

FOREST AND WILDLIFE ECOLOGY NEWS

A Newsletter for Dept. of Forest and Wildlife Ecology Staff, Students and Alumni

Vol. 14. No. 1

News from the Chair

s the semester ends and we review the past year we can point to many



Bill Karasov

things that are going well. Our number of undergraduate majors is holding steady and our course and instructor evaluation scores remain high. Our number of post-undergraduate trainees has

been going up with support from increases in funding we garnered in a very competitive environment. Mirroring this strong performance, our student, faculty and staff received national, regional and campus awards as well as promotions (see inside and other recent newsletters). We are very sorry to see the upcoming retirement of four valued, senior professors (page 4). They represent 15% of our faculty number and in the current budget environment it is challenging to recover lost ground. Fortunately all four will remain involved as Emeritus Professors and a new Assistant Professor, Jon Pauli, has just joined the faculty (page 3; see feature on Pauli in next issue). Our next urgent challenge will be to manage the upcoming budget cuts without jeopardizing more positions, programs, and overall quality. Contributions from many of our alumni to such funds as the Forest and Wildlife Ecology Fund

(page 7) are providing critical flexible funds that will help us meet this budget challenge. We are always most grateful for your support. Have a great summer!

- Bill Karasov

Alumni Update

Jim March (PhD Wildlife Ecology 1976) says he is enjoying retirement on the Mississippi River at La Crosse. Last spring the Wisconsin Chapter of The Wildlife Society awarded Jim the "Wisconsin Award," the chapter's highest honor, for his professional excellence and contributions to the state's wildlife. Scott Walter, another Wisconsin alum (MS 1996, PhD 1999 Wildlife Ecology) presented the award to Jim. (jamesmarch@centurytel.net)

Chris Guglielmo (MS Wildlife Ecology 1993) is an Associate Professor of Biology at the University of Western Ontario. His research focuses on the physiology, ecology, and conservation of migratory birds and bats. An article in the 28 January 2011 issue of *Science* describes his research on bird migration using a new state-of-the-art bird research facility and altitude simulation wind tunnel. After earning his MS degree at UW, Chris completed his PhD in Biological Sciences at Simon Fraser University. (cguglie2@uwo.ca)

In Memoriam

Bradley Livezey (MS Wildlife Ecology 1979) passed away on Feb. 8, 2011, following an automobile accident. Bradley, 56, was an ornithologist at the Carnegie Museum of Natural History in Pittsburgh, PA. His work focused on the phylogenetic relationships of avian families, evolution of avian flightlesness, and avian paleontology. Bradley came to Carnegie Museum of Natural History in 1993 as Associate Curator of Birds and was awarded full curatorship in 2001. During that time he served as the museum's first Dean of Science. In tribute to Bradley's life and work, the family's wishes are that contributions be made to support the Section of Birds at Carnegie Museum of Natural History. Please indicate that your donation is in honor of Brad Livezey. Contributions should be sent to Director of Development, Carnegie Museum of Natural History, 4400 Forbes Avenue, Pittsburgh, PA 15213.

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FOREST AND WILDLIFE

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Web site: http://fwe.wisc.edu/ Editor/design: Mary Miron



Student News

Graduate students receive accolades

Wildlife Ecology and Zoology PhD candidate **Zach DeQuattro** won the best poster award for his poster titled "Effects of Progesterone Exposure on Fathead Minnow (*Pimephales promelas*) Reproduction." Zach presented his poster at the annual meeting of the Society of Environmental Toxicology and Chemistry (SETAC) in Portland, OR, Nov. 7-11, 2010. Professor Bill Karasov and Senior Scientist Terence Barry in Animal Sciences are Zach's advisers.

Caitlynn Nemec, Wildlife Ecology MS graduate student, won Best Student Presentation Award at the 2011 winter meeting of the Wisconsin Chapter of the Wildlife Society for her presentation on "Connecting Central Wisconsin Grassland Through A Private/Public Partnership." Caitlynn's research focuses on the attitudes and opinions of landowners in central Wisconsin toward grassland conservation with a goal of increasing habitat for the state's threatened Greater Prairie Chicken. Professor David Drake is Caitlynn's adviser.

Karl Malcolm, PhD student in Wildlife Ecology was named a finalist for the Presidential Management Fellowship (PMF) Class of 2011. The purpose of PMF is to attract outstanding individuals to the federal service. PMF Fellows commit to a two-year appointment and receive formal classroom training, work assignments, a 4-6 month developmental assignment, and potential for accelerated promotions. Professor Tim Van Deelen is Karl's adviser.

Wildlife Ecology PhD student Jennifer Stenglein received the Best Student Paper Award at the Midwest Fish and Wildlife Conference in Minneapolis, MN, in December 2010. Her award winning paper is titled "Allee effects and growth of the recovering southern Lake Superior gray wolf population." Jennifer is researching the survival of wolves in Wisconsin as it relates to their habitat. She hopes to use her research find-

ings to guide wolf conservation and management in Wisconsin. Jennifer is working with Professor Van Deelen as her adviser.

On March 4, 2011, PhD candidate **Mike Dockry** was inducted into UW-Madison's newly formed chapter of The Edward Alexander Bouchet Graduate Honor Society.

Later in the month, on March 26, he was inducted into the national society at Yale. The society commemorates the first African American to earn a doctorate degree from an American university (Physics, Yale University in 1876). The society "seeks to *Dockry, continues on page 3*"



Research in China wraps up in front of a Beijing classroom

Since 2008 PhD student Karl Malcolm (pictured above) has been working in southwestern China on a study of the Asiatic black bears inhabiting the fragmented mountainous forests of Sichuan and Yunnan Provinces. This past December, before wrapping up his field work on a month-long visit, Malcolm was invited to spend several days lecturing to students in the Conservation Biology and General Ecology courses at Peking University in Beijing. The Chinese students seemed particularly interested to learn about and discuss differing attitudes towards wildlife and the vastly different models of conservation and natural resource management in China and the USA. Malcolm says that highlights of the trip, which he shared with his brother Randall, were telling tales of his outdoor experiences and graduate student life in the Midwest and talking about how his boyhood adventures in the woods shaped his own appreciation for nature and wildlife.



Dockry, continued from page 2 develop a network of scholars who exemplify academic and personal excellence, foster environments of support, and serve as examples of scholarship, leadership, character, service, and advocacy for students who have been traditionally underrepresented in the academy." Mike's research interests include understanding social aspects of forest management, sustainability, indigenous community forestry, and environmental history. His adviser is Professor Nancy Langston.

Faculty News

Pauli joins department

We're pleased to introduce FWE's new faculty member, Assistant Professor Jonathan



Jonathan Pauli

Pauli, who joined the department in January, 2011. Jonathan earned his PhD in Ecology at the Univeristy of Wyoming in 2010. His research focuses on the response of mammal populations and communities to human disturbance, particularly

as it relates to developing effective conservation strategies. His work involves diverse ecosystems and employs a variety of techniques, from traditional ones like live capture, radiotelemetry and observation to more advanced ones involving molecular markers, stable isotopes and mathematical modeling to answer questions relating to mammalian ecology and conservation.

Mladenoff receives Kellett award

Professor David Mladenoff was selected to receive the 2011 Kellett Mid-Career Award. The award, which includes \$60,000 in flexible research funds, is supported by the Wisconsin Alumni Research Foundation (WARF) and recognizes outstanding midcareer faculty members who are 5 to 20 years past their first promotion to a tenured

position. The award is named for William R. Kellett, a former president of the WARF board of trustees and retired president of Kimberly-Clark Corp. Professor Mladenoff's research centers on how natural and manmade disturbances influence forested landscapes and patterns of change across space and time.

Temple honored by Kiwanis, featured on UW web site

Professor Emeritus Stan Temple received the 2011 Kiwanis International Annual Conservation Award in recognition of his career accomplishments. The award was presented April 18 at the Edgewater Hotel in Madison. The Kiwanis presented the award to Temple in recognition of his "extraordinary work helping to restore endangered species, protecting critical habitat and bringing the scope and magnitude of the extinction crisis into clear public focus."

In January 2011 Professor Temple was featured in an article that appeared on the UW-Madison's home page. The article describes Temple's lifetime of work to save threatened species and his sharing of those experiences in the classroom. To read the article in its entirety visit:

http://www.news.wisc.edu/18884

Three faculty members promoted to full professor

Congratulations to our newest full professors in the Department of Forest and Wildlife Ecology. Scott Bowe, Volker Radeloff and Mark Rickenbach were all approved for promotion effective July 1, 2011.



Scott Bowe

Professor Scott Bowe joined the department in August 2000 after earning his PhD at Virginia Polytechnic Institute and State University, a MS at the University of Minnesota and BS at the UW-Madison. He is an extension wood products

specialist and also teaches a courses on Wood Identification and Wood, Industrial Use, and Society.



Volker Radeloff

Professor Volker Radeloff joined the department in 2000 after completing his PhD in Forestry at UW-Madison, his MS in Geography/ GIS at Edinburgh University and Diploma in Geography at

University of Trier in Germany. He specializes in landscape ecology, conservation biology, remote sensing, GIS, and biometry and teaches courses on forest biometry as well as the Forest Resources Practicum.



Mark Rickenbach

Professor Mark Rickenbach's work specializes in Extension and forest policy management. He joined the department in 2000 after earning his PhD in forest resources at Oregon State University, his MS in

Forestry at University of Massachusetts-Amherst and his BS in Forest Science at Pennsylvania State University.

Latin American premier of 'Green Fire'

In March 2011 Adjunct Associate Professor Eduardo Santana organized the seminar: "Mexico and Aldo Leopold: Reciprocal Influences," one of the first analyses of the mutual influences of Aldo Leopold and the Mexican conservation movement. The seminar was presented as part of the Guadalajara International Film Festival, the largest in Latin America [http://ficg.org/sitio]. The new documentary "Green Fire: Aldo Leopold and A Land Ethic for Our Time" received its Latin American debut at the film festival.

Mexico's National Commission for the Knowledge and Use of Biodiversity (CONABIO) has published its new book "Natural heritage of Mexico: 100 cases of success" [free online at http://www.biodiversidad.gob.mx/publicaciones/librosDig/librosDig.html]. Included are two long-term projects Dr. Santana has been working on with colleagues from the University of Guadalajara and collaborators from FWE and other UW-Madison departments.





Four faculty members to retire in June

Four faculty members in the Forest and Wildlife Ecology
Department—Professors Scott Craven, Donald Field, Ray Guries,
and Robert Ray—are set to retire the end of June. Their combined
years of experience and expertise will be greatly missed in the



Scott Craven — Professor Craven's ties to the department go back to his days as a graduate student. He earned both his MS and PhD in Wildlife Ecology in 1975 and 1978, respectively. In 1979 he joined the department as a faculty member. Scott says he has always considered himself an Extension Specialist as well as a faculty member. His responsibilities have included teaching, research, administration (Department Chair for seven years), and Extension work. He is a familiar voice on

public radio, initially with the Wonderful World of Nature program on Wisconsin School of the Air and currently as a regular guest on Wisconsin Public Radio. Animal damage control has been an important component of his Extension work both in Wisconsin and across the U.S. Scott has been involved in numerous service activities. Scott won't be sitting idle during retirement. He plans to remain active with the department's summer field class, fundraising, some specific Extension programs, his radio work with WPR, and the Wildlife Society. He's also looking foward to spending more time at his cabin in northern Wisconsin.



Ray Guries — Professor Guries earned his BS from the University of Massachusetts and his PhD from the University of Washington. Following a two-year research associate position at Yale, Ray joined the FWE department in 1977. In addition to his teaching, advising, and research activities, Ray served as chair of the department for seven years and Interim Vice-Dean and Associate Dean for Research for just over a year. Ray's research interests are in the area of forest genetics and tree improvement, in particular

testing new elm hybrids' resistance to Dutch elm disease. Ray has advised 35 MS and 17 PhD students as well as served on over 100 graduate student committees. He received several awards for his teaching and advising proficiency, including the Carl Alwin Schenck Award in 1999, the highest teaching recognition accorded by the national professional forestry society. Post retirement Ray will continue to work with the WI DNR, Division of Forestry, to oversee and coordinate various aspects of their applied tree improvement program. He will also continue to test and select Dutch elm disease resistant/tolerant trees for commercial release.

department. Below are all too brief descriptions of the four individuals' contributions to the department and the discipline. We wish them the best of luck in their retirements and hope to continue to see them around the department.



Donald Field — Professor Field earned his BS and MS degrees at UW-Madison then completed his PhD at Penn State University in 1968. Following positions with universities and the NPS in the Pacific NW, Don returned to the UW-Madison in 1988 as Associate Dean of CALS, Associate Director of the Ag Experiment Station, and Director of the School of Natural Resources. He served in these positions until 1997 when he returned to a faculty position in Forest and Wildlife

Ecology. He then reestablished his research program on rural land-scapes and forest dependent communities and returned to teaching and advising students. One of Don's major accomplishments was cofounding the journal *Society and Natural Resources* and the International Association of Society and Natural Resources, both thriving entities today. After retirement Don plans to continue consulting work with the NPS and serving on the George Hartzog Institute for Parks Board at Clemson University. He also hopes to improve his photographic and culinary skills and through travel expand his knowledge of the historical, cultural and natural treasures of the US.



Robert Ray — Professor Ray earned his BS and MEd at the University of Georgia, then completed his PhD at the University of Maryland. In 1976 he joined the UW-Madison's Dept. of Continuing and Vocational Education (CAVE), serving as chair for five years. Bob's research and teaching focused on leisure behavior and life satisfaction across the lifespan. When CAVE was dissolved in 1997, Bob joined the Forest and Wildlife Ecology Department, which has remained his tenure home. In 1999 Bob

became Assistant Dean for Academic and Student affairs in CALS and served in that role until 2006 when he was offered the position of Associate Dean for Academic Programs. In 2010 he returned to FWE. In the near future following retirement, Bob has agree to teach the CALS Freshman seminar in the fall of 2011 while he wraps up a couple of projects. In the longer term, he looks forward to owning his own time, travel, spending time with family and volunteering with Habitat for Humanity. He eventually plans to relocate to Colorado "in search of a bit more sunshine" and to be closer to some of his family.



Department News

Timme receives CALS Award



Congratulations to Sheila Timme (above with CALS Interim Dean and Director William Tracy) who received the CALS Classified Staff Award. Sheila is the Administrative Department Manager for Forest and Wildlife Ecology as well as Entomology and Plant Pathology. The three department chairs describe Sheila as working with dedication, diligence and good humor and with consistently excellent performance. Sheila and other CALS award recipients were honored at a ceremony and reception on April 27th in the Ebling Symposium Center.

Biomass supply study funded

Professor Mark Rickenbach will lead a new research project titled "Identifying and engaging stakeholder networks toward sustainable, multi-sourced biomass production." Rickenbach, along with Randy Jackson and Carol Williams in the Agronomy Department, will explore ways to identify potential biomass suppliers, such as farmers and woodland owners, and how they can coordinate their supplies with those that demand their products, ultimately leading to a sustainable, multi-sourced biomass supply. The Wisconsin Institute for Sustainable Agriculture provided \$92,000 for the two-year project, which will begin this summer.

Project examines sustainability of Madison's freshwater system

Assistant Professor Adena Rissman is one of five researchers who will study connections between the local water system and land use, climate change, human activities, development, and ecosystems. The five-year, nearly \$5 million grant funded by the National Science Foundation will focus on the Yahara watershed, which includes all of Madison's lakes. The grant is part of a new NSF program that is exploring ways to maintain a sufficient supply and quality of freshwater while balancing needs from development, agriculture, human use, and conservation. The researchers say that the complexity of the issues, which touch on everything from energy production and food prices to city planning and recreation, requires more than a "just the facts" type of scientific approach.

They will use an integrated approach that combines scientific modeling, field data collection, stakeholder input, public engagement, outreach, and education to take a broad view of the many factors at play. Joining Rissman on the project are Chris Kucharik, agronomy; Monica Turner, Zoology; Stephen Carpenter, Center for Limnology; and Steven Loheide, Civil and Environmental Engineering.

Raffa launches new research projects, receives awards

Forest entomologist Professor Ken Raffa is launching a new USDA funded project in collaboration with Peter Reich at the University of Minnesota. He will contribute an insect component to their B4 Warmed project on simulated climatic warming. Raffa Raffa, continues on page 6

WI DNR Secretary Stepp gets hands-on experience

WI DNR Secretary Cathy Stepp (below right) joined Forest and Wildlife Ecology PhD Student Karl Malcolm (below left) for a visit to a snowy bear den near Thorp, Wisconsin, in mid-March. Along with recent alum and current DNR Bear and Furbearer Ecologist David MacFarland, they checked up on a radio-collared female bear and her three eightweek-old cubs. Secretary Stepp was delighted to learn more about Wisconsin's expanding black bear population, the focus of a study Karl has been conducting since 2005 under the supervision of Professor Tim Van Deelen. With field work nearly complete, Karl hopes to finish his dissertation later this year.





Raffa, continued from page 5

and UW-Madison collaborators Professor Rick Lindroth and Postdoctoral Associate Ezra Schwartzberg say the project will examine the effects of simulated warming on the susceptibility and tolerance of boreal forest trees to herbivory. A second new project will explore options for biological control of the emerald ash borer.

Raffa continues two other projects, one on the interactions between fire and mountain pine beetle with Professor Phil Townsend and a second project with Cameron Currie in Bacteriology on the role of symbiotic microbes in climate-driven range expansions of mountain pine beetle.

Congratulations are also in order. In December the Entomological Society of America presented Professor Raffa with its Founders Award and the International Society of Chemical Ecology honored him with their Silverstein-Simeone Lecture.

Combined phenological records provide 102-year plant and animal record

Many wildlifers know Professor A. W. Schorger as a former member of the depart-



A.W. Schorger

ment (from 1951 to 1972) who wrote the definitive book on the natural history of the passenger pigeon and who left the department a generous endowment. Professor Emeritus Stan Temple has been formally archiving Schorger's extensive collection of field journals

and research notes, which have been stored in the department and little used since his death in 1972. Temple has also been extracting phenological records from Schorger's field journals that go all the way back to 1908. When combined with the phenological records of Aldo Leopold (1935-1948), Nina Leopold Bradley (1976-present) and Temple's own records (1976-present), they provide a remarkable 102-year record of the timing of seasonal events in south-central Wisconsin. Preliminary analyses of these

data demonstrate that they can be used to develop models of how over 120 species of plants and animals are likely to respond to predicted changes in Wisconsin's climate.

Study tests impact of PBDEs on immune system

Professor Bill Karasov and PhD student Tawnya Cary are treading into a new research discipline called immunoecology. They hope to gain a better understanding of how the immune functions of several animal species develop and protect them in their natural environments. The research examines the effects of chemicals commonly used in fire retardants on Northern Leopard Frog tadpoles. The tadpoles are fed a diet that

includes polybrominated diphenyl ethers, PBDEs for short. They hope to measure the potential impact of PBDEs on survival, growth rate, and the amount of time it takes for the tadpoles to develop into frogs as well as discover whether PBDEs weaken the animals' immune system making them vulnerable to other pathogens in the environment. Recently published early results show that a PBDE-tainted diet increased mortality and stunted growth among the tadpoles. The research project was highlighted in a recent UW Sea Grant Institute article. To view the entire article visit: http://seagrant.wisc.edu/Home/AboutUsSection/Press Room/Details.aspx?PostID=1016

New etched glass artwork honors donors

y all accounts, the new Wall of Honor, located in the Aldo Leopold wing of Russell **D** Labs, is a great success in every way—the glass etchings designed to recognize all of our donors has been very well received. The centerpiece etching of a pair of eagles above a forested lake setting (image below) is the department's way of thanking all of

our donors for their support and generosity over many years. A small number of donors who provided substantial support to the forestry and wildlife programs have been personally recognized with individual named etchings, each depicting a different forest-wildlife scene. The etchings, produced by Bob and Mary Krauski of Krauski Art Glass in Hartland, WI, are both technically complete and artistically striking—each a work of art. See the Wall of Honor images on their web site at: www.krauskiart glass.com/pages/pubspaces/ forestrypg/forestryWall.html. Please be sure to stop by Russell Labs and see the Wall of Honor when your travels take you to Madison.







A heartfelt thank you to all of our donors

The Department of Forest and Wildlife Ecology was fortunate to receive a number of generous donations in the past year. We thank each of you for your contribution and continuing interest in our department, programs, and students. Below is a list of those who contributed in 2010.

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We invite you to join us in our efforts to provide support for important department priorities. Donations to the Forest and Wildlife Ecology Fund will be used to support student travel to professional meetings, help cover the costs of the summer field camp and the southern trip, and to renovate work space in Russell Labs.
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Check out these video links:

Leopold film - Green Fire - now showing

The Aldo Leopold Foundation has produced a new documentary titled "Green Fire: Aldo Leopold and A Land Ethic for Our Time." The film explores Leopold's life work as well as how his ideas continue to be relevant today. For more information and to view a trailer visit: http://www.aldoleopold.org/

Are Flame Retardants Harming Frogs?

View this short video that describes research by Professor Bill Karasov and PhD student Tawnya Cary on the impact of PBDEs on frog development and mortality: http://www.youtube.com/watch?v=XZ8tIv7A11s

Inside this issue. . .





