Our Forest Health

When we feel sick an array of health professionals are available to help. They can provide a diagnosis and prescribe a treatment. Foresters and land managers are the health professionals for our natural resources, and our forests are currently in need of a remedy.

This issue of forest health encompasses more than trees, though. Humans have played a major role in the problem and yet are also a key to solutions. Government, industry, and non-profits will be involved in the solutions to address forest health.

Our forests have largely recovered from the land clearing of the late 19th and early 20th centuries. Yet much of the forest has grown older and our pioneer tree species, except for aspen, are now in declining health and some are fading from the landscape. Who would have thought such change might happen in but a few decades. We have also seen expanding travel and trade that has brought us invasive species to complicate forest management. Stresses from changes in our climate only add to these issues.

Forests provide important benefits, and the forest based industry is a key player in maintaining, protecting, and procuring these benefits. Yet this industry and associated forest management have slowed in recent years because of the economic downturn. A consequence is reduced capability to manage our forests for renewal and to improve their structure, function and benefits.

As one piece of the puzzle, our department is working toward solutions. In this issue we bring you examples of our education, leadership development, research and outreach that will be key to improving the health of our forests.

Alan Ek, Professor & Head, Forest Resources

Extension Forestry: Research & Education from the U to You

Across the state, 200,000 individuals and families collectively manage about a third of our forested land base. As a land-grant university, a central part of our mission is to conduct applied research and education to inform and benefit these landowners and land managers. As part of the University of Minnesota Extension Forestry team, Dr. Eli Sagor is working to bring reliable and research-based information to Minnesota’s forest managers, landowners, and enthusiasts.

The Extension Forestry team has developed four core program areas: Forest Ecosystem Health, Forest and Tree Invasives, Urban and Community Forestry, and Agroforestry and Bioenergy. Within these areas, the focus is on creating useful content and making it accessible for people to use. With a focus on silviculture and family forest management, most of Sagor’s work falls under Forest Ecosystem Health.

CONTINUED INSIDE
You might know Sagor as the person behind the MyMinnesotaWoods website, webinars on a variety of topics, and this year’s Minnesota Family Woodland conferences. All three offer the opportunity for people to connect with the University to inform their forest management activities.

Launched in the spring of 2007, MyMinnesotaWoods is a great site for anyone who wants to learn more about Minnesota’s forests. Family forest owners will find information they can use to make decisions about their land, but the site has expanded recently to include more information for professionals as well. “When people go looking for information about trees and woods in Minnesota, we want them to find quality, reliable information. That means making University research easy to find and use,” comments Sagor. In addition to being an accessible website, MyMinnesotaWoods content is available through a free email newsletter published once a month, Facebook, and Twitter accounts. The idea is to make University content available where and when people are looking for it.

In partnership with the U’s Sustainable Forests Education Cooperative, Dr. Sagor and the Extension Forestry team also offer webinars on a variety of topics. Topics for the 2014 webinars include forest health, monitoring seasonal change, adaptation for climate change, forest management certification standards, and more. These webinars give a dispersed audience access to talks by Extension educators, research faculty and others, as well as the ability to engage in the conversation and ask questions online.

In addition to these online resources, Extension developed the new Minnesota Family Woodlands Conferences this year. “What we’ve tried to do is organize big events that get a lot of people together thinking about forest use, forest health, and forest management,” says Sagor. “These are big public events. We want everyone to come.” Two conferences have been held this year in Bemidji and Rochester and have featured presentations, workshops, and field tours with topics on phenology and forest pests, for example. “These are going to become annual conferences that can showcase a lot of what we do here in the Department of Forest Resources and Extension,” says Sagor.

Always looking for new ways to achieve their mission, the Extension team is partnering with the Cloquet Forestry Center and the Minnesota Forest Resources Partnership on a new idea to develop a silvicultural prescription library. Over the next 18 months, they will gather 20 case studies of prescriptions to be included in the online library. These prescriptions will showcase silvicultural strategies to improve stand complexity and resilience across the Lakes States and Ontario. The case studies will be searchable by geography, cover type, silvicultural practice, and other factors for people to look at as examples and sources of information. “What we’re doing is not looking for somebody’s idea about how you could manage something, but real, on the ground, actual silvicultural practices that people have adopted and what they’ve learned,” says Sagor.

In addition to the online case studies, a symposium and field days will be held for people to learn from and interact with the individuals behind these case studies. “Part of the reason I like this is that it reflects a different approach to education around natural resources,” says Sagor. “Some of these prescriptions will be on research sites, but the majority of them will not. This will be a peer learning environment where we are convening, gathering, facilitating, and certainly weighing in with research results, but we’re not lecturing as much as bringing people together.” Various national forests, counties, and industry partners are already on board to be a part of this project.

Visit MyMinnesotaWoods.com to dig into great information about forest use, health, and management. Visit z.umn.edu/MMW2 to subscribe to the MyMinnesotaWoods email newsletter. Visit z.umn.edu/2014webinars for a complete listing of webinar topics, dates, and how to participate.
We continue to be amazed by the support of our alumni community and thankful for their commitment to our programs. Students who receive scholarships benefit not only from the financial assistance but also from the knowledge that alumni are invested in their education and future. The Department would like to recognize the following recently established scholarship funds:

**Marvin W. Pearson Forest Resources Fund**

This scholarship will provide support to undergraduate and graduate students in the Forest and Natural Resource Management program. This scholarship was created in honor of Marvin Pearson, a graduate of the UMN’s forestry program in 1950, by his wife Geraldine. Most of Marvin’s professional life was in the field of forest and sawmill safety, and he became nationally recognized as an authority in logging safety. Marvin was a longtime friend of the University, and we are proud to help honor his name and continue his legacy here on campus.

**Forestry Alumni Scholarship Fund**

The class members of 1962-64 have developed an all-class scholarship as an opportunity for alumni to help support our students. This scholarship will directly support undergraduate students in the Forest and Natural Resource Management major. Recipients will be students who show promise, motivation, and interest in natural resource management; those with significant financial need; and with consideration given to veterans of active duty in the U.S. Armed Forces or the Peace Corps. Donors will be recognized on a plaque in Green Hall.

**Add Your Support**

If you would like to be part of building support for undergraduate students, gifts can be made online or sent to Janelle Schnadt at University of Minnesota, Department of Forest Resources, 115 Green Hall, 1530 Cleveland Avenue North, St. Paul, MN 55108. Please make out the check to the University of Minnesota Foundation, and include a note indicating how you would like to direct the gift (to a specific fund or purpose). More information is also available on the Department website. Thank you for your continued support of our students and our programs.

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The Shade Tree Short Course

This year was the 52nd annual Minnesota Shade Tree Short Course (STSC), a growing two-day course for everyone involved in urban forestry and arboriculture. The short course was created in the aftermath and management of Dutch elm disease (DED) as a resource for professionals in urban forestry and arboriculture to come together.

The first STSC was held in 1963 and was a series of workshops about DED, controls, symptoms, chemicals, and rules. The event has since evolved into an annual two-day course to share the latest information on a variety of issues facing not only urban forests but also the urban environment. Professionals, municipalities, and individuals from arborists and urban foresters to landscape architects and building contractors participate in the STSC to continue learning about these issues.

The University of Minnesota Extension and the Minnesota Department of Agriculture were instrumental in getting the first Minnesota STSC started, and the event has grown significantly since then. In 1992 the annual attendance was approximately 250 while the 2014 attendance was over 1,000 participants. This year also hosted more exhibitors in the field than previous years.

Each year the STSC has a theme, and this year’s focus was on preservation. This includes the preservation of trees but also the preservation of municipal budgets, support for tree care, urban forest programs, private tree care, and preserving and improving the health of humans, bees, and trees. Two of the keynote speakers this year were Dr. Marla Spivak, Professor of Entomology, on how pesticides and pollinators can coexist, and Rob Venette from the U.S. Forest Service on cold weather and Emerald Ash Borer survival rates.

Over 50 sessions were held on a variety of topics for a range of interests. The topics are organized into categories of introductory, technical, advanced technical, and community forestry so that someone with a newfound interest in urban forestry can get as much out of the STSC as a seasoned arborist. Students studying Urban and Community Forestry were also given the opportunity to present on projects they have been involved with as Research Assistants.

Professor Gary Johnson, chair of the STSC steering committee since 1994, has watched the event grow and succeed but is always looking for improvements. “I’m never satisfied with a short course, which is at the same time a driving force, a goal, and a frustration,” says Professor Johnson.

The Shade Tree Short Course continues to grow and will be held again in March 2015. All are welcome to attend, and more information can be found on www.mnshade.com.
Student Spotlight: Sophia Gutterman

In her first year after switching to the Forest and Natural Resource Management (FNRM) major, Sophia Gutterman is enjoying her time at the University and enjoying the variety of experiences offered here. From classes to clubs and from internships to study abroad, Sophia is diving into her college experience.

Sophia grew up with a family who enjoyed the outdoors. They often visited her grandmother in North Carolina where they would hike and go boating. She says, “That sparked my interest in being outdoors and bringing other people outdoors, too.”

After starting at the University in a different major, Sophia decided to keep looking for something closer to her passion and goal and found the FNRM major with the Parks and Protected Area Management track. “I went into it having looked at all the courses. What surprised me was that the courses are so diverse,” she says. “I really like all the different experiences and I think, while they are diverse, they come together in a nice, cohesive group.”

When asked what her favorite things about being on campus and being in this program are, she said, “I have a lot of favorite things. I took a Park and Protected Area Tourism class last semester, and I really loved that class. I find it interesting to look at the different ways globally that people use tourism as an economic support system. I also really like being in this Department and in CFANS. I feel like the Saint Paul campus is very laid back and a second home in some ways.”

In addition to academics, Sophia is president of the University’s West Coast Swing Club. This style of dance is unique in that it’s a social dance. During competitions, which the club members travel across the Midwest to compete in, participants are randomly assigned partners to dance with. “You may or may not have danced with them before,” says Sophia. “You’re dancing, and you’re making up moves. It’s all improvisation.”

Before graduating in 2015, Sophia also plans to study abroad in Costa Rica and gain additional experience through internships. She is currently planning for this summer’s internship at a nature center in Michigan where she will be involved with management and environmental education. As for post-graduation plans, Sophia is open to many possibilities and paths, including opportunities with the U.S. National Park Service, the U.S. Forest Service, and maybe graduate school someday.

Recent Graduates: Where Are U Now?

Mark Westphal, 2007, Forester with the Carlton County Land Department
My primary responsibility is the timber management of Carlton County’s 72,000 acres of tax-forfeit land. I plan, delineate, cruise, and devise silvicultural prescriptions for a given sale as well as plan all aspects of the regeneration process. Another interesting part of my job is managing Carlton County’s seed orchard where we collect cones and extract seed from jack pine, red pine, and white spruce for regeneration purposes on Carlton County managed lands.

Q: What from your experience at the U of M was most helpful in preparing for your career?
A: For me, the wide variety of perspectives I was exposed to on issues related to natural resource management has been very helpful in my career. This helps as I’m constantly involved with the public on all aspects of my job.

Q: What surprised you the most?
A: I thought I would be in the field 90% of the time! I never realized the amount of office time that is involved with being a forester.

Kirby Budrow, 2011, NR Forestry Specialist with the MN Department of Natural Resources
My job duties include timber sale set-up and supervision, updating DNR forest inventory, collecting Ecological Classification System data, fire suppression, private forest management, and public education and outreach.

Q: What surprised you the most?
A: As a Forester with the MN-DNR, you are expected to take a large part in fire suppression.

Q: What advice do you have for current students?
A: Get as much field experience during college as you can. Be flexible with where you will take a job.
Life on Campus

Hands-On Training Over Spring Break

Over spring break, the Department hosted the Department of Natural Resource's Wildland Firefighter Training course. Many students have traditionally taken this course, but this was the first year it was held on campus. With five eight-hour days, it's not exactly the typical spring break activity, but it is a great opportunity for students to learn skills and build their resume. The course covered topics such as performance issues in a high risk work environment, fireline methods, environmental factors that affect fire, and skills and tools used to fight a wildland fire. The course included a field day with hands on experience using wildland firefighting tools. Senior Frank Falzone commented, "I thought the class was well done, and we covered topics I wasn't too familiar with that were really interesting."

Students left the course with a certification, but some students also left with new ideas of career they might pursue. "I really got a lot more than I expected," said Senior David Rudolph. "It's not something I had planned on doing [in my career] before going into the class, but coming out of it, it is something I could see myself spending more time on."

The Department also offered chainsaw training on campus over spring break. An instructor provided the four-hour indoor portion and returned to give students field experience running chainsaws. The course covered mechanics, safety, maintenance, and cutting techniques. Senior David Rudolph also took the chainsaw course. He said, "It is something I wanted to learn more about because it is a pretty powerful thing, and I want to be safe about it. I learned quite a bit about safe cutting tactics, and he taught us a lot about maintenance that I hadn't known about before."

Conclave at Cloquet

On April 12th, twelve forestry schools converged on the Cloquet Forestry Center to compete in the 62nd Annual Midwestern Foresters Conclave hosted by the UMN's Forestry Club. Teams came from Iowa, Missouri, Wisconsin, Michigan, Illinois, and Ohio, and in total, approximately 190 students participated. Events in the competition included double buck, single buck, underhand chop, pulp toss, bolt throw, log roll, dendrology, traverse, DBH estimation, chain toss, wood identification, match split, and axe throw.

To get all the details right, the Forestry Club planned this event for a full year. They set the budget, gathered sponsors, worked with volunteers, and ran the event itself. It was a lot of work, but it all came together for a great day. "I'm really proud of it," said Lauren Stufft, President of the Forestry Club and a senior specializing in Urban and Community Forestry. "Thank you to all the volunteers and to the Cloquet Forestry Center staff. It was the Forestry Club's event, but a lot of other people made it possible and so much fun for everyone."

After the events of Conclave, the day also included the STIHL® Timbersports® Series Collegiate Qualifier. Each school was able to enter one competitor to compete in stock saw, standing block chop, single buck, and underhand chop events. In the end, our very own Gopher, Ben Whelan came out on top as the winner after beating the University of Wisconsin - Stevens Point competitor in a sudden death event.

"I started practicing three years ago," says Ben. "I had full intentions of wanting to compete in the Stihl series ever since I first saw it." He will be training harder than ever to prepare for the US Collegiate Championships in Norfolk, Virginia this June 20-22. "It would be cool to see Minnesota support out there, for sure," says Ben. So all you Gophers in the area, go cheer him on! Visit z.umn.edu/stihl2014 for details on the championship.
Your years on campus were formative to your life and career. Reconnect with campus to stay in touch, develop your professional network, and/or volunteer. Here’s how:

**Volunteer to be a Mentor** to a CFANS student. As a graduate you have a lot to share with current students! Learn more at z.umn.edu/cfansmentor.

**Join the CFANS Alumni Society/U of M Alumni Association** to take advantage of the many discounts on travel, events, financial services, career resources, Gopher apparel and more. Learn more about membership at z.umn.edu/dos.

Get social, stay connected!

**LinkedIn**
Build your professional network with other alumni through the CFANS group on LinkedIn

**Twitter**
Follow @UMNForestRes, @CFANS, and @CFANSAlumni on Twitter for updates on people, research, and happenings

**Facebook**
Find the Department of Forest Resources and CFANS Alumni and Friends on Facebook! Stay connected to campus and share your stories and photos, too!