

Kemp's Point

Volume 9, Number 1, May 2008

News from the University of Wisconsin-Madison's Kemp Natural Resources Station

A Busy Winter

By Tom Steele

Normally winter is a quiet time at Kemp. It's a chance for us to catch up on projects, and catch our breath, after a hectic field season. But the Winter of 2007-2008 was exceptionally busy for us at the Station. We hosted more scientists, more students, and more groups at Kemp this past winter than ever before.

Much of this increased activity is the direct result of the new Mead Residence Hall. Previously, only the small Cabin was available for lodging during the winter months. However, we quadrupled our winter capacity with the completion of the new residence hall. We can now accommodate 24 users during the period November-March.



We hosted several scientists and researchers this past winter. One such user was Stephanie Steinhoff. Stephanie is a graduate student in the Department of Forest & Wildlife Ecology at UW-Madison. She was at Kemp last January doing some early reconnaissance as part of her Masters research on flying squirrels. We will see a lot more of Stephanie over the summer as her fieldwork shifts into high gear.

Kemp also hosted a group of intrepid teenagers interested in winter survival and ecology. The

weekend workshop was organized by Steve Kinzel, Jim Winkler, and Dan Renzoni of UW-Extension. Students participated in a number of hands-on activities from building a winter snow shelter called a quinzhee to learning what to do if you fall through the ice. It was an action-packed weekend and the weather was perfect given the wintry topics – lots of snow and cold.

We were also pleased to host a number of colleagues from the Department of Natural Resources and the U.S. Forest Service. They met at Kemp several times to work on varied projects without the immediate distractions of their home office.

All of this activity reminds me of the movie *Field of Dreams*, specifically the line "if you build it, they will come." Based on our experience, this past winter has been a clear case of life imitating art.

More Remodeling at Kemp

We aren't talking about buildings and rooms this time. Instead, it's *Kemp's Point* itself that has a new look. After 7 years, it was time for Kemp's newsletter to take on a slightly different appearance and approach.

While change is inevitable, some things never change. And that, we hope, is the informative and educational nature of *Kemp's Point*. The goal is to feature more of the research, instruction and outreach that Kemp Station supports each year.

Kemp's Point is also available at the website, www.kemp.wisc.edu. If you would like to skip the hard copy in the mail and read it on-line instead, simply drop an email to me at kortman@wisc.edu, and I'll be glad to make that change for you. Past issues are also available on-line.

Thanks for your readership and continued interest in all that is Kemp Station.

-Karla Ortman

If you are interested in using Kemp Station facilities, whether it be winter, spring, summer, or fall, drop us a note (kemp@cal.wisc.edu) or give us a call (715-358-5667).

Night Visitor



Dan Haskell, a master's student at Michigan Tech University, stayed at Kemp periodically throughout the winter while visiting his research sites in the area. As part of his study on lakeshore restoration, Dan is monitoring his sites for the presence of furbearing mammals. He wants to determine how these populations differ between lakes with natural shorelands and those that are developed. Mammal counts were done with snow track surveys and remote cameras. In the first photo we see Dan walking away from a remote camera. Next we see a red fox, caught by the camera. Notice the tree branch in the background is the same in both photos.

Bats Fly in Winter

Last year, a long-term bat monitoring station was erected at the Kemp Natural Resources Station. This monitoring device records the echolocation sound waves of bats flying in the area. Each month, data is collected from the device at Kemp and sent to Wisconsin Department of Natural Resources Ecologist, Dave Redell. In March, Dave sent the following report on winter bat activity at the state's monitoring devices:

...we recorded some interesting winter bat activity. UW-Stevens Point Schmeekle Reserve, UW-Arboretum, and UW-Green Bay sites all recorded winter flights of the big brown bat at temperatures below 40F and some passes were at temps below freezing. I was expecting there would be some big brown bats flying as that is not uncommon. When I worked in Illinois we recorded big brown bats flying in the winter and other locations have recorded them as well. It's a hearty bat. What I wasn't expecting was the Eastern Red bat flying in early January (8th) at the Milwaukee site (Riverside Park...Urban

Ecology Center). It is not known how far south the "tree bats" migrate during the winter months, though we do not typically think of them hanging around Wisconsin. We'll need to wait and see if this is a typical winter occurrence in WI or not. The Kemp NRS (near Minocqua) station is our northern most station and had no winter flights recorded until last week's warm up (March 2nd) when two big brown bat passes occurred. October 30th was the previous last record at Kemp. On March 2nd, two bat passes occurred at 7:33 pm (45 min after sunset) with temperature at 34.5 F and a light SE wind at 2mph. Maximum daytime temperature that day was 38.5 F. It's tough to say where this or these bats were roosting, though big brown bats are one of the few bats known to use human structures to overwinter.

If you would like to learn more about bats, please visit:

www.batcow.org (Bat Conservation of Wisconsin)
www.batcon.org (Bat Conservation International)



Fralish Research Library & Lounge

Master craftsman and all-around great guy Gary Kellner put the final touches on the Fralish Research Library & Lounge this winter. The 1,100 square-foot, multi-purpose room is located in the lower level of the Mead Residence Hall. It was funded by a generous donation from the Fralish Family Foundation. The room provides Kemp users a convenient place to track down research articles or just relax in front of a cozy fire. The library includes a collection of leading ecological, natural resource, and scientific journals, texts, references, and maps. And like all Kemp Station buildings, users can access the Internet via a high-speed, wireless connection.



The top photo shows the new library bookcases, waiting to be filled with the library collection. In the lower photo, lounge areas near the fireplace provide space where researchers can gather and visit or just relax after a long day in the field.



The Wisconsin Idea

The Wisconsin Idea proclaims, "The boundaries of the University are the boundaries of the state." It means that the University should not be an ivory tower institution but should serve all the people of the state in relevant ways. No one knows who coined the phrase "Wisconsin Idea" or when, but as early as 1858 a state legislative committee defined the role of a state-supported university:

"The general government has made a munificent donation to the people of Wisconsin. They have an unquestioned right to demand that it shall primarily be adapted to popular needs, that its courses of instruction shall be arranged to meet as fully as possible the wants of the greatest number of our citizens."

The University of Wisconsin-Madison recently launched "The Wisconsin Idea In Action," <http://admiss.gradsch.wisc.edu/cgi-bin/wi/index.pl>, a searchable, online database of UW-Madison's service to the state. It includes hundreds of examples of how UW-Madison's teaching, research and outreach activities connect to you, the citizens of Wisconsin.

This database illustrates the Universities commitment to its partnerships with state constituents and shows how the University is valuable to the state well beyond its role in educating students. Search this database to find out how the University is active in your community.



When it comes to growing old, most of us are trying to delay the process as long as possible. But the opposite is true when it comes to our forests. Researchers, resource managers, and the general public have a keen interest in restoring old-growth ecosystems. At one time, old-growth forests were abundant in Wisconsin; now they are rare. Currently, an innovative research project is examining ways to accelerate the development of old-growth characteristics and function without having to wait centuries.


The study is being conducted by an interdisciplinary team of researchers that includes Drs. Karl Martin, Wisconsin DNR; Brian Palik, U.S. Forest Service; Craig Lorimer, UW-Madison; and Chris Webster, Michigan Technological University. The scientists are implementing timber harvests in a way that mimics nature.

When a windstorm blows through an area, it creates various-sized openings, or gaps, in the forest canopy. Some areas are left untouched; others are flattened. By harvesting trees in a similar pattern, and by increasing the amount of snags and downed wood left in the forest, the researchers hope to promote the development of old-growth conditions while still producing the wood products that society needs.

This past winter loggers implemented the experimental timber harvests at three locations

across northern Wisconsin. Sites were located on the Flambeau River State Forest (Sawyer County), the Northern Highland State Forest (Vilas County), and the Argonne Experimental Forest in the Chequamegon-Nicolet National Forest (Forest County). My role in the project is to determine how timber harvesting costs and productivity compare between the conventional and experimental logging practices.

The dedicated field crew of Dean Van Doren and Joshua Kunzman spent six weeks this winter doing detailed time studies of the men and machines working in the woods. Additional help was provided by Dr. Karin Fassnacht and Mike Worland. Data have been collected, entered, and collated. Over the next several months, we will conduct a thorough analysis of the data, looking for trends in logging cost and productivity among the treatments.

The research team hopes their work will ultimately lead to the development of guidelines that help forest managers restore a part of Wisconsin's forest legacy while permitting the harvest of wood products. 



Technicians Dean Van Doren (above) and Joshua Kunzman (left) time logging equipment to determine timber harvesting costs and productivity.

To learn more about this study, visit <http://www.wnrmag.com/supps/2004/oct04/intro.htm>





Kemp Profile: Joe Nohner

Hometown:
Omaha, Nebraska

Area of study: M.S., Aquatic Sciences and Management, University of Michigan

Your 2008 field crew: My advisor,

Dr. Jim Diana; from the WDNR, Steve Bolssen, Tom Cichosz, Paul Cunningham and Andrew Sabai; UM students, Tom Aepelbacher, Kyle Battige, Jason Bies, Leah Ettema, Corey Higley, Sean Lewandowski and Sam Upton; and about 25 local volunteers

What question will your field research answer?
We're creating a GIS-based model to predict where muskies spawn in lakes across Northern Wisconsin, which will tell us which habitats they choose and make critical habitat designations.

How is your research funded? We've received funding from the Musky Clubs Alliance, grants from the University of Michigan, and support from the Wisconsin DNR.

Describe a typical day of field work. I wake up at 9AM and start planning the day's fieldwork based on lake temperatures and volunteer availability. We drive to our first lake of the day and complete egg surveys. We

use D-frame nets to sample sediments and search for eggs to verify that the muskies we identified at the location were actually spawning. We quit the egg surveys by 5 PM and return to Kemp for dinner. At 7PM we leave for spotlighting surveys and typically return around 3 AM. We've had as many as 14 boats on the water with 28,000,000 total candlepower of spotlights in a night. The spotlighting surveys identify spawning fish locations, which we will survey for eggs approximately a week later.

What's the biggest challenge you've faced working on this project? The biggest challenge this year is that the field season was compressed by the late spring and rapid warming in our lakes. We've been coordinating four lakes worth of surveys some nights, and putting together volunteers, boats, and field equipment for each lake is a logistical nightmare.

What's the biggest fish you've ever caught?
44 inch tiger musky

Where do you see yourself after you've completed your degree? I'm hoping to move to Wisconsin or Minnesota to work with a consulting firm that restores lakeshores.

When you're old and gray, what will you tell your grandkids about this project? You know you're in the right field when you go to bed happy at the end of an 18 hour day.



Students from the Milwaukee Institute of Art & Design visited Kemp Station in early spring to find quite a bit of snow and ice still on the lakes. The field trip north was part of their Limnology course, taught by Maurizio Murru. Not to be deterred by the winter conditions, students took turns at the auger, drilling a hole through the ice to collect water samples. Examination of the sample in the lab allowed the students to compare aquatic creatures seen here to those found in Milwaukee area lakes.



Learning Opportunities at Kemp

Learn about Wisconsin's natural resources at Kemp Natural Resources Station, a University of Wisconsin research and teaching facility in Woodruff. To register for a session, contact Karla at (715) 358-5667 or kemp@cals.wisc.edu. All sessions are free of charge. The complete schedule, including added sessions, is available at www.kemp.wisc.edu.

Most sessions are held in the second floor classroom, above the Kemp Boathouse. There is a short walk to the Boathouse from the parking area and the classroom is accessible by stairs only. Participants are reminded to dress appropriately for the weather and planned outdoor activities.

Monday, June 16, 7:00 pm

Grouse in the Mist

Scott Walter, UW-Richland County, Biological Sciences

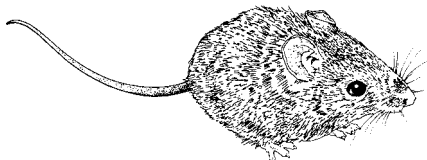
The Ruffed Grouse is a popular game bird, and one of the most dramatic bird species in Wisconsin. From the drumming behavior of breeding males to the thunderous flight of flushing birds, few people who spend time in our woodlands are unaware of the beauty of this magnificent animal. The health of grouse populations, however, depends on the presence of very specific habitats. Our ability to provide these habitats on the landscape is therefore of utmost importance in ensuring the continued abundance of this forest denizen. Dr. Scott Walter of UW-Richland will describe the ecology and life cycle of grouse, and discuss how forest management policy and long-term landscape change can (and has!) impacted grouse populations in Wisconsin. He will also describe his research on grouse ecology in south-western Wisconsin, where grouse—once abundant—are disappearing into the mist.

Thursday, June 26, 7:00 pm

The Lynx

Dan Haskell, MS Student, Michigan Tech University

Big cat sightings in Wisconsin are not uncommon. But are any of these big cats the Canadian Lynx? Find out when Dan Haskell speaks on the ecology of this wildcat, its history and status in the state. He will also share stories about his research experience trapping lynx in the Rocky Mountains.



Thursday, July 10, 7:00 pm

Small Mammal Identification & Ecology

Loren Ayers, Ecologist, Wisconsin DNR

While they may be some of Wisconsin's most common wildlife species, they are often the least known and understood by the average person. No longer! Loren Ayers will provide information on identification and habits of various small mammals, including shrews, moles, voles, mice and squirrels. A variety of live, native animals will be on hand for you to study and enjoy.

Wednesday, July 16, 7:00 pm

Hibernation

Hannah Carey, UW School of Veterinary Medicine

Hibernating animals undergo remarkable changes in their physiology during the winter months. Their metabolism drops to very low levels, heart rate and breathing are greatly reduced, and body temperature falls close to freezing. Hibernators like the 13-lined ground squirrel store up large amounts of body fat in the late summer and fall, which provides them with energy during the winter fast. Dr. Hannah Carey will talk about the amazing physiology of hibernating mammals, and how insights from hibernation biology can lead to new approaches to improve the health of humans and other animals.

Monday, July 21, 7:00 pm

Cellulosic Ethanol in the Northwoods: Implications for Our Forests and Wildlife

Amber Roth, PhD Student, Michigan Tech University

As demand and interest in renewable energy grows, new research has focused on identifying new sources for ethanol production. The greatest potential for expanding ethanol production in the US will not be from corn but rather from cellulosic sources including our forests. Though this industry will provide new economic opportunities for Northwoods communities, many residents wonder about the potential impact on our wildlife. Can we find a win-win scenario where both the economy and wildlife can benefit?

Tuesday, July 29, 7:00 pm

Exotic Earthworms

Cindy Hale, University of Minnesota, Department of Forest Resources

Researchers have been studying the affect of exotic earthworms on ecosystems since the 1990's. Dr. Cindy Hale, the pioneer researcher to study European earthworm communities in Minnesota hardwood forests, will provide an overview of this research and an update on what is going on today. Learn about earthworm anatomy and identification, how exotic worms may be impacting Wisconsin's forests, and how you can get involved in earthworm surveys.



Monday, August 11, 2:00 – 4:00 pm

Wisconsin Soils: Get to Know What's Down Below!

Nick Balster, UW-Madison Department of Soil Science

On any Sunday afternoon drive, it's easy to experience the diverse and beautiful landscapes that blanket Wisconsin. However, an often overlooked and mistreated resource of equal diversity and beauty also underlies this area. Come and experience the extraordinary properties and rich diversity of Wisconsin soils. Dr. Nick Balster will discuss the historic and present role of soils in the development of Wisconsin's landscapes and on the maintenance of life on earth. Hands-on activities (great for all ages) will help you identify soil characteristics essential to the function of this dynamic underground world. You will leave with a new appreciation for soil and a new fascination of what goes on below our feet. So please join us as we take a hands-on, "down and dirty" journey into the wonderful world of soil!!

Monday, August 18, 7:00 pm

Bat Night

David Redell, Ecologist, Wisconsin DNR

Leave your binoculars at home, pick up an ultrasound detector, and listen for bats flying at Kemp. We will start with an overview of the natural history of eight bat species in Wisconsin and then discuss inventory and monitoring plans for the state. Learn about the citizen-based bat monitoring project and how you can participate. After sunset we will walk through the area and search for bats that are foraging for insects.

Monday, August 25, 7:00 pm

Turkeys in Wisconsin

Scott Craven, UW-Extension State Wildlife Specialist

If you didn't hear Scott Craven "talk turkey" last year, here's your chance to get the low down on a big bird that's fairly new to the state. Everything turkey will be covered, including the bird's physical and behavioral characteristics, how they make a living, and the status of the bird in the state. Don't miss this fun and informative talk!

Friday, August 29, 7:00 pm

Flying squirrels responses to silvicultural treatments in the NHAL and Argonne forests

Stephanie Steinhoff, MS Student, UW-Madison

When almost all of Wisconsin was logged in the late nineteenth century, historic and mature forests disappeared from the landscape. Today the Wisconsin Department of Natural Resources is trying to restore old-growth forests through specialized silvicultural techniques. In a collaborative study with the Department of Forest and Wildlife Ecology at the University of Wisconsin – Madison, we are studying flying squirrels as an indicator species for the success of these prescriptions in promoting native wildlife. Come learn more about these innovative forest treatments and about the flying squirrels of the northern mixed forests.

Wisconsin Coverts Project Workshop

The Wisconsin Coverts Project is a 3-day workshop for private landowners who are interested in enhancing their woodlands for wildlife. The workshop is organized by the Extension Wildlife staff in the Department of Forest and Wildlife Ecology at UW – Madison. The project name "Coverts" is a 14th century English word describing a dense thicket that provides shelter for wildlife. Over the course of the 3 days, attendees receive training from forestry and wildlife professionals in the classroom and the field. Participants also receive a binder full of reference materials and contacts to use after the workshop.

The 2008 WI Coverts Project workshop is FREE thanks to the following sponsors: The Ruffed Grouse Society; Louisiana-Pacific Corporation; UW – Extension; UW-Madison, Department of Forest and Wildlife Ecology; and Michigan Technological University. In exchange for the free workshop, participants agree to become Coverts Cooperators - implementing (or reviewing) their own written woodland management plan, reaching out to others in their communities, and encouraging sound land stewardship. Since the WI Coverts Project's beginning in 1994, 345 Coverts Cooperators (representing 315 properties) have attended Wisconsin's 14 workshops.

The 2008 workshop is going to be held August 14th – 17th at Kemp Natural Resources Station in Woodruff, WI. Any woodland owner or person responsible for managing a parcel of wooded land in Wisconsin is eligible to apply. There is no minimum acreage requirement; we are most interested in persons with outreach potential and influence in their community.

There are 25 spaces available. **Applications are due June 15th 2008.**

For more information on the WI Coverts Project (brochure, typical agenda, slideshow) and how to, apply please visit the WI Coverts Project website (<http://wildlife.wisc.edu/extension/wicovertsproject.html>) or contact:

Jamie Nack, WI Coverts Project Coordinator
UW – Madison, Dept. of Forest and Wildlife Ecology,
211 Russell Labs, 1630 Linden Drive, Madison, WI
53706. Phone: (608) 265-8264 E-mail:
jlack@wisc.edu



Fisher (*Martes pennanti*)



Monica Fowlds, a master's student in Forest & Wildlife Ecology at UW-Madison, snapped this photo of a fisher while staying at Kemp Station this spring. The fisher, a member of the weasel family, was in a tree near the Office/Lab building.

Fishers are native to Wisconsin and historically, were common in forested areas of the state. In the early 1900s, logging, wildfires and unregulated trapping drastically reduced the animal's population. In 1921 legal protection was given to the fisher. Regardless, the last verified observation of a native Wisconsin fisher was made in 1932. Fishers are efficient predators on porcupines. Primarily in response to increased porcupine population and their

extensive damage to timber, the U.S. Forest Service and the Wisconsin Conservation Department (now DNR), collaborated to reestablish the fisher population in 1956-1967. During this time, 120 animals from Minnesota and New York were released in the Chequamegon and Nicolet National Forests. The project was successful and by 1975, fishers occurred throughout the northern quarter of the state. In 1985, the first trapping season was established. The fall 2006 population estimate of fishers was nearly 14,000.

References: Kohn, Bruce E.; Payne, Neil F.; Ashbrenner, James E. / *The fisher in Wisconsin* (1993) and *Fisher Population Analyses 2007*, By Robert E. Rolley and Michele P. Woodford

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This newsletter is also available as a PDF at the Kemp website, www.kemp.wisc.edu.

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