process for selecting a mutually agreeable alternative for the fate of a failing Shiatown Dam by assessing the ecological, social and economic issues associated with repair, removal, or restoration activities.

# **Advancing Ecosystem Management Research**

EMI is coordinating an expanded and integrated research agenda on a variety of issues underlying effective ecosystem management at SNRE. We help to administer the federally-funded McIntire Stennis forestry research program, and are pleased to announce the recipients of the latest rounds of grants. These are: Northern Michigan forest productivity across a complex landscape -David Ellsworth and Kathleen Bergen; Territory size and establishment in breeding forest songbirds: implications for forest management and conservation -Emily Silverman and Kim Hall; Effects of an exotic disturbance and its silvicultural management on northern hardwood ecosystems: tree growth, tree regeneration, and invertebrate biodiversity -John Witter and Jennifer Stoyenoff; Forest successional processes in the E.S. George Reserve —Yvette Perfecto and John Vandermeer; and Landscape ecology of native, invasive, red maple (Acer rubrum L.) —Burt Barnes

An ecosystem management research symposium was held in Ann Arbor in late October to enable faculty working on related topics to share ideas and perspectives. The principal investigators for the last round of McIntire-Stennis projects presented results of their investigations, highlighting the ways that the research funding has enabled them to leverage their inquiries into additional funding or mechanisms to achieve on-the-ground change. These projects include: Does biological diversity control

ecosystem function? -Don Zak; Suburban ecosystem management: the perception of urban forests and their effects on people -Ray DeYoung, Terry Brown & Tom Crow; An integrated geoecosystem-remote sensing approach to ecosystem management of aspen-dominated forests in northern Lower Michigan -Kathleen Bergen & Burt Barnes; Deer, fire, and oaks: Altered disturbance regimes and implications for upland oak ecosystems -Burt Barnes & Don Zak; Analysis of temporal and spatial changes in Michigan's forests -John Witter; and Assessing on-the-ground progress of ecosyste management projects -Steve Yaffee, Jim Diana, & Don Zak.

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## Third Year of Speaker Series

It is hard to believe that at the end of the 2002-2003 academic year, EMI will have hosted thirty speakers in our Distinguished Speaker Series. We hosted Jim Lyons, who at the time was the Under Secretary of Agriculture in the Clinton Administration, as our first speaker in April 1999. lim, now a professor at the Yale School of Forestry and Environmental Studies, returned in November to speak to our faculty and students, this time about his perspective on the 2002 elections.

During the Fall 2002 term, EMI hosted five speakers. EMI joined with the Program in the Environment (PitE), the new joint undergraduate program with SNRE and the School of Literature, Sciences and Arts (LS&A) to host Lyons and Robert Costanza, Director of the Gund Institute for Ecological Economics at the University of Vermont, who spoke on the need for a "transdisciplinary" approach to conserving and managing natural resources in his talk "Human Dominated Ecosystems: Understanding the Anthropospehre in the Anthropocene."

EMI hosted Hank Fischer of the National Wildlife Federation's Montana Office who presented a talk titled the "Science and Politics of Wolf and Grizzly Bear Restoration." Mr. Fischer was responsible for creating the compensation fund trust while working with Defenders of Wildlife in the 1980's and 90's. Creation of the fund was a major turning point in the battle to restore wolves to Yellowstone.

SNRE Alumnus and Senior Natural Resource Management Specialist for Marine Corps Base Hawaii, Diane Drigot, gave a talk titled "Serving National Defense, Homeland Security, and Ecosystems through Implementing Integrated Natural Resource Management Plans on US Military Lands." Dr. Drigot has been extremely successful at building partnerships for the purpose of preserving and restoring natural resources on military lands.

Simon Fraser University Professor of Environmental Policy Thomas Gunton kicked off the term's speaker series with an interesting presentation describing the "Evaluation of Collaborative Planning Models: The British Columbia Experience in Land Use Planning." Dr. Gunton has been using research performed by Steve Yaffee and Julia Wondolleck to develop the British Columbia Land and Resource Management Plans.

The Series' audience continues to grow as EMI unites with other programs to co-host speakers and as our reputation for inviting interesting and experienced guests gets out. The talks draw on a broad multidisciplinary audience from across the University with an increasing number of attendees from the broader community.

For more information about the series, please visit the EMI website at www.snre.umich.edu/emi/events/htm. If you have suggestions for speakers to invite next year, please contact Marcia at lochmann@umich.edu or 734-615-6431.



Hank Fischer, November 11, 2002



Robert Costanza, December 3, 2002

# **Duke Fellows Practical Conservation Skills Workshops**

How can graduate students build a wide set of practical professional skill while still developing depth in their areas of specialization? One solution piloted by the Duke Fellows is to host a series of short skill-building workshops.

EMI working with the Doris Duke Conservation Fellows has organized and hosted short course enrichment activities for the entire SNRE graduate population. By doing so, the Fellows have built their own leadership skills, created skill-building opportunities for

themselves, and have extended the reach of the DDCF program into the larger graduate student population. Workshops have focused on communication skills, both interpersonal communication in the workplace and presentation skills; fundraising skills; media relations; grassroots organizing, and strategic planning.

Three more workshops will be held between January and March, focusing on development, real estate, and project budgeting and proposal

writing. When surveying the SNRE graduate student population, the fellows found these skills the most demanded by their peers. Each workshop runs about three hours. One credit of independent study is arranged for students who attend three out of the six skill-building workshops offered throughout the 2002-2003 academic year and write a short paper applying lessons learned from one of the workshops to a situation of the student's choice.



Doris Duke Conservation Fellows, 2002



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# **Doris Duke Charitable Foundation Awards SNRE \$550,000**



SNRE Doris Duke Conservation Fellows at NCTC, September 2002

The Doris Duke Charitable Foundation (DDCF) awarded the SNRE \$550,000 to identify and support future conservation leaders. The grant includes financial support to students enrolled in masters degree programs who are committed to careers as practicing conservationists in the nonprofit or public sectors. They will be designated as Doris Duke Conservation Fellows and awarded summer internship funding and tuition support. SNRE is one of five universities nationwide selected to host fellows based on the quality of its interdisciplinary environmental programs and commitment to educating conservation practitioners. The school was previously awarded grants in 1998 and 2000 that have supported a total of 30 fellows who are already making a difference in land trusts, government agencies and environmental groups. For example, past fellows include Maggie Macdonald, Executive Director of the Green River Valley Land Trust in Pinedale WY and Sarah McKearnan, who staffs the Salmon Recovery Team at Seattle Public Utilities. EMI helps to administer the Duke Fellows Program at Michigan and Steve Yaffee serves as Faculty Program Director. According to Yaffee "The resource management agencies will be facing a huge turnover in staff in the next few years. The Duke Fellows program is one of our strategies for helping them deal with this transformation. The Fellows Program also enables SNRE to continue its tradition of providing staff and future leaders for a range of national, regional and local environmental nongovernmental organizations."



### New EMI Hire Althea Dotzour



Althea Dotzour, EMI Research Associate

EMI hired a full-time staff person in September 2002 to help with a variety of projects, including midcareer training and evaluation. Althea has worked and studied amidst the prairies, wetlands, and woods of the Wisconsin, Minnesota, and Michigan all her life. She began working at EMI in the winter of 2001, expanding the capacities of the online case study database and developing evaluative summaries

for practitioners of ecosystem management. As an EMI research associate, Althea is helping to develop a set of midcareer education opportunities, designing the layout of a comprehensive ecosystem management evaluation plan, and creating a section of our website that focuses on lessons from ecosystem management. In April 2002, Althea received a M.S. in Natural Resource Policy and Behavior

from the School of Natural Resources & Environment at the University of Michigan. Her master's project research was an evaluation of a conservation behavior exhibit at the Brookfield Zoo just outside Chicago. Althea received her B.A. at Carleton College in Northfield, MN where she majored in biology and concentrated in environmental science.



# Featured Alumni Affiliate Diane Drigot



Dr. Diane Drigot, Senior Natural Resource Management Specialist, Marine Corps Base Hawaii

Dr. Diane Drigot has led ecosystem restoration and environmental protection efforts at the Marine Corps Base Hawaii (MCBH) for nineteen years. She is responsible for an integrated ecosystem approach to natural/ cultural resources management, environmental restoration, and environmental documentation under National Environmental Policy Act (NEPA) as well as public involvement in these programs. In addition to nineteen years of service with MCBH, Diane currently holds an ap-

pointment as Research Affiliate for University of Hawai'l Environmental Center, and has served as a founding Research Associate at the East-West Center's Environment and Policy Institute, Assist. Professor of Environ. Studies at University of Northern Colorado, and as an environmental assessment consultant in the past. Diane received her Masters of Science in Resource Policy and Planning from SNRE in 1972 and her Ph. D. in 1975. Diane participated in the EMI Distinguished Speaker

Series in October 2002 to share her experiences of working for the Marine Corps Base Hawaii. Students were very interested in learning how Dr. Drigot grew her one-person operation as the environmental director at MCBH to a 25-person staff within the Department of Defense that is working on both cultural and ecological sustainability issues.

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# Featured Steering Committee Member David Allan

Professor David Allan is an active member of the EMI Faculty Steering Committee and has been helping to shape the EMI agenda since its inception. The professor of SNRE's graduate courses in conservation biology and fluvial ecosystems, and a coteacher for the Introduction to Global Change course of the new joint LS&A/SNRE Program in the Environment, Professor Allan is a valuable asset to the committee bringing a vast array of knowledge of aquatic ecosystem structure and function.

Allan recently accepted two notable appointments – Interim SNRE Associate Dean and the

head of The National River Restoration Science Synthesis Project, a unique undertaking by a team of eminent freshwater scientists and American Rivers to evaluate the state of river restoration in the United States. Professor Allan received his B.Sc. in 1966 from The University of British Columbia and his Ph.D. in 1971 from SNRE at The University of Michigan. Professor Allan's research focuses on freshwater systems, with particular emphasis on streams and rivers. His work in community ecology includes studies of predator-prey interactions, the downstream transport or drift

of aquatic insects, and studies of invertebrate distribution and abundance. Current research examines the influence of land use and landscape setting on the ecological status of streams and rivers, flow variability and its influence on the biological community, and indicators of stream ecosystem condition. The common theme in these projects is the intent to develop a better understanding of the land-water linkages that influence stream ecosystem function in humanaltered drainage basins.



David Allan, EMI Steering Committee Member

### **EMI Staff 2002-2003**

EMI is benefiting from the efforts of a new cohort of graduate students and an ambitious agenda. Program staff includes: Director Steve Yaffee, Faculty Advisor Julia Wondolleck, Program Coordinator Marcia Lochmann, Research Associate Althea Dotzour, Research Associate/Web Designer Jen Rennicks, Senior Research Associates Todd Bryan and Sarah McKearnan. The graduate student staff includes Mary Adelzadeh, Adam Block, David Chadwick, Anne Finken, Erin Haddix, Liz Hamilton, Steve Higgs, Steven Hufnagel, Leah Katz, Elizabeth McCance, Mindy Murch, Christine Ogura, Shelly Rudner, and Sheila Schueller.

Our internal faculty steering committee is

comprised of thirteen professors from the School of Natural Resources & Environment who meet monthly to examine the issues that drive the Initiative. Each of the thirteen professors represents the diversity by which SNRE prides itself: an interdisciplinary team of scientists specializing in aquatic and terrestrial ecosystem sciences, social science, and landscape planning and design. The Faculty Steering Committee includes: David Allan, Professor, Stream Ecology and Conservation Biology & Ecosystem Management; Burton Barnes, Professor, Forest Ecology and Landscape Ecosystem Classification; Steven Brechin, Associate Professor, Sociology and International Environmental Issues; Daniel Brown, Associate Professor, Geographic Information Systems and Spatial Analysis; James Diana, Professor and Associate Dean, Aquatic Ecosystems and Fisheries; Donna Erickson, Associate Professor, Landscape Planning and Rural Landscapes; Robert Grese, Professor and Director, Nichols Arboretum, Ecological Restoration; Joan Nassauer, Professor, Landscape Ecology and Design; Paul Seelbach, Adjunct Professor, Aquatic Ecosystems and Fisheries; Michael Wiley, Associate Professor, Aquatic Ecosystems; Julia M. Wondolleck, Associate Professor, Collaborative Resource Management Steven L. Yaffee, Professor, Natural Resource Policy, Planning and Management; Donald R. Zak, Professor, Terrestrial Ecosystem Processes.









# ECOSYSTEM MANAGEMENT INITIATIVE

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Imagining, evaluating and promoting sustainable natural resource management



# **Upcoming Events**



The Northern Forest Story

Stephen Blackmer Northern Forest Center **Thursday, January 16, 2003 12-1:30pm** University of Michigan Alumni Center

Impacts of Invasive Species in Natural Systems

Victoria Nuzzo
Biological Control of Non-Indigenous Plant Species
Cornell University
Tuesday, January 28, 2003 12-1:30pm
Michigan League Michigan Room

Environmental Responsibility in the Redefinition of International Affairs

A.Hinat Gokyigit
TEMA: Turkish Foundation for Combating Soil Erosion for Reforestation and the Protection of Natural Habitats
Friday February 7, 2003 12:00-1:30pm
Michigan League Hussey Room

Effects of Land Use on Ecological Condition Virginia Dale Oak Ridge National Laboratory **Tuesday, March 11, 2003 12-1:30pm** Michigan League Koessler Room

Theodore Roosevelt Professorship Lecture
Steven Yaffee
School of Natural Resources & Environment
The University of Michigan

Monday, April 7, 2003 4-5:30pm University of Michigan Alumni Center

#### EMI Advisory Board Meeting

Tuesday, April 8, 2003 9am-12pm Michigan League Hussey Room EMI Advisory Board Meeting Lunch Tuesday, April 8, 2003 12-2pm Michigan League Kalamazoo Room