

FOREST AND WILDLIFE ECOLOGY NEWS

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

Vol. 15, No. 1 Spring/Summer 2012

News from the Chair

Congratulations to our newest alumni—our May graduates! As



Bill Karasov

reflected in these pages, our faculty, staff and students continue to do great things, even in the face of declining resources. We're 7th among 18 CALS departments in the

number of undergraduate majors, and we're 5th in the amount of money generated from extramural research grants that helps run the Department, College and University. Faculty, staff, and students published nearly a hundred articles in professional journals last year, as well as a few books (one is highlighted on pg. 3). FWE faculty members extend our reach throughout the state and beyond. Professor David Drake leads our highly successful Coverts program that has reached 505 landowners and impacted nearly 800,000 acres over 18 years. Professor Scott Bowe served on trade missions to China and India promoting Wisconsin's multi-billion dollar wood industry. Associate Chair Mark Rickenbach and Adjunct Professor Bruce Allison were appointed to serve on Wisconsin's Council of Forestry—a key policy venue for sustainable forestry (pg. 3). As delighted as I am about these achievements, I am anxious about the future. Our department, like UW as a whole, has suffered consecutive budget cuts. We have lost personnel and been

Go climb a tree...safely!

The Forestry Club organized a tree climbing demonstration for its members on May Day. They received instruction from one of the best in the field. Joe House, owner of Tree House Arbor Science and a UW-Madison 1995 Forest Science graduate, has won state and international tree climbing competitions across the globe. With Joe demonstrating proper use of climbing gear and safety techniques, about a dozen students participated. Pictured in the photo left to right are Brian Zweifel, Liz Wood, and Kelsey Egelhoff.

Photo by Glen Stanosz.



unable to replace retired faculty. Our interim chancellor projects that UW-Madison cannot maintain core programs with available state funds and tuition, and must rely more on philanthropy. With your help, everyone pulling together, we will maintain and improve programs that provide excellent training and a continuing stream of people, as capable as our alumni, to carry on into the future the important work of management and conservation of natural resources.

— Bill Karasov, Chair

FOREST AND WILDLIFE

ECOLOGY NEWS is published by the Department of Forest and Wildlife Ecology

Please send comments and news to: Dept. of Forest and Wildlife Ecology 1630 Linden Drive University of Wisconsin-Madison Madison, WI 53706-1598 Tel. 608-262-9975 Fax 608-262-9922 Email: mjmiron@wisc.edu

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





Alumni Update

After completing his B.S. in Wildlife Ecology in 1974, Lee Jennings earned his M.S. in Agronomy in 1977 at UW-Madison. He has been working in agriculture ever since. In December 2011, he became the Interim Crops and Soils Educator for Dane County University Extension. Lee and his wife live in Madison and have two grown daughters. (lee.jennings@ces.uwex.edu)

Mark Mattner (B.S. Wildlife Ecology 1974) is Marketing Analytics & Database Manager for the University of Minnesota Alumni Association. He earned his Teaching Certificate in 1975 at UW-Milwaukee, taught Physical Science for five years at Tomah Junior High School, then began a career as a computer software engineer (Programming Certificate-Brown Institute, Minneapolis). Says Mark, "Especially during walks in the woods or while fishing I think about how grateful I am for the wisdom and the research skills I gained from our program, our instructors, and my past advisor, Joe Hickey. They have served me well in all facets of my life." (mmattner@umn.edu)



Joe Kresse (B.S. Forest Science 1973) remembers a Forestry Club Christmas tree sale back in the '70s when they had to store some trees in the horse barn on campus.

When they were put out for sale, the smell of the horse barn lingered on them. When one customer asked about the smell, he responded that "it was special because you got the manger in the stable effect for no extra cost." Joe is retired and lives in La Grande, Oregon. In the picture above, Joe models his UW Forestry hat. (Kressej@gmail.com)

Alumni Update continues on page 3

Faculty and Staff News

CALS honors Nack and Rodock

Congratulations to Jamie Nack, FWE Wildlife Outreach Specialist, who received the CALS J.S. Donald Short Course



Jamie Nack

Teaching Award and to Sara Rodock, student services coordinator, awarded the Excellence in Leadership award. Jamie teaches "Wildlife Management on the Farm" for the Farm & **Industry Short Course**

program. Since taking over the course in 2003, Jamie has developed the curriculum to provide a unique, dynamic learning experience for each student. As a final project, each student develops a wildlife management plan for his or her farm. A fair but demanding instructor, Jamie's course policies have been used as a model for other Farm & Industry Short Course instructors.



Sara Rodock

Sara Rodock is student services coordinator for not only Forest and Wildlife Ecology but Plant Pathology and Entomology as well. The chairs of the three departments say Sara goes above and beyond

to deliver exceptional advising and graduate program coordination. She is also a leader in campus advising efforts, chairing the campus-wide Academic & Career Advising Association in 2009. Chairs of all three departments Sara works with say she is "an invaluable resource to faculty, staff, graduate and undergraduate students."

Three receive Technology **Transfer Award**

Outreach specialist Jamie Nack, Associate Professor David Drake, and Professor Emeritus Scott Craven received the Donald

R. Peterson Farm Technology Transfer Award for their interactive exhibit—Wildlife on the Farm-and activities at the 2011 Farm Technology Days. The exhibit included a wildlife identification quiz and wildlife specimens for visitors to touch and ask questions about. Visitors could also learn how to attract desirable wildlife and minimize wildlife damage to crops, landscapes, and buildings. Nack, Drake and Craven were honored at the annual Wisconsin Farm Technology Days Board of Directors meeting in April.

Mladenoff honored by landscape ecologists, receives **OECD Fellowship**

Professor David Mladenoff received the Distinguished Landscape Ecologist Award at the annual meeting of the US International Association for Landscape Ecology (IALE) in April. The award recognizes his long-term scientific contribution to define the field of landscape ecology. In addition to his innovative research program, Mladenoff's many contributions to the field through his teaching and service to the organization were noted. Professor Mladenoff also was awarded a Foreign Study Fellowship through the Cooperative Research Programme (CRP) of the Organisation for Economic Co-operation and Development (OECD). The fellowship will support his work on a collaborative research project with colleagues at the University of Turin and University of Sassari in Italy and the Swedish University of Agriculture in Umeå, Sweden.

Van Deelan awarded grant to develop curriculum

The College of Agricultural and Life Sciences has awarded Associate Professor Tim Van Deelan a grant to develop teaching modules that explore European approaches to deer impacts on forests, agriculture, and urban and rural areas. By offering a global perspective to a local issue (deer management in Wisconsin), the teaching modules will provide interdisciplinary problem-solving options and opportunities to debate the merits of applying European approaches to manage similar conservation issues in Wisconsin.



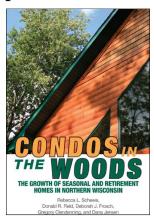
Balster earns teaching award

Associate Professor Nick Balster is one of 10 professors on campus to receive the UW-Madison Distinguished Teaching Award. He is a faculty affiliate in FWE. Balster's home department is Soil Science where he teaches seven courses either by himself or as part of a team. He says that of all his roles, he holds his role as teacher as most important. Balster joined the UW faculty in 2003 and chairs the new environmental science major. He and the other award recipients were honored at a ceremony and reception March 28.

Allison appointed to Council on Forestry

In December Governor Scott Walker appointed Adjunct Assistant Professor R. Bruce Allison to fill the Urban Forestry slot on the Wisconsin Council on Forestry. Allison teaches and guest lectures in the FWE department. He is president of Allison Tree Care, Inc. and is a past president of both the Wisconsin Urban Forestry Council and Wisconsin Arborists Association. Allison will join FWE colleague Professor Mark Rickenbach who also serves on the Wisconsin Council of Forestry as the Forestry School Representative.

Condos in the Woods published



Condos in the Woods: The Growth of Seasonal and Retirement Homes in Northern Wisconsin is hot off the presses. FWE Emeritus Professor Donald Field is co-author of the book along with

former students Rebecca Schewe, Deborah Frosch, Gregory Clendenning, and Dana Jensen. Looking at trends in natural resource management from the 1970s to the present on a national scale and in an area of northwestern Wisconsin called the Pine Barrens, the book explores how long-term and new,

seasonal residents view the management strategies of their natural resources. The book is published by University of Wisconsin Press. For more information visit http://uwpress.wisc.edu/books/4903.htm

Buongiorno presents keynote in Finland, completes forest outlook studies

Emeritus Professor Joseph Buongiorno gave invited lectures and seminars in December 2011 at the University of Helsinki and the Finnish Forest Research Institute (Metla) including the keynote address at a seminar honoring Dr. Jari Kuuluvainen at the Finnish Society of Forest Economists.

Buongiorno, Jeff Prestemon (Forestry Ph.D. 1994), Shushuai Zhu (Forestry M.S. 1999, Ph.D. 2001) and Ronald Raunikar (Forestry Ph.D. 2006) have just completed two outlook studies for forests and wood industries. They project the consequences of scenarios of the Intergovernmental Panel on Climate Change on forest area, volume, product demand and supply, international trade, prices, and value added up to 2060 for Africa, Asia, Europe, North America, Oceania, South America, and selected countries. For more information, see "Outlook to 2060 for World Forests and Forest Industries," available at http://treesearch.fs.fed.us/pubs/40454 and "The North American Forest Sector Outlook Study 2006-2030," available at http://treesearch.fs.fed.us/pubs/40454.

Weimin edits special issue, awarded fellowship

Weimin Xi, Research Associate in FWE was guest editor for a special issue of the journal *Tree and Forestry Science and Biotechnology*. The special issue on Forest Restoration includes 14 papers authored by 60 scientists from five countries. To view issue information and abstracts visit: http://www.globalsciencebooks.info/Journals Sup/12TFSB_6_SI1.html
Dr. Xi was also the recipient of the 2012 KC Wong Research Fellowship. The fellowship was established by the KC Wong Education Foundation in Hong Kong to facilitate

continues on page 4

Alumni Update, continued



Past Wildlife Ecology Department chairs Orrin Rongstad (left) and Lloyd Keith get together monthly over lunch to discuss old times, politics, and wildlife problems and issues. Both Orrin and Lloyd are 80 years young. (Orrin Rongstad email: bdrongstad40@gmail.com)

In Memoriam

James E. Kuntz, former UW-Madison Forestry faculty member, passed away April 4, 2012, in Madison. He earned both his M.S. and Ph.D. degrees at the UW before returning to the UW in 1947 to accept a joint appointment in Plant Pathology and Forestry. He remained at the UW for 40 years working with students and researching oak wilt, butternut canker, maple and walnut die-back, poplar canker and other forest and shade tree diseases. Dr. Kuntz is survived by his wife, Helen, three children, four grandchildren, and six great-grandchildren.

James G. Teer, accomplished wildlife conservationist, passed away on March 19, 2012, in College Station, TX. Dr. Teer earned his Ph.D. from the UW in 1963. Throughout his career in wildlife ecology Dr. Teer received numerous awards for his work as an educator and researcher. His research interests focused on studies of the ecology of plant-animal communities, population dynamics of vertebrates, and the ecological basis of land-use planning and resource conservation and management. Dr. Teer is survived by his wife, Joan Marie Powell of Laurel, Mississippi, two children, and three grandchildren.





continued from page 3 collaborations with scientists at the Chinese Academy of Sciences (CAS). With this support Dr. Xi will travel to China to develop a collaborative project between researchers at the Institute of Geographic Sciences and Natural Resources Research at CAS and the LANDIS-II (http://www.landis-ii.org/) team in the department. Professor David Mladenoff is the chief advisor on the project.

Student News

Congratulations to our FWE student award recipients

Schilke awarded NSF fellowship

Paul Schilke received a 2012 National Science Foundation Graduate Research Fellowship Program Fellowship. Schilke was selected based on his outstanding abilities and accomplishments as well as his potential to contribute to strengthening the vitality of the U.S. science and engineering enterprise. He will begin his graduate studies in Wildlife Ecology in the fall working with Assistant Professor Anna Pidgeon on understanding factors limiting reproductive success in passerines.

Hilts and Gleason awarded research scholarships

Congratulations to Emily Hilts, a Wildlife Ecology undergraduate major who received a 2012 Holstrom Environmental Scholarship. And congratulations to Sarah Gleason, a Wildlife Ecology undergraduate who was awarded a Hilldale Undergraduate/ Faculty Research Fellowship. Both awards support undergraduate research done in collaboration with UW-Madison faculty or academic staff. Hilts and Gleason will each receive \$3.000 and



Four receive Society of American Foresters rings

Cour graduating Forest Science undergraduate majors received commemorative rings at a Forestry Club ceremony in April. The Society of American Foresters (SAF) awards the rings to graduating senior SAF members. This year's ring is inlaid with butternut. Ring recipients pictured above from left to right are Danielle Schumerth, Grant Gibson, Collin Buntrock, and Johanna Slempa.

their advisors will each receive \$500 to offset research costs.

Norton honored at Fish and Wildlife meeting

Andrew Norton, Ph.D. graduate student in Wildlife Ecology, received the Janice Lee Fenske Memorial Award at the 2011 Midwest Fish and Wildlife Conference in Des Moines in December. Norton was selected based on his academic ability and scholarly achievements. The award includes a \$500 scholarship and plaque. In addition to his award Norton published an article in Journal of Wildlife Management titled "Spatio-Temporal Variation in Male White-Tailed Deer Harvest Rates in Pennsylvnia:

Implications for Estimating Abundance." Co-authors on the article are D.R. Diefenbach, B.D. Wallingford, and C.S. Rosenberry. The article appeared in Volume 76, pp. 136-143.

Welcome to our three new grad students

Three new graduate students joined the department at the start of the spring semester. Jessica Gorzo, Wildlife Ecology Ph.D. student, is working with Dr. Anna Pidgeon; James (Trip) Hook, Forestry Ph.D. student, is working with Dr. Phil Townsend; and Catalina Munteanu, Forestry Ph.D. student, is working with Dr. Volker Radeloff.





What's New in Teaching

Tweets engage students in wildlife behavior

Assistant Professor Anna Pidgeon uses a social media tool to get her students engaged in wildlife behavior observations. The roughly 50 students in her Terrestrial Vertebrate Ecology course were required to open a twitter account then tweet a minimum of 10 wildlife sightings or behaviors over the course of the spring semester. "This exercise encourages them to look around, to notice things like when cardinals first started singing this spring. It encourages them to pay attention to what is around them, not only in natural areas, but to see wildlife using habitat wherever they area," says Pidgeon. Sharing wildlife observations is only a small part of the course. The bulk of the work focuses on the defining characteristics, natural history traits, and distribution and conservation challenges of Wisconsin's terrestrial vertebrates. Students have to learn these details for all 67 of the state's mammals and all 56 reptiles and amphibians, as well as about a fourth of Wisconsin's 200plus birds. If you are interested in reading some of the students' tweets, go to www.twitter.com and type #FWE306 into the search bar.

Isotopes used to determine diet of urban and rural raccoons

By Rebecca Evansen Most wildlife majors likely remember Wildlife Management Techniques (FWE561) and its interesting field exercises. In Fall 2011, Drs. Jon Pauli and Scott Lutz added a new exercise – estimating diets of wild raccoons based on stable isotope analysis of hair samples collected in the wild. In a nutshell, more of the natural heavy isotope of nitrogen (denoted $\delta^{15}N$) occurs in predators than in plant eaters, and more of the

natural heavy isotope of carbon (denoted $\delta^{13}C$) occurs in animals that eat corn and its products compared with most other food. The class predicted that rural raccoons would have higher values of $\delta^{13}C$ because of their access to corn, and both urban and rural raccoons would have similar $\delta^{15}N$, but higher than in plants, because raccoons in both habitats are at the same tropic level (eating a mix of animals and plants). To test their hypotheses students collected

raccoon hair samples from across the state, had them analyzed on a mass spectrometer, a machine that measures the amount of various isotopes based on their relative mass, then compared results by habitat type. The results partly surprised them. The class did not detect a difference between the rural and urban raccoons. They attribute this lack of difference to the fact that both urban and rural raccoons were likely eating large

Raccoons continues on page 6

First graders team up with Forestry Club students

On May 15 thirty-five first graders from the Spruce Street Elementary school in Sauk Prairie teamed up with the Forestry Club at Picnic Point to learn about the importance of forests and the products forests provide. "We had so much fun! It was great getting to be outdoors with the kids and introduce them to a subject we're so passionate about," says incoming Forestry Club President Liz Wood. "Their smiles and enthusiasm were a highlight of the semester and left us in good spirits as we resumed finals week. We had a great crew of forestry students out there and I hope we can do another outreach event like this in the year to come." In the photo below graduating senior Collin Buntrock demonstrates tree aging with an increment borer core.







Beissinger gives 2012 **Leopold Lecture**



Steven Beissinger

Each year the Department of Forest and Wildlife Ecology hosts a prominent scientist to visit the department and give the Aldo Leopold Lecture in Natural Resources. This

year's speaker was Steven Beissinger, Department of Environmental Science, Policy and Management at the University of California, Berkeley. In his lecture on April 13, attended by over 100 people, Beissinger spoke about the impact of recent climate change on small mammals and birds in California. This year's lecture marked the 15th anniversary of the Leopold Lecture Series, which began in 1998 with a lecture forum with all living children of Aldo Leopold in attendance— Nina Leopold Bradley, Estella B. Leopold, A. Carl Leopold, and Luna B. Leopold. It was serendipitous that this year's speaker, Steven Beissinger, is the A. Starker Leopold Professor of Wildlife Ecology at UC, Berkeley. In addition to his lecture, Beissinger met with faculty, staff, and students during his visit.

NASA project launched

In January 2012 a new NASA funded project was launched titled "The effects of extreme climate events on avian demographics: the role of habitat refugia in mitigating climate change." In addition to the participation of FWE Assistant Professor Anna Pidgeon and Professor Volker Radeloff, the project is a collaborative effort with Fish and Wildlife Service, USDA Forest Service, U.S. Geological Survey and researchers at two other universities. New FWE Ph.D. student Jessica Gorzo and new post-doctoral researcher Brooke Bateman will also work on the project.

Raccoons, continued from page 5 amounts of corn-derived nutrients, regardless of location. In rural settings they were consuming corn on agricultural fields; in urban environments they were consuming human food (which contains a lot of corn-based products) obtained by raiding garbage cans. As expected, the raccoons in both habitats had comparable 15N values, as they are both of the same trophic level.

To look at raccoon diet and reliance on cornderived nutrients at a finer spatial scale, the students also digitized the locations of all of the raccoons sampled, overlaid these locations onto National Land Cover Dataset

(NLCD) maps and created a home range buffer (average home range radius of a raccoon is 488 m) for each animal. From these data, they calculated the percent forest and percent cropland for each animal. They next related these habitat characteristics to their isotopic signature. The students found that the 13C values of raccoons decreased as the amount of forest habitat cover increased and that ¹³C values increased with the amount of crop cover. Thus, the class concluded that raccoons eat a large amount of corn regardless of location, but that habitat type, especially the amount of forest or crop cover, is related to their reliance on corn-derived nutrients.

Badger project studies the "real" Bucky

rofessor Tim Van Deelen and M.S. student Jimmy Doyle are working on a study of the ecology of badgers in Wisconsin in collaboration with Wisconsin DNR. They use surgically implanted radio transmitters to study the movements and habitat associations of badgers in the southwestern part of the state. After a slow start last fall with only three badgers trapped, things are quickly picking up this spring. At the time this was written, they had caught eight new badgers since April! In the photo to the right DNR wildlife technician Tanya Wolf pins a wild badger to the ground with a snare pole.







Radio collared deer provide research data

Pield research crew leader and UW-Madison alumni, Mike Preisler (front row, second from left), is pictured with a radio collared 20-month-old male white-tailed deer and a group of volunteers from Shiocton, WI and the Wisconsin Rapids High School. White-tailed deer in Wisconsin are being radio collared and monitored for a research project funded by the Wisconsin DNR and the Forest and Wildlife Ecology Department. In addition to using data collected from the study to estimate population parameters (abundance, recruitment, and cause-specific mortality), the project provides a unique opportunity for public outreach. – Andrew Norton, Wildlife Ecology Ph.D Student



Forest and Wildlife Ecology Fund

We invite you to join us in our efforts to provide support for important department priorities. Donations to the Forest and Wildlife Ecology Fund are used to support various activities such as student travel to professional meetings, help cover the costs of the summer field camp, host special lecturers, and to renovate work space in Russell Labs.

I/we would like to donate: ____\$25 ____\$50 ____\$75 ____\$100 ____ Other (please specify amount)

I/we would like to pledge \$_____ each year for _____ years

Please charge my gift of \$______ to my (please circle): Mastercard Visa American Express

Card Number: _____ - ____ Card Expiration Date: ______

Cardholder's Name (please print) ______

Date ______

Name(s) ______

Street Address ______

City, State, Zip ______

If paying by check, please make your gift payable to UW Foundation and mail to: University of Wisconsin Foundation, US Bank Lockbox, P.O. Box 78807, Milwaukee, WI 53278.

Department of Forest and Wildlife Ecology University of Wisconsin-Madison 1630 Linden Drive Madison WI 53706-1598

NONPROFIT ORG US POSTAGE PAID MADISON WI PERMIT NO 658

We enjoy hearing from you!

We'd like to hear what's new with you, your career, family, etc. Drop us a note and include your name, degree and year, and any news you'd like to share with us. Please send your email to Mary Miron at:

mjmiron@wisc.edu or drop a hard copy in the mail to the return address above.

Inside this issue...





