Kemp's Point

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

Counting Turkeys

By Alec Craig,
WDNR Research Technician

I am heading north through a deep and star spattered darkness. The headlights of the truck illuminate signs of wood and metal. My eyes scan each of them, attempting to find the right one. I come across civilization as I pass through a quiet town ten blocks in length. The countryside quickly grows dark again as I leave the town behind. Still looking for the road I need to turn on, I feel as though I have already rushed past my destination. I am a relative stranger to these north woods that are home to hundreds of lakes, thousands of roads and lanes, and millions of timeworn pine trees. I pull over to take a look at the atlas and discover that I have almost turned down the correct road. Minutes later, with the dawn beginning to break, I pull up to my first stop and hop out into a wilderness echoing with coyotes howling and a ruffed grouse drumming. My first day of wild turkey surveys has begun.

Wild turkeys (*Meleagris gallopavo*) have become increasingly prevalent in Wisconsin since their reintroduction in the 1970's. Previous studies focusing on abundance and distribution have already occurred in the west-central and southwestern portions of the state. Research in regard to occupancy of these birds began last spring across all of northern Wisconsin. Led by Chris Pollentier and Scott Hull of the Wisconsin Department of Natural Resources, and Scott Lutz of the University of Wisconsin-Madison, this project aims to discover the likelihood of wild turkeys occurring within a given area in the northern part of the state. Counties included in this research stretch from Polk in the west to Forest on the border of the Upper Peninsula of Michigan.

Bayfield and Douglas comprise the northern extent of the surveys while Rusk and Barron are the southernmost counties.

A total of 157 transects are located on streets, roads, and highways throughout fourteen counties. Each transect is broken into three stops that are located one mile apart. At each stop, four minutes are dedicated to listening for male gobbles and female clucks.The four minutes are dissected into two minute segments. An average of five to seven transects can be completed in the time spanning one hour before sunrise to two and a half hours after sunrise. All transects must be completed three times from the end of March through the final week of May. Surveys are conducted during this time of the year because toms (male turkeys) are actively gobbling and strutting in hopes of securing a mate.

A usual day of turkey surveys consists of waking up between 3:30 and 5:00 am. The time the alarm goes off depends on how far away the first transect is located. Since surveys begin an hour before sunrise, an event that happens earlier and earlier each day, planning the route the previous day is helpful and allows for a little more sleep. After waking up, supplies and breakfast are quickly gathered and taken to the vehicle. Written directions or those from a GPS are followed to the first transect. A pale blue light starts creeping into the eastern sky as the first transect is surveyed.

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Signs of Spring: A Field Station Perspective

By Tom Steele, Kemp Superintendent

Many folks have a favorite sign of spring – a milepost they eagerly await to signal the end of winter. The first robin hopping across the yard, the first crocus poking up in the garden, or the first distant calls of sandhill cranes are but a few examples. For me, my milepost is the return of researchers to Kemp Station. That's a sure sign winter is over and a busy field season lies ahead.

I am happy to report Kemp passed that milepost earlier this month. Actually, we flew right by it. Foresters, entomologists, wildlifers, landscape architects and rural sociologists have been rolling in steadily these past few weeks. It seems like there is a new face every other day. These fresh faces belong to graduate students coming north to set up field plots or to collect some early data or to bear down for some focused writing. And while their individual disciplines and projects vary, each student brings with them a budding optimism that is the essence of spring.

One of my favorite things to do as station superintendent is stop in at the Mead Residence Hall on spring mornings. The building is a beehive of activity. Some folks are busily packing lunches in preparation for the day afield. Others are scooting back and forth, loading up trucks. And still others are shuffling about, deciding what they want for breakfast. Amid it all is a constant chatter. The scene reminds me of a friendly small-town café, with its bustle and clatter and pervading camaraderie.

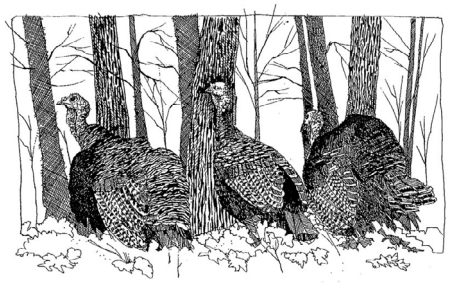
Sometimes it is easy to lose sight of the little things that underpin a student's education. Often the focus is on courses and credits and research proposals and grants. But a scene from Mead reminds me it is outside-the-classroom experiences, like a summer spent at a field station, that truly define an education. A field season at Kemp is where students hone skills, solve problems, forge independence, make discoveries, develop friendships and craft memories that last a lifetime.

Yes, spring is the season of promise. And I cannot think of a better symbol than the return of researchers to Kemp Station.

Counting .... *(From page 1)*

On a sheet with a map of the transect area, information such as wind speed, temperature, number of toms gobbling, and female turkeys clucking is recorded. Once the 4 minutes are up, it's on to the next stop in the transect. After the transect is completed, it's time to head out and wind through the back roads and highways of northern Wisconsin.

Ultimately, this local research will improve our understanding about the distribution and the drivers of wild turkeys in the Northwoods. and that localized knowledge will help guide the future managment of this colorful, charismatic and truly unique bird.



Editor's Note: Alec writes: Getting to know a new area is exciting for me. I enjoy reading maps, learning the names of roads and businesses (my favorite tavern names so far being Skinny Dippers Bar and The Outhouse), and seeing the landscape change. The differences between southern Rusk county and northern Vilas county are fascinating and distinct. I also find any aspect of the natural, biology related world intriguing. In my first week of surveys I have come across white-tailed deer, raccoons, squirrels, chipmunks, porcupines, turkeys, a bobcat, eagles, owls, and dozens of songbirds.

I received my undergraduate degree in geography at the University of Wisconsin-La Crosse in 2013 and it has been rewarding putting my cartography and biology skills and knowledge to use. In addition to my education I have worked in this field as an intern with the National Park Service in Virginia and U.S. Fish and Wildlife Service in Rhode Island. It has been fulfilling working for the DNR in my home state after a couple of summers on the east coast.

The Timber Harvest

By Karla Ortman

Each of us responds differently to change. Some embrace it; others do everything in their power to prevent it. I find myself somewhere in the middle. I'm reminded of the line from a song: "Life's about changing, nothing ever stays the same." And it's true! Our stuff wears out or breaks; we change jobs or move; people come and go; we lose a family member or pet. We react to the changes, and then we adapt. Some changes we deal with without giving them much thought. Those who live year-round in Wisconsin adjust to seasonal change a few times each year and even from day to day, our weather is far from reliable. But when the landscape changes, it somehow feels different. And so it was when the timber harvest came to my neighborhood.

It was a chilly February evening when the equipment arrived. The dogs and I were walking by the neighbor's property as the harvester was unloaded from the tractor trailer. One of the guys trudged through the snowbank on the roadside and nailed to a tree an orange diamond-shaped sign that read "Logging Operations Ahead." For the next few days, as I drove or walked by, the timber harvest activity captured my attention. For the last 15 years, this section of land and its trees had been essentially the same. Now, in a short time, the landscape was changing dramatically.

My initial reaction to a timber harvest, especially one in my little corner of the world, is emotional. I think about the critters and how they rely on the trees -- the hollow trunk used by a family of flying squirrels; the high branches that support the grey squirrels dray (nest of leaves); the crevasse in the bark where a tiny chickadee roosts, protected from the wind at night. I get emotional and worry about the critters and how in a day or two, their "homes" and "safe spots" will be gone. Then I remind myself that these wild beings know what they are doing. They will relocate, build a new nest; they will adapt to the change in their habitat and do what is needed to carry on.

And those were exactly the thoughts that rolled through my mind as this timber harvest began. On the last day of harvest activity, the forest alongside the road was cut. Just a few months ago, I walked by that stretch of woods, admiring the trees decked out in their beautiful fall colors. They were gone now. And once the pang of loss subsided, my interest turned to what this changed landscape now offered to a casual observer like myself.

Most striking was the change in the lighting. It was as though someone had knocked down a wall and removed half of the roof. It felt like I was in a completely new place -- kind of like when you rearrange the furniture in your living room – it takes a while for it to feel "usual" again. And along with that came a view. Previously, I could only see the forest because of the trees, but now I can see for some distance, to the forest beyond the harvested acres.

While the majority of the property was clear cut, many trees remain. Tall, mature red and white pines stand like the last chess pieces on the board as the match nears its end. Young aspen, birch and red oaks too small for harvest are scattered about. The occasional branchless dead trunk stands alone, like a totem. And on the parcel nearest the road, in a spot where the land dips low, a grove of balsam fir and black spruce huddle. Finally, throughout the property, woody debris covers the ground – branches, limbs, twigs, pine boughs. Walking through that would be asking for an ankle sprain! For a number of days after the harvest, the scent of pine hung in the air.

More than a month has passed since the sawdust settled and the harvested timber was taken to the mill. I have grown accustomed to

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Plants Beneath the Ice

Left: winter turions of the native water milfoil; turions are overwintering structures

At left: From L to R, Susan Knight, Paul Skawinski & Andy Teal by the Kemp Boathouse after their excursion on ice. Above right: Elodea canadensis, American pondweed

On January 18, 2015, three curious souls went in search of answers to questions about what some specific aquatic plants looked like in the dead of winter. Self-described "plant nerds" Susan Knight (Associate Scientist, UW-Madison Trout Lake Station) and Paul Skawinski (Citizen Lake Monitoring Network Educator, UW-Stevens Point), along with Paul's former field assistant, Andy Teal, ventured out on frozen Tomahawk Lake by way of the Kemp Station boathouse, to spy on the plants. Armed with ice auger, net, plant rake and a high-tech camera, the trio ventured forth to see what they could see. And what did they see? Green plants! Susan explains: "As cold as it feels, the temperature of the water under the ice is much warmer than the world above. Of course any plant that floats on the water or sticks out of the water, like pond lilies or cattails, can't survive. But most of the leafy underwater plants cannot survive either, probably because there isn't enough light to sustain them. As the winter goes on, the ice gets thicker, the snow gets deeper, and the light is cut down more and more each day. Even when the days start getting longer in January and February, there is probably less and less light under the ice until spring breakup.

But these little evergreen plants manage to stay green. They probably aren't photosynthesizing much in the dead of winter, but they will be the first to get going come spring. So why are they evergreen? Like pines and spruce, it comes down to economics. The plants can't afford to make new leaves every spring – it takes too much energy and too many nutrients. So they invest in leaves that last more than one season. But being evergreen comes at a cost. Most evergreen plants grow more slowly and they have adapted to grow in less hospitable places – at least from a plant's point of view. These little evergreen lake plants don't grow fast, but they are ready to go once the ice is gone, and the sun is shining down again. "

You can view the video the team made of the Kemp bay plants under ice at this link: http://go.wisc.edu/541543. The sound makes it especially fun!

Right: Plants gathered from beneath the ice, laid out on the snow

GreenHouse Residents Take to the Woods

John Bates (left) leads students on an interpretive hike through the forest at Kemp Station.

Fourteen residents of the GreenHouse Residential Learning Community at UW-Madison traveled to Kemp in March of 2015 for what was originally intended to be a winter field trip. While the snow left early, the off season didn't keep us from taking advantage of the Station's resources to appreciate the natural heritage of the northern highland forest. There is so much to see here if you just get outside.

Students observed impacts of deer browse and blowdowns on tree reproduction, and how earthworms are changing groundcover and creating habitat with more sedges. Students also learned how to identify different trees, a real challenge in winter when the trees lack their distintive leaves.

A highlight for the students was spending time with local naturalist John Bates. John gave us an historical perspective on the old-growth forest and human use of the land that gave us a much greater appreciation for all of the natural resources and processes in front of us.

Following the afternoon outside, we retired to Mead Hall to gather around the fire where John led us through a discussion about human relationship with the environment fueled by analyzing quotes of many famous writers. The combination of exploring both our external and internal spaces is what made our trip to Kemp so special. It was truly a great venue for exploration and learning and we will return.

Editor's Note: To see more photos off the GreenHouse residents at Kemp Station, visit them on Facebook: UW Madison's GreenHouse.

Harvest .... *(From page 3)*

the new look of our neighbor's property. In fact, I find myself approaching that stretch of road differently now than before the harvest. One might say I approach with a sense of anticipation! Will there be a bird of prey perched atop one of those tall pines? Might I see a little head peeking out from a cavity hole in one of the snags? And then there is the possibility of things to come once the growing season begins.

How will this changed landscape respond to the sunlight? Previously, the nutrient rich soil was submerged in the shade of the forest. But now, the ground will bask in the warmth of the sun. What sun-loving grasses, flowers and shrubs will appear? Will plants grow from seeds that have lain dormant for years in the ground? Will there be patches of blueberries or raspberries?
Because the loggers harvested a great deal of birch and aspen from this parcel, it's likely there will be ample young shoots from the roots of their predecessors. Will these appear yet this summer? Will it take longer? Will these young sprouts survive the neighborhood deer?!

Yes! Wildlife! What wildlife will be attracted to this new, young forest? White-tailed deer are already quite prevalent in my neighborhood, but it was interesting to see a number of them making their way through the newly cut landscape. I've read that deer are attracted to these new cuts where twig litter from aspen and other trees make for nutritious dining. Will this become a popular spot for browsing deer? It's fun to think about the different wildlife I may have the opportunity to see or hear because of this change to the landscape.

And there it is – change has brought with it opportunity. And with opportunity, we expand our experiences and knowledge. Who knew one could get all that from a timber harvest?

Learning Opportunities at Kemp Station

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

Most sessions are held in the Outdoor Pavilion. Attendees are advised to dress appropriately for outdoor seating and bring insect repellent. Directions to Kemp Station are available at the Kemp website.

May 10 (Sunday) 8:00 am
Romance & family for our Northwoods birds

Session Leader: Amber Roth, Michigan Tech University

This year marks the launch of the second Wisconsin Breeding Bird Atlas. This project depends on volunteers to observe and interpret bird breeding behavior. Regardless of whether you intend to participate or not, this program will give you insights into the world of romance and family life of our Northwoods birds. Join Amber on a hike during the start of the songbird breeding season to observe bird romance and nesting on the American Legion State Forest. We'll meet at the public parking lot in Lake Tomahawk behind the ice cream stand and the Visitor's Center on Hwy 47 at 8:00 am.

May 16 (Saturday) 10:00 am & 12:30 pm
Shiitake Workshop 2015

Session Leaders: Glen Stanosz & Scott Bowe, UW-Madison

Back for the fourth year! Join us for an introduction to Shiitake mushroom cultivation. This hands-on demonstration will begin with a discussion of the life cycle of Shiitake mushrooms. Did you know that Shiitake mushrooms grow on logs? We will demonstrate how hardwood logs are prepared, inoculated, and tended to grow these delicious mushrooms. Come ready to work! Participants will be asked to form an assembly line to prepare and inoculate logs that can be taken home at the end of the session. You will have an opportunity to perform each step in the Shiitake process so you have the skills to build your own mushroom garden. Mushroom samples will be served after the seminar to reward your efforts. First-time participants receive priority. Registration limit: 15

Experience Wildlife Field Camp
Join UW-Madison students for a taste of Wildlife Ecology Field Camp! Affectionately known as "Summer Camp," students spend two weeks at Kemp Station for an intensive study of wildlife ecology. You are invited to participate in select learning experiences. Participants should dress appropriately for activity and weather.

May 20 (Wednesday) 7:00pm
Northwoods Wildlife Management & Current Issues
Fireside discussion with Scott Craven, Extension Wildlife Specialist (Emeritus) from the University of Wisconsin-Madison, Dept. of Forest and Wildlife Ecology.

May 25 (Monday) 7:00pm
Forest Management & Wildlife
A presentation on early successional forest management for ruffed grouse, woodcock, and other associated wildlife, with Gary Zimmer, Coordinating Biologist with The Ruffed Grouse Society.

May 27 (Wednesday) 9:00am
Fish Ecology & Management
John Kubisiak (WDNR Fisheries Biologist) and Steve Timler (WDNR Fisheries Technician) discuss fish ecology and management in northern Wisconsin. Watch as the crew pulls in a fyke net set along the shores of Lake Tomahawk.

May 28 (Thursday) 1:00pm
Managing Wildlife Conflict
Join Bob Willging (District Supervisor) and the USDA APHIS Wildlife Services team as they explain through demonstrations how the agency manages wildlife conflicts in Wisconsin with a focus on beaver, bear, and wolves.

May 28 (Thursday) 7:00 pm
The UW Urban Canid Project
Session Leader: David Drake, UW-Madison

Wild canids like red fox and coyotes are moving into cities across North America. To better understand these animals' ecology and behavior in urban areas, we are radio-collaring red fox and coyotes in the city of Madison. The objectives of our study are to investigate competition for space between a traditional predator (coyote) and prey (red fox) species, assess the diseases these animals may carry and the risk for disease transmission, and to proactively manage conflicts between wild urban canids, people, and domestic animals. This presentation will cover the ecology of red fox and coyotes, our trapping and tracking methods, and results from our research as we study these animals in an urban environment.

July 9 (Thursday) 10:00 am and 2:00 pm
Youth Forestry (Ages 5 to 11)
Session Leader: Scott Bowe, UW-Madison

Have you ever wondered how forests grow, change, and provide all of the products we use every day? Please bring your children or grandchildren for a hands-on adventure to learn about the forests around us. We will learn how to age and measure trees. We will use leaf rubbings to produce spectacular works of art while learning to identify trees by their leaves. We will make homemade paper and learn about the science of manufacturing forest products. We will make wooden leaf necklaces to help us remember all of the important products that come from forests. This is a special program in partnership with the Minocqua Public Library. To register, please call the library at 715-356-4437 by Tuesday, July 8.

July 21 (Tuesday) 7:00 pm
Tree ID and Products from Our Forests
Session Leaders: Scott Bowe, UW-Madison & Collin Buntrock, WDNR

Exercise, education, and entertainment! Where else can you get all three? Please join us for an interactive nature walk to learn about tree id and the products that come from our northern trees. Instructors Collin Buntrock, Forest Products Services Specialist with the WI DNR, and Scott Bowe, Professor & Extension Specialist with the Department of Forest and Wildlife Ecology, will lead the discussion. Come prepared with sturdy shoes and bug spray.

July 27 (Monday) 7:00 pm
Attracting Wildlife to Your "Backyard"
Session Leader: Jamie Nack, UW-Madison

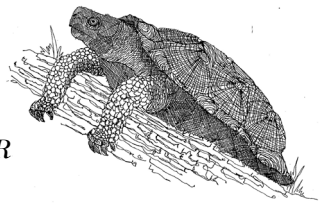
If you build it, they will come! Learn about ways to increase the diversity of wildlife using your backyard, whether you own half an acre or 40 acres. We'll focus on ways to increase the quantity and quality of habitat (food, water, shelter, and space) to attract birds, mammals, reptiles, and amphibians. Handouts and references will be provided.

August 7 (Friday) 7:00 pm
Wisconsin's Bats
Session Leader: Heather Kaarakka, WDNR

Learn about all things bats! The evening will begin with a presentation about bats -- their biology and ecology. Wisconsin DNR Conservation Biologist, Heather Kaarakka, will provide an update about White Nose Syndrome in Wisconsin and provide an overview of the state's roost monitoring project. Faculty and students from UW-Stevens Point will be on hand to demonstrate monitoring devices and share information about data collected at Kemp Station's long-term bat monitoring station. Participants are invited to help count bats as they emerge from various roost sites at dusk. Please dress appropriately for being outdoors in the evening.

August 8 (Saturday) 10:00 am
Bat House Workshop
Session Leader: Linda Winn, Retired WDNR

Let's build a bat house! It's a great way to help these threatened animals who help us by providing free, organic pest control. Learn where to place the house to increase roost use by bats from year to year. Assemble the bathouse using precut materials. Tools and materials to build the at house will be provided but if you have a cordless drill driver you'd like to bring, that would be approreciated. Fee: $15 per person.



August 26 (Wednesday) 7:00 pm
The Wood Turtle in Wisconsin
Session Leader: Carly Lapin, WDNR

Learn about the 11 species of turtles that call Wisconsin home and get an in-depth look at the state threatened wood turtle, which can be found in the rivers, streams, and forests of Wisconsin's Northwoods. During this indoor presentation, we'll discuss the biology and ecology of this unique turtle species and find out about an ongoing conservation and management study being conducted by the Wisconsin DNR on the Tomahawk and Namekagon rivers.

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Find us on Facebook

Spring Peeper (Pseudacris crucifer)

It was a sub-zero morning in early March when I noticed the spring peeper was featured on the Wisconsin Phenology calendar. It was noted that the male peepers perform their mating calls from March to June in Wisconsin. Given the frigid temperature, it was hard to imagine such a thing beginning yet that month, but it is Wisconsin and surely stranger things have happened! The spring peeper is a tiny frog that grows up to 1.5 inches in length and is tan or brown with a "cross" or X-like mark on its back. Like their frog and toad cousins, these wee frogs hibernate in winter -- their bodies actually freeze! But they are still alive thanks to their body's ability to distribute high glucose (sugar) throughout (Watch a short video about frog hiberation at http://go.wisc.edu/c11bp1) In spring, after ice melts in wetlands, and when snow-melt creates ephemeral ponds in the forest, the male peepers begin their calls. It's amazing how much volume this little creature has! According to one website, "Spring Peepers have large "vocal sacs" under their chins. They pump these sacs full of air until they look like a full balloon, then let out a mighty "peep" while discharging the air." It is said that they can be heard up to 2 1/2 miles away if they are assembled in large numbers! The females select their mate by the quality of the call, with high speed and volume being the winning characteristics. After mating and egg laying is complete, eggs hatch anywhere from two days to two weeks later, depending on temperatures. Interestingly, pepper tadpoles are larger than the adults, at least until they lose their tails. It takes about 8 weeks for the tadpole to fully develop into a young frog that can leave the pond, and a year to reach maturity. Listen for those peepers!

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