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Michigan Tech

Michigan Technological University

SCHOOL OF **Forest Resources** AND **Environmental Science**



A pine grosbeak enjoying a late autumn snack on Michigan Tech's campus.

WINTER 2012

Dear Alumni and Friends,



Terry Sharik

It is a distinct honor to serve as dean of the School of Forest Resources and Environmental Science. Having served as faculty from 1986-1993, I knew what I was getting into when I returned this past July. At least, with respect to the weather!

Some things have changed, others have not. We still have a very strong forestry program, both at the undergraduate and graduate levels (including professional degrees) and maintain a strong professional approach that stresses knowledge, skills and abilities, and certain behaviors and attitudes. However, “wood” is gone from the name of our school: only one tenure-track faculty position remains in this area, and the accredited undergraduate degree no longer exists. In contrast, we have added undergraduate degrees in Wildlife Ecology and Management and in Applied Ecology and Environmental Sciences. This is reflected in the greater diversity of expertise in our faculty. We have also made gains in gender balance in our faculty and student body, the latter exceeding the national level in natural resources academic programs. However, we remain

significantly below average with respect to diversity in race and ethnicity.

Like anyone else, I have my biases with respect to what we should be about, resulting from my basic values and experiences in the natural resource field that span more than four decades. From my perspective, what makes programs like ours unique is that we integrate the basic biological, physical, and social sciences, and apply them in managing critical issues related to natural resources and the environment. Our program is also unique by focusing on the diverse array of services provided by ecosystems in a way that enhances human well-being while at the same time maintaining the integrity of these ecosystems. A key dimension is coupled human and natural systems, which requires the integration of policy, planning, and management. In my mind, this is at the heart of natural resources and environmental science.

The challenge we have, which is repeated in most natural resource programs around the country, is that most of our faculty expertise resides in the biological sciences, followed by the physical sciences, with the social sciences a distant third. This imbalance creates real challenges in conducting natural resource science (and management), as most of the critical issues we face today related to natural resources and the environment have a strong socio-economic dimension. Given the typically slow turnover in faculty, it seems like the only reasonable way to deal with this imbalance in the short run is to work closely with other schools and colleges in the university that have expertise in the social sciences; this is what we

intend to do, as exemplified below.

Given the above challenges and limitations, I began looking for natural resources issues that would allow us to integrate the basic sciences and apply them in a way that would serve the public good. It made the most sense to focus on our state—given that we are a public institution in Michigan—and the industry within our state, as Tech’s charter includes a mandate to serve Michigan industry, which in turn affects community viability and sustainability. At the same time, the deans of the five academic schools and colleges (Forest Resources and Environmental Science, Engineering, Business and Economics, Sciences and Arts, and Technology) met to identify areas of endeavor that would cut across all of our programs; ultimately, we decided to focus on biomaterials in a life-cycle context. Biomaterials, as we use the term, refers to the organic materials extracted from ecosystems—while still maintaining the integrity of these ecosystems—processed to produce a diversity of products useful to society, and recycled for re-use and eventually re-incorporated into ecosystems. As such, these “green materials” are renewable. Given a preponderance of forested ecosystems in Michigan, the most obvious material is wood fiber in trees, though there are others such as syrup (principally from sugar maple) and fruits (of blueberries, junberries, chokeberries, etc.). Wood fiber alone is used to make a vast array of useful products, including dimension lumber, plywood, and oriented strand board for building construction; veneer for furniture and cabinetry; pellets and chips for heating

and electrical energy production; pulp for paper production; cellulosic rayon for the clothing industry; chemicals for medicinal uses and automotive fuel; and more recently, cellulosic microfibrils for a myriad of new applications in the medical and communication fields. Indeed, some estimates of the number of products made from wood or its derivatives exceed five thousand.

We are in the process of identifying all expertise in the University related to biomaterials and visiting both the industries that process these materials and the public and private landowners who supply them. The plan is to bring together these entities to develop a curriculum (undergraduate and graduate) that meets the needs of the biomaterials industry, as well as identify gaps in knowledge and understanding that would benefit from additional research. Upon doing so, we would then seek funding to implement the program.

Finally, I might mention that I have appointed Andrew Storer as Associate Dean to oversee the schools’ academic programs, which should result in better service to our students. Undergraduate student recruiter Chris Hohnholt and undergraduate student advisor Mary Jurgensen will be assisting Andrew in this effort.

I welcome any thoughts you may have about any of what I have said above. You can reach me by email (tsharik@mtu.edu) or phone (734-972-2356), or better yet, by dropping by my office for a chat.

A handwritten signature in black ink that reads "Terry". The signature is written in a cursive, slightly slanted style.

Forging Partnerships, Fostering Future Leaders

I'm excited that Terry's on board and I think he's going to do great things for the program. As a new leader does, Terry found areas that we could strengthen and is working diligently to resolve them. He has already toured the forest products community in the U.P., and he is making his way to northern lower Michigan as well. As charged by the University's provost, Terry is fostering partnerships with the College of Engineering and the School of Business and Economics. This promises to foster collaboration that views the ecology, economics, and social components of forests holistically, from cradle to grave.

Our program is unique in its excellent integration. Our undergraduate students begin their education with classes like vegetation of North America, and field techniques before heading off to fall camp. That camp, a full 14 weeks, allows them to complete a multi-resource assessment (MRA) of an 80-acre stand.

Their final fall semester has them completing a capstone project—essentially a management plan for a 4000+ acre landscape. Approved management recommendations are executed by students participating in the Forestry and Environmental Resource Management (FERM) program, and FERM has produced some of our most sought-after graduates. If you think about it, this makes sense; these students received additional hands-on training by the school forester, Jim Rivard. Jim's office is across the hall from mine and he regularly asks if I have found any new vehicles for his students to use. If you (or your agency, corporation, or organization) have a used vehicle you'd like to donate, please contact me. I assure you we'll put it to very good use managing our forests.

About this time last year I had the pleasure of hosting a pair of French visitors to the Ford Center. This opportunity came to us courtesy of Bill Botti '64 who wanted to provide a French landowner and a French forester an overview of northern hardwood forest management. They visited with us before making their way to the Duke Experimental Forest and in both cases were shown the cutting trials. The fact that the Ford Forest was visited by vested members of the forestry community from across the Atlantic Ocean was not lost on me, and neither was the fact that one of our alumni hosted them.

The students, faculty, and staff appreciate each and every one of you who help make this program a success. We cannot perform our mission without your help. Thank you for your gifts, the job notices, and the gentle (and occasionally not so gentle) guidance you provide.

In closing, if you would like to make a gift to the School, whether it be monetary or asset, please get in touch with us. We are happy to show you how such a gift can be beneficial to you, your family, and the School of Forestry.

Christopher Hohnholt
Director of Development and Outreach
School of Forest Resources and Environmental Science



The School of Forest Resources and Environmental Science has several funds that help to support our students. These include:

Undergraduate scholarships, established by alumni, faculty, and friends of the School. The C. Raymond Lowe Endowed Memorial Scholarship, for example, helps to support students studying forestry or environmental engineering who are from mid-Michigan or the Upper Peninsula. The John C. Noblet Memorial Endowed Scholarship was established to specifically help support a sophomore forestry major. The James C. Lamy Endowed Scholarship provides a full-tuition award to current or incoming SFRES students. These are only a few of the many generous funds!

Graduate scholarships and fellowships help to support graduate study, furthering the base of knowledge in forestry and environmental science. An example is the Loret Miller Ruppe International Endowed Graduate Scholarship, which supports graduate students in the Peace Corps Master's International Program, helping students to study abroad and make a difference at the same time.

Of course, your generous gifts help us to support our operations and equipment, as well as annual awards. Please consider a gift for anything from the Ford Center to student travel. You really do make a difference.

See all giving options at <http://www.mtu.edu/forest/giving>.



Dr. Blair D. Orr

The Michigan Technological University Board of Control awarded its Silver Medal to Blair D. Orr, professor in the School of Forest Resources and Environmental Science.

Orr was honored for establishing and nurturing the University's signature Peace Corps Master's International (PCMI) program. He is only the second faculty member to receive the Board's Silver Medal, which recognizes outstanding personal accomplishments of Michigan Tech alumni or friends of the University.

Tech's PCMI program now is the largest in the nation and has held that distinction for seven years. Since Orr launched the program in forestry in 1995, PCMI has expanded to eight graduate programs in departments across campus.

Orr's research focuses on forestry in developing nations, forest economics, and land use in the Upper Peninsula. He received his PhD in Forestry from the University of Wisconsin–Madison in 1988, majoring in forest economics. His Bachelor of Science in Natural Resources and Master of Arts in Economics were also from the University of Wisconsin–Madison.

Before coming to Michigan Tech, Orr was a research fellow at the University of Wisconsin and an assistant professor of forestry at the University of the South in Sewanee, Tennessee.

Congratulations to our Midyear Graduates

These are just a few of our graduates from Midyear Commencement. Whether they're moving on to further graduate work, going off to industry, or taking their places in labs, in the field, or as policy-makers, all of us in the School of Forest Resources and Environmental Science wish them the very best. We know they're going to go far.



1. Aino Virtanen, 2. Bethany Lyons, 3. Laura Kangas, 4. Fay Dearing, 5. Jerry Jondreau, 6. Chad Dyke, 7. Lilli Kaarakka, 8. Kevin Ehlert, 9. Keri Deneau, 10. Ross Brown, 11. Haley Rupp, 12. Michelle Kroll, 13. Kara Oikarinen

Restoring to Glory

A major initiative the School of Forest Resources and Environmental Science is pursuing is the revitalization of the Ford Center and Forest (FCF) at Alberta. Most alumni know the place as the site of our fall camp, where our juniors are immersed in field learning and the development of field skills. However, we also have a rigorous research program in the surrounding forests and conduct tours of the village that emphasize the role of wood in the early development of the auto industry. In the past, the teaching, research, and outreach activities of the center and forest were not highly integrated, with resulting inefficiencies, and thus we have appointed Andrew Burton to serve as director of a combined center and forest (see page 7). Andy is currently working with a committee composed of SFRES faculty and staff to develop a strategic plan for FCF that is sustainable.

The maintenance of our physical facilities at FCF has suffered from insufficient operating funds and reduced revenues from product removals from the forest; the end result is the need for considerable renovation of these facilities. Andy is currently working with the director of facilities management in the University to obtain an estimate of costs. Once complete, we will be seeking renovation funds from outside sources. The National Science Foundation recently awarded Dr. Burton a \$300,000 infrastructure improvement grant to build a modern wet lab at the center and to upgrade the heating system in the dormitory and mess hall. The NSF grant was contingent upon installing a fiber optic cable in the village, which was paid for in part by the University's central administration.



Finally, we are currently looking at our one dozen or so small parcels that are scattered throughout the Keweenaw Peninsula and adjacent areas to determine their worth for teaching and research and value in the marketplace. Those that appear to have limited value for research and teaching will be considered for sale as a way to establish an endowment for the FCF.

There are other needs and opportunities in the school that deserve brief mention. The first is outdoor recreation and tourism, which is the second largest industry in the state of Michigan, yet we do not have any faculty expertise in this area. The second is forest pathology. Despite the growing issues in forest health related to factors such as invasive species and climate change, there are no tenure-track faculty positions in any of the state's universities that offer degrees in natural resources, nor are there any such positions in the Michigan Department of Natural Resources.



New Faculty



Evan Kane is an assistant professor. He earned both his BS in ecology and environmental science and MS in forestry at Michigan Tech, and his PhD in interdisciplinary forest ecology from the University of Alaska Fairbanks. Evan teaches soils, assists with capstone, and will be teaching a fire class. His interests are nutrient dynamics in terrestrial and aquatic ecosystems, particularly in “hotspots” of soil carbon storage. Evan also works with the Terra Preta Working Group.



Amber Roth became intrigued with wildlife and nature at a young age from tagging along with her father on bird hikes, playing with friends in the empty woodlots of her childhood neighborhood, and walking through the Northwoods with her grandparents. By the age of six, she knew she would work with animals one day, perhaps as a veterinarian, a paleontologist, or the successor to Jim Fowler on Mutual of Omaha’s Wild Kingdom. Amber’s first jobs while an undergraduate at the University of Wisconsin-Madison included working at the Primate Research

Lab and the Endangered Resources Program at the Wisconsin Department of Natural Resources (WDNR). After graduating with majors in international relations and biological aspects of conservation, she worked for USDA Wildlife Services as a wildlife nuisance specialist, studied Western Lowland Gorillas for a fellowship with Lincoln Park Zoo in Chicago, and returned to WDNR to research grassland bird response to harvesting switchgrass for bioenergy. She returned to University of Wisconsin-Madison to complete a Master’s degree in wildlife ecology. Her research on bird response to aspen clearcutting led to her eventual pursuit of a doctoral degree at Michigan Tech in forest science. For her dissertation research, she identified a win-win management scenario for increasing biological diversity while producing woody feedstock for biofuels in aspen forests. Amber will remain at Michigan Tech as a research assistant professor to continue research related to management and demography of migratory birds that informs conservation planning. She plans to teach a new fish and wildlife management course in 2013, taking students on a tour of forests and learning directly from natural resource professionals in the field.

New Staff



Amy Krause joins the SFRES staff as the School’s media specialist and alumni liaison. She manages the school’s website(s), social media outlets, and other communication avenues. Amy will also be planning many of the School’s events, including the alumni reunion weekend. A native of southeastern Michigan, she came to the Houghton area in 2005 for what was supposed to be one summer, but ended up making the move permanent. In her free time she enjoys running and cooking.



Phyllis Williamson is the School’s new administrator of services. Phyllis has worked at Michigan Tech since 1994 and comes to SFRES most recently from the School of Business, where she was a budget coordinator. “I’m excited to be a part of the School and working with faculty and staff on our vision,” she says. Phyllis and her husband Ron have three children and two grandchildren. She enjoys camping and spending time with her family.

FACULTY FOCUS

Andrew Storer

Named Associate Dean

Professor **Andrew Storer** has been named associate dean of the School of Forest Resources and Environmental Science.

“I view this as an exciting opportunity to work with the new dean and with the faculty, staff, and students,” Andrew said. “My main responsibility as associate dean will be to oversee academic affairs in the School, at both undergraduate and graduate levels. I have already been filling some of these responsibilities as the director of graduate programs for the school for the past two years.”

A forest insect ecologist, Andrew is best known for his research on the emerald ash borer, an invasive beetle that is killing ash trees in the Upper Peninsula and across the Midwest and Northeastern

US and Eastern Canada. He heads a federally funded project to develop and test an effective emerald ash borer management program. Andrew won Tech’s 2012 Research Award, sharing it with physics professor Robert Nemiroff.

Andrew brings tremendous experience to the associate dean position. In addition to being an excellent scholar, he has been deeply involved in the teaching mission of the school. His efforts have resulted in special recognition for excellence in graduate mentoring and undergraduate teaching. He also is highly regarded at the University level for his service on the Graduate Faculty Council and Senate Curricular Policy Committee. I look forward to working closely with Andrew to move the school forward on all fronts.



Andrew Burton

Appointed Director of Ford Center, Research Forest

Dean Terry Sharik has appointed Professor **Andrew Burton** as director of the Ford Center and Research Forest in Alberta. The two comprise a field station for the School and incorporate teaching, research, and outreach.

Andrew heads Tech’s Ecosystem Science Center and the Midwestern Regional Center of the US Department of Energy’s National Institute for Climatic Change Research. His research focuses on forest ecosystems, including responses to global change factors, underground processes, carbon and nutrient cycling, and the ways tree roots respond to their environment.

“I’m looking forward to working with the staff at the Ford Center and with the faculty and students in the School to help the Ford Center and Research Forest achieve their full potential,” Andrew said. “The forests and wetlands at Ford encompass the full range of terrestrial ecosystems common to the upper Great Lakes states, and I’m excited by the challenge of developing facilities and management plans that take full advantage of the research, education, and outreach potential created by these wonderful natural resources.”

In the past, the teaching, research, and outreach missions of the Ford Center and the Research Forest were managed more or less separately, Sharik explained.

“As director of the Ecosystem Science Center and the Midwestern Center for the DOE Climate Change Research Institute, [Andrew] understands what it takes to bring people with various backgrounds together to work on common problems. He has been an active contributor to programs at the Ford Center and forest for a number of years and has directed several of them. He is deeply committed to the notion of integrating the teaching, research, and outreach missions of the center and forest in ways that fully capitalize on their cultural heritage and their potential as a model for sustainable land use, underpinned by sound ecological and social science. I am excited about the possibilities for realizing this potential under Andy’s leadership.”



FACULTY PROMOTIONS/TENURE

Congratulations to the following faculty who were recently approved for promotion and tenure by Michigan Tech’s Board of Control:

- 🌿 **Andy Burton**, promoted to professor with tenure
- 🌿 **Rod Chimner**, promoted to associate professor with tenure
- 🌿 **Oliver Gailing**, promoted to associate professor with tenure
- 🌿 **Audrey Mayer**, promoted to associate professor with tenure
- 🌿 **Chris Webster**, promoted to professor (already tenured)

In the News

Scientists from the US, Mexico, Argentina, and Brazil, led by Professor **Kathleen Halvorsen** (Social Sciences/SFRES), will join forces to study the social and environmental impacts of biofuel production. Their aim is to design regional, national, and international policies to promote sustainable biofuel development and minimize its negative effects.

“This large, interdisciplinary group of scientists will work together to do socio-ecological and policy analysis of bioethanol and biodiesel development in each of the four countries,” said Halvorsen. “The countries all have policy goals of increasing sustainable biofuel production.”

* * * *

Victor Busov recently received a \$1.1- million grant from the US Departments of Energy and Agriculture to analyze the genetic traits that affect the quality and yield of woody biomass from *Populus*, a species that includes poplar trees like aspens and cottonwoods. Michigan Tech will work with the Oak Ridge National Laboratory (ORNL) and the National Renewable Energy Laboratory (NREL) on the 3-year study.

Busov is growing 5,000 independent lines of poplars in controlled laboratory conditions at Michigan Tech. The major goal of this project is to find the genes whose activation changes woody biomass growth and/or properties.

* * * *

Using the crowdfunding site Petridish.org, Associate Professor **John Vucetich** raised more than \$10,000 this year to help support the ongoing wolf-moose predator-prey study at Isle Royale National Park. You can read about the project at www.petridish.org/projects/the-wolves-of-isle-royale.

Backpacker magazine also published a feature article about the declining wolf population at Isle Royale National Park, including interviews with Vucetich and Research Professor **Rolf Peterson**.

* * * *

Michigan Tech has signed a collaborative agreement with Karpaga Vinayaga College of Engineering and Technology (KVCET) in India, naming the Indian university as a project center for Tech’s Pavlis Institute for Global Technological Leadership.

During summer 2011, Michigan Tech faculty members **Gopal Jayaraman** (Mechanical Engineering-Engineering Mechanics), **Bob Warrington** and **Mary Raber** (Institute for Interdisciplinary Studies), **Andrew Storer** (SFRES), and **Anne Warrington** (School of Business and Economics) visited KVCET and made presentations focusing on Michigan Tech’s Pavlis Institute and Enterprise and research programs. This past summer, an international memorandum of understanding was signed establishing the Pavlis project center, and a group of four Pavlis students visited KVCET for five weeks doing projects in the area.

The collaborators have authored two research proposals so far, including a National Science Foundation (NSF) International Graduate Education and Research Training (IGERT) application with Craig Friedrich (ME-EM) as principal investigator. IGERT funding could support faculty and student exchanges between Michigan Tech and KVCET.

* * * *

The Faculty of 1000 (F1000) has selected a paper by Associate Professor **Andrew Burton** to include in its library of the top two percent of articles in biology and medicine.

The article, “Chronic N Deposition Alters Root Respiration-Tissue N Relationship in Northern Hardwood Forests,” appeared in the journal *Global Change Biology*, 2012. F1000 selects the most important articles in biology and medical research publications for its database. Articles are chosen by a peer-nominated group of the world’s leading scientists and clinicians, who then rate them and explain their importance.

* * * *

Two of the ten most downloaded papers in 2011 from the *Journal of Forestry* were from the School of Forest Resources and Environmental Science. Professor **Chris Webster** authored, “Woody Invaders and the Challenges They Pose to Forest Ecosystems in the Eastern United States” (Vo. 104, No. 7) and “Promoting Ecological Sustainability in Woody Biomass Harvesting” (Vol. 108, No. 1).

New Funding

Assistant Professor **Evan Kane** (SFRES/Ecosystem Science Center) has received \$123,698 from the US Forest Service for “Response of Forest and Peatland Ecosystems to Environmental Change.”

* * * *

Assistant Professor **Michael Falkowski** has several new projects that have recently been funded.

“Fuel Consumption and Carbon cycling in northern peatland ecosystems: Understanding vulnerability to burning, fuel consumption, and emissions via remote sensing of fuel moisture and radiative energy.”

- Program: NASA Terrestrial Ecology
- PI: Michael Falkowski
- Michigan Tech CoPIs: Evan Kane, Eugene Levin
- MTRI CoPIs: Mary Ellen Miller, Nancy French, and Laura Bourgeau-Chavez]
- Collaborating Institutions: Rochester Institute of Technology; University of Idaho; Florida Atlantic University
- Amount: ~\$650,000

“Enhancing Tools and Geospatial Data to Support Operational Forest Management > and Regional Forest Planning in the Face of Climate Change.”

- Program: NASA New Investigator Program in Earth Science
- Title: Enhancing Tools and Geospatial Data to Support Operational Forest Management and Regional Forest Planning in the Face of Climate Change
- PI: Michael Falkowski
- Michigan Tech CoPIs: Linda Nagel; Robert Froese
- Collaborating Institutions: US Forest Service Rocky Mountain Research Station; Portland State University; University of Idaho
- Amount: ~\$350,000

Deaths

Richard Crowther '71



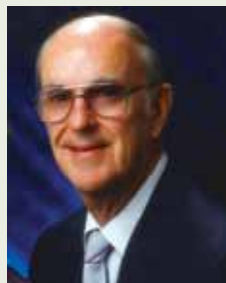
C. Richard Crowther, a retired SFRES faculty member, died on July 6, 2012, in Escanaba, Michigan. He was 87.

Born in Waterloo, Iowa, Crowther earned his Bachelor of Science degree in Forestry and Master of Science in Forestry Management from Iowa State College. He joined the Michigan Tech faculty as an instructor in 1956, completing his PhD in 1971 while teaching at Tech. He retired as a full professor in 1985.

A professor of silviculture, Crowther also served as advisor to *The Forester*, the School's yearbook. The 1961 and 1962 issues were dedicated to him. He was an avid bowler and bowled with the Tech Faculty League.

Crowther moved to Escanaba after he retired, but he maintained ties with Michigan Tech. In 2010-2011, he was recognized as a member of the President's Club, an annual giving club, for his contributions to Michigan Tech.

Philip Hildebrand '53



Philip G. Hildebrand, 83, of Rathdrum, Idaho, passed away Aug. 31, 2012, in Coeur d'Alene. A Rhinelander, Wisconsin native, Phil graduated in 1953 with a degree in forestry.

Phil worked in the state of Washington for Weyerhaeuser after graduation and went on to work for the Washington State Department of Natural Resources, where he finished a 29-year career, retiring in 1982.

He and his wife Aldena moved to North Idaho after retirement, remaining in the Coeur d' Alene area. Phil was an avid skier and served as a member of the 49° North Volunteer Ski Patrol. He was also a member of the Colville Lions Club and the Colville Rural Fire District. In 1989, Phil and Aldena spent a year in China where he taught English and lectured on forestry.

Joseph A. Kovach '87



Joseph A. Kovach, 53, of Wausau, died Saturday, Oct. 29, 2011, at Aspirus Hospice House in Wausau.

He was born Jan. 19, 1958, in Livorno, Italy, to Alexander and Virginia (Beatty) Kovach. Joseph's father was a military man, and Joseph was able to travel the world as an army child. He completed his bachelors degree at Penn State and earned his masters from Michigan Tech.

Joeseeph spent a great deal of time in Ecuador. He first went there as a Peace Corps volunteer from 1981 to 1983. He enjoyed it so much he later returned to work as a forester for Baltek Corp. It was at this time that he met and married the mother of his two children, later settling in Wausau. Joseph worked in the Forestry Division at the DNR for 18 years as a forest ecologist and silviculturist.

"Remote sensing of conifer and mesquite encroachment into lesser prairie-chicken habitats."

- Agency: Natural Resource Conservation Service
- PI: Michael Falkowski
- Michigan Tech CoPIs: Joseph Bump
- Amount \$95,000

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Associate Professor **Linda Nagel** (SFRES/Ecosystem Science Center) and Co-PI Research Engineer **Matt Powers** (SFRES/Ecosystem Science Center) have received \$80,000 from USDA Forest Service for "National Instruction of Advanced Climate Topics."

The Training in Advanced Climate Change Topics (TACCT) course developed by the Forest Service is an intensive one-week course developed for natural resource professionals to provide advanced instruction on climate change science and ecosystem response as well as increase institutional capacity for incorporating climate change into management activities on national forests. Instructors have come from a number of organizations including the Northern Institute of Applied Climate Science (NIACS), Michigan Tech, the University of Wisconsin-Madison, and the Forest Service Northern, Southern, and Pacific Southwest Research Stations.

* * * *

Associate Professor **Victor Busov** has received \$499,916 from the US Department of Agriculture for a project: "Role of LATERAL ORGAN BOUNDARY Transcription Factors in Regulation of Wood Formation in Poplar."

* * * *

Research Assistant Professor **Yinan Yuan** and Assistant Professor **Hairong Wei** have received \$149,888 from the US Department of Agriculture, National Institute of Food and Agriculture, for a project, "Systematic Identification and Characterization of Overlapping Sense/Antisense Gene Loci in Populus Genome."

* * * *

Linda Nagel has received \$61,712 from the USDA Forest Service for "Lake States Silviculture Module of the US Forest Service National Advanced Silviculture Program," and \$131,305 from the US Department of Agriculture, Forest Service, for a project, "National Advanced Silviculture Program Six of the US Forest Service, Ecological Systems Module."

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Assistant Professor **Rod Chimner** has received \$31,328 from the Michigan Department of Environmental Quality for "Enhancing Aquatic and Wetland Habitat Along the Portage Waterway."

Alumni News

KEEPING CONNECTED



If you were at the American Birkenbeiner in Hayward, Wisconsin, last spring, you may have seen **Ken Maki '63** fly by in a blur. Ken is pictured here with fellow Michigan Tech graduate **Bob Richards '77** (Biology) from Houghton. Ken skied the full American Birkenbeiner (54 kilometers, or over 33.5 miles) the next day in 5 hours and 40 minutes. Congratulations, Ken!



Barbara Bennett '79 and **Karin VanDyke '78** shared career tips with students during a visit for the Presidential Council of Alumnae meeting in September.



Jennifer Papillo '03 welcomed son Michael Augustine Crampton (Gus) on February 12, 2012.

1996

Jeff Ploetz of the Cloudburst Group was recognized this year by the U.S. Agency for International Development (USAID) Annual Awards program. As program manager for Cloudburst's Environmental Compliance and Support Services contract to the USAID, he was honored for ten years of excellence in supporting the Europe and Eurasia Bureau to meet its environmental compliance and biodiversity conservation requirements. Since 2001 he has worked with a number of the Bureau's Environmental Officers in carrying out environmental compliance responsibilities and in meeting its responsibilities for biodiversity conservation. Jeff is a former US Peace Corps member and also holds a BS in biology from Michigan Tech.



2002

Jason Caron sent in this cute picture of his son Elijah sporting his Michigan Tech gear. Jason says that Eli is growing like a weed (he is 16 months old here) and he had to get one more picture before Eli outgrew the shirt! Jason reports that all is going well in Sault Ste. Marie where he is a forester with the Michigan DNR in their Soo field office.

2002

Sara Claypoole visited campus from Pottstown, Pennsylvania, during Winter Carnival. After graduating from Michigan Tech in applied ecology and environmental sciences, she went on to the University of Charleston. Sara says, "I'm a pharmacist with CVS Pharmacy and a proud owner of 10 acres of woods. In my spare time, I'll be taking care of the woodlands." She is planning for her first harvest in 2013.

2005

Marjorie Ely is leading the day-to-day implementation of the Reforestation Initiative at NRG, including new capital contracting and an expanded NRG Forest Restoration Team.

2009

Jessica Beachy began a new position in May 2012 as an education coordinator at the Grand Traverse Conservation District in Traverse City, Michigan. She has worked with the Conservation District's Invasive Species Network for the past year and is currently adjunct faculty at Northwestern Michigan College.



2010

Jill Witt stopped by for a meeting with Joe Bump and to say hello to the wolf. With her were husband **Steve Bailey** (PhD Rhetoric and Technical Communication '10) and their son, Kip.



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Alumni News

KEEPING CONNECTED

REUNION REVIEW

Alumni Reunion Honors Award Ceremony

On Saturday, August 4, The School of Forest Resources and Environmental Science welcomed alumni back to campus at our Alumni Brunch and honored outstanding alumni for 2012.



Brandon Bal '07 (pictured with Associate Dean Andrew Storer) received the Outstanding Young Alumnus Award. He is a technical (GIS) forester and area manager with American Forest Management, the Western UP District chair of the American Tree Farm System, and a member of the Society of American Foresters.

Jacob Hayrynen '81 (pictured with Professor Blair Orr) received the 2012 Outstanding Alumnus Award. Jake is currently the forest products manager at J.M. Longyear, LLC, which manages more than 164,000 acres of company-owned forestlands in Michigan and Ontario. Beginning in 2001, he led efforts to acquire, manage, and operate 90,000 acres of forest lands, and has been instrumental in growing the company-owned land portfolio from 48,000 acres to 164,000 acres.



Jake is a member of the SFRES Advisory Board and was an instrumental member of the School's dean search committee. In 2009 he also served on the Board of Advisors for SITTM Technologies Inc., Sault Ste. Marie, Ontario. His professional memberships include the Society of American Foresters, the Great Lakes Timber Professionals Association, the Lake States Lumber Association, and the Michigan Forest Products Council (MFPC), as well as a member of the MFPC's Forest Policy committee since its inception.



Keith Creagh '74 (pictured with President Glenn Mroz) is the director of the Michigan Department of Natural Resources. Prior to his appointment in July, 2012, Keith had been serving as director of the Michigan Department of Agriculture and Rural Development (MDARD).

Keith's service with state government began in 1974 and has included a wide range of positions with MDARD during his tenure, including land use deputy director, where he coordinated a multi-agency implementation plan in response to Michigan Land Use Leadership Council recommendations. Working through the ranks, Keith's assignments provided experience with invasive and exotic species, conservation easements, and environmental stewardship. His background also includes working closely with stakeholder groups, federal agencies, the state legislature, and Congress.

Also inducted into this year's honor academy is alum **William Botti '64** (pictured with Dean Terry Sharik). After beginning his college education in New York, Bill came to Michigan Tech to earn a degree in forest management.

Bill had a 26-year career with the Michigan DNR, retiring after directing the state forest timber management program.

His second career was as president of Clinton Trail Tree Farm, a forestry consulting and Christmas tree business. "We started the Christmas trees as an investment for the kids' college expenses. Our kids and grandchildren help; that makes the fall season fun," said Bill.

Bill currently serves as chair of the Michigan DNR Forest Management Advisory Committee and executive director of the Michigan Forest Association (MFA), where he has been a member since 1971 and a board member for over 25 years. Other positions he has held with the MFA include president, publications chair, and columnist, artist, and author for Michigan Forests magazine.

Bill has been a member of the Society of American Foresters (SAF) since 1978 and has authored several publications on forest history. His list of accomplishments also includes:

- Forestry Conservationist of the Year 2009 (Michigan United Cons. Clubs)
- Retired Forester of the Year 2002 (Michigan SAF)
- Friend of the Living Forest 1995 (Michigan Forest Resource Alliance)
- Distinguished Service Award 1992 (Michigan Forest Association)

Bill's community service includes the Eaton Rapids Medical Center and the Chamber of Commerce, the Lions Club, United Methodist Church, and Boy Scouts. Bill married Alice in 1963 and has three children and seven grandchildren.

"Michigan Tech was just what I was looking for," Bill explains. "The practical emphasis and northern location were perfect. We were encouraged to address our (forestry) instructors by their first names. Many lasting friendships and memories were forged at Tech."



Michigan Tech

School of Forest Resources and Environmental Science
Michigan Technological University
1400 Townsend Drive
Houghton, MI 49931-1295

We All do our Part

Our students conduct cutting-edge research that makes a direct impact on the environment for all of us. Their commitment to their field and the furtherance of environmental understanding is them doing their part for future generations.

These are students like Shane Kleiman, an undergraduate in SFRES:

“ While visiting campus, I got the feeling Michigan Tech professors were not only interested in teaching students concepts of ecology and environmental science, but how to manage a landscape’s wide variety of natural resources. Through studying applied ecology and environmental sciences at Michigan Tech, I hope to integrate the many different viewpoints on environmental management.

I have helped with projects dealing with phragmites—an invasive plant species—and grass mixtures that may resist its spread. Currently, I am studying different management techniques in aspen stands and any long-term site quality effects of these techniques. I have gained valuable insight into projects currently taking place, and ideas for future studies.

I would not be a student at Michigan Tech without scholarships provided by the University, donors, and other local organizations. As an out-of-state resident, Michigan Tech’s tuition would be unaffordable. Scholarships, from anonymous donors and other organizations, have helped me pay for my Tech education. I am thankful and appreciative of each and every one of them. ”

We hope you do your part by giving to our scholarship fund. Support the work that will create the future we want tomorrow and decades ahead. Contact our office today and give, and do your part for the wonders of the natural world. Visit www.mtu.edu/forest/giving.

