Students participate in the Jack and Jill Buck Saw Competition at Midwestern Foresters' Conclave.
Dear Alumni and Friends,

As I write this message in early May, things are beginning to green up. Many good things have happened in the School of Forest Resources and Environmental Science since our fall newsletter. One of the most significant is the approval of a new Bachelor of Science degree in Natural Resources Management. This addition promises to grow and diversify our undergraduate student body. This positive change reflects the hard work of our dedicated faculty, staff, and students.

We continue to be challenged with having adequate financial resources to support our many programs. In this regard, you may be interested to know that nearly equal amounts, about 40 percent each, of our annual available funds come from the Michigan General Fund and from competitive grants and contracts awarded to our faculty and staff. Additionally, about five percent is directed from federal-formula funding for forestry research. The remainder, about 13 percent, is from you.

Without the latter, we would cease to operate at the level in which we do.

Listed below are the major areas identified by faculty and staff as deserving our special attention. Your continued giving to these areas allow us to enhance the reputation of our School and its contributions to society. Also in this publication, Development Director Chris Hohnholt conveys a special story of an alumus inspired to give back by creating opportunities for students. If you are inclined to contribute to any of our needs, we would be delighted to speak with you.

With sincere appreciation for the many ways in which you contribute to our well-being,

Terry Sharik

Development and Outreach

Chris Hohnholt, Director of Development and Outreach

I met with Forestry alumnus Ed Eiswerth (’77) over breakfast on a cold Sunday morning during Winter Carnival. Ed departed the warm and sunny state of Alabama to travel to Houghton to take in the events of Winter Carnival and to assume the Presidency of the Michigan Tech Alumni Association.

A tireless advocate for Michigan Tech, Ed and his wife Precy made the decision to make a planned gift and become members of the McNair Society. At breakfast our discussion turned to development and fundraising. He encouraged me to share their story.

They knew that they wanted to leave a gift to Michigan Tech, but Ed harbored concerns over Precy being supported if he should pass before she does and both wanted to leave their son positioned for success. His second concern centered on how his gift would be used in the future.

Assistant Vice President for Advancement Eric Halonen worked with Ed and Precy to alleviate their concerns in regards to ensuring they and their son would be taken care of. Their solution was to provide a percentage of their estate to Michigan Tech only after both passed. This also provided for a large portion of the estate to flow to their son. Giving a percentage of their estate to Michigan Tech after they both pass ensures the greatest number of options now and for the long haul. It also positions their son, and any children he may have, for success.

When Ed and I met during Alumni Reunion last summer, he gave me the assignment to generate a few ideas that they could review in the fall. As I got to know Ed and Precy, I learned they love their time traveling abroad. Through travel Ed and Precy developed a broader global perspective. They sincerely valued this expanded view. Ed and Precy decided to establish an endowment that will support the School of Forest Resources and Environmental Science undergraduate student travel and student exchange possibilities. For just as Ed and Percy expanded their horizons through travel, a fundamental Michigan Tech initiative plans to cultivate global citizens.

Our program considers this a major win for all parties. It provides new opportunities for our students while preserving Ed and Precy’s peace of mind.

I hope you’ll look over Terry’s article that centers on our development goals. They all boil down to experiences and opportunities for our students. When our advisory board met in late March, I shared that sentiment with them along with one that President Glenn Mroz (’74, ’77) shared with a group of us a few months ago—that ultimately, Michigan Tech’s mission is human development. I invite you to share in that mission.
Development Goals

Biotechnology/Molecular Genetics Program

SFRES offers one of the country’s premiere forest biotechnology/molecular genetics programs. The five faculty members who operate in this area are without a lab manager to coordinate project activities and ensure the proper use of equipment. There is a continuing need to upgrade lab equipment. Donor funding would allow for the hiring of a lab manager and updated equipment.

Diversity Issues

Natural resources ranks at the very bottom in the proportion of minorities with bachelor’s degrees in the workforce among all major disciplines and is second only to engineering in the lowest in the proportion of women. Student enrollment reflects this. To narrow the disparity, we have considerable work to do. Embarking on an initiative to increase gender and racial/ethnic diversity in SFRES involves offering appealing programs and environments. We need resources to support such efforts.

Ford Center and Forest

The Ford Center and Forest is a largely unsupported auxiliary unit of the University, yet plays a major role in the teaching, research, and outreach missions of the School. Its operations and maintenance funds are partially generated from timber sale revenues, which have declined precipitously in the past six years. Aggravating this decline in revenue used for normal operating costs is $500K in deferred maintenance costs for the structures. An infusion of donor dollars would allow for renovation and the construction of new facilities.

Forest and Environmental Resource Management (FERM) Program

The FERM is rapidly becoming one of the School’s premiere educational enhancements that involves executing land management actions on its working forests. We seek funding for a professor of practice and associated costs to oversee this program.

Global Engagement

If we are to heighten global awareness and involvement, one of Michigan Tech’s major learning goals, there is a need to provide opportunities for faculty and student exchanges with universities around the globe. The Peace Corps Master’s International (PCMI) Program at Michigan Tech is the largest of its kind among all US institutions of higher learning. The closely aligned AmeriCorps VISTA Program, focused on anti-poverty projects, is quickly gaining momentum at Michigan Tech. These programs greatly enhance the diversity of our student body, yet there is no base funding for them. We seek funds to ensure continued oversight and recruitment of high-quality students for these programs, and for the exchange of faculty and students from around the world.

Greenhouse

The current greenhouse is operating at capacity. Ongoing, revenue-positive research cannot be conducted because expansion is required. Thus, we seek funds for the construction of an additional greenhouse.

Isle Royale Wolf-Moose Project

The longest running predator-prey study in the world garners international prestige and ongoing national publicity for the University. We seek funds to endow a faculty position in large predator-prey relationships and to oversee the continuation of this project in perpetuity.

Otter River Cabin Restoration

The byproduct of a three-way land swap with Michigan Tech, the US Forest Service, and the Michigan DNR, the 80-year-old cabin is a favored respite by our students and alumni. The cabin needs to be moved and rebuilt to mitigate ongoing damage caused by flooding of the Otter River. Relatively modest contributions from donors would allow this to happen.

Scholarships

The School awards $50K in scholarships to its students each year and the University provides an additional $200K for both academic and athletic scholarships. The University continues to strive for highly qualified students and continued access to scholarships will prove to be a critical enabler. The School’s goal is to increase annual scholarship awards from $50K to $100K.

Student Clubs

Student clubs are extremely important in the development of our students. Through involvement in these clubs, students develop leadership skills and meaningful relationships with their peers and future professional colleagues. They come to appreciate their education by participating in regional and national competitions with students from other academic institutions. Donor contributions would be used to fund student activities in our six student clubs and increase the number of students who can participate in these activities.

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From the Associate Dean

As we bring the academic year to a close, it is my pleasure to report on the exciting progress we have made regarding classroom space. We moved the computer lab, which occupied a space larger than necessary, to a smaller room, freeing us to develop a larger teaching space. The new computer lab, located in the former wildlife teaching lab, has been open since fall semester. Air conditioning will be added this summer. Fun fact: this space once held one of the first computer labs on campus! We appreciate the University’s Information Technology team who worked with us to develop this new space.

Moving the computer lab enabled us to develop a configurable classroom. We accomplished this in stages, getting feedback from faculty and students as it evolved. Carpet tiles were added over the semester break, and this summer the audio-visual system will be updated to include a dual-screen system with sound. This space enhances opportunities to use new pedagogies in the classroom. The room is popular for classes, thesis defenses, faculty and staff meetings, and other gatherings within the School. Rather than rely on central funds, SFRES funded this classroom, ensuring its availability exclusively for SFRES classes and meetings. Development of this configurable classroom was funded in part by the generous donations of alumni and supporters. This space will become even more valuable as we expand our undergraduate programs through the addition of an undergraduate degree in Natural Resources Management (more on that below). We continue to look for ways to create the best environment for students and faculty.

Andrew Storer

From the Chair of the Curriculum Committee

The School of Forest Resources and Environmental Science is excited to have developed a Bachelor of Science in Natural Resources Management (NRM) that was approved by the University’s Board of Trustees and State Universities of Michigan Presidents Council on June 5. This broad-based major will equip students with the knowledge, expertise, ethics, and perspective necessary to address complex environmental problems that involve multiple natural resources.

Environmental problems are fundamentally natural resource management problems with social and economic dimensions. Finding solutions and providing leadership on environmental issues requires a broad-based foundation in natural resource, social, and economic sciences. The NRM degree adds to the three more specialized degrees in natural resource fields that are offered in the School (Forestry, Wildlife Ecology and Management, and Applied Ecology and Environmental Sciences). The new major includes classes that promote a big-picture look at natural resources, including wood, water, air, soil, wildlife, and recreation. In addition, it provides expansive training and a comprehensive understanding of the interdependence of ecological, social, and economic systems in the context of natural resources management.

Nationally, enrollment in Bachelor of Science majors in the area of natural resources is eclipsing more focused programs. For example, the Society of American Foresters, which accredits our School’s forestry degree, developed accreditation standards for natural resources majors for the first time in 2014. The NRM degree aims to capitalize on this trend, anticipating future student interests and occupational trends. In addition, broad-based natural resources degrees tend to have greater diversity (gender, ethnicity, race) than more traditional programs. The job market for NRM graduates is broader than that for our more specialized programs. This degree program is designed to provide a sound undergraduate education for students who wish to enter the overall natural resources job market or attend graduate school.

Joseph Bump
Brittany VanderWall is the new district forester serving Sheboygan and Presque Isle counties in Wisconsin. VanderWall received both a Bachelor of Science in Forestry and a minor in Ecology (2014). In her new role, Brittany “promotes sustainable forest management, ensuring that profit and sustainability-seeking landowners are aware of the necessary channels to go through." I serve as a liaison between landowner and forestry professional," VanderWall noted.

Marcella Campioni accepted an assistant professor position in silviculture at University of Minnesota, set to begin next fall. Marci looks forward to returning to the Lake States.


Deaths
Charles “Chuck” Swan, 62, of Gladwin, Michigan, passed away unexpectedly on Wednesday, December 10, 2014 at Mid-Michigan Medical Center. Born in Battle Creek, Michigan to the late Charles and Frances (Naramore) Swan, Chuck married the former Kathie Baldini on June 25, 1977 in Negaunee, Michigan. Chuck graduated from Michigan Tech with a Bachelor of Science in Forestry. He was a veteran of the United States Army, owner/operator of MCI Aquatics, and a member of the Sacred Heart Catholic Church, where he served as an usher. Chuck enjoyed relaxing with friends on Drummond Island.

James “Jim” T. Anderson died at Agrace Hospice on December 24, 2014. Jim was born in Freeport, Illinois on March 22, 1927 to Royal and Irene (Kennedy). He was a graduate of Freeport High School. In 1950, Jim graduated from Michigan Tech’s School of Forestry. He served in the United States Navy in both WWII and the Korean War. Jim enjoyed playing golf and was a stout Badger, Packer, and White Sox fan.

Student News
Michigan Tech’s student chapter of The Wildlife Society participated in the regional conclave in Sandstone, Minnesota, placing second in the Quiz Bowl competition.


Four SFRES students received Summer Undergraduate Research Fellowships (SURF) this year. Sarah Harttung will conduct research on “Changes in Peat Carbon Storage with Altered Hydrology and Plant Species Composition” with Dr. Evan Kane. Andrew Meyer will be “Assessing and Quantifying Bird-Window Collisions on the Michigan Technological University Campus” with Dr. Amber Roth. Robert Richard is investigating the “Initial Impact of Forest Derived Soil Amendments on Soil Properties and Forest Productivity” with Dr. Kane. Gina Testa will study “The Effect of Short Rotation Aspen Management on the Movement and Habitat Selection of Forest Birds” with Dr. David Flaspohler.
Professor James B. (Jim) Pickens is retiring from the Michigan Tech School of Forest Resources and Environmental Science after 30 years of teaching, research, and service to the school. Jim wore many hats during his time with the School—teacher, storyteller, graduate program coordinator for the School, University Senator, and developer and manager of our very successful Master of Forestry program.

When asked to reflect on his career, Jim says, “It was a hoot publishing lots of very theoretical mathematics papers, especially in the first 15 years here.” Another highlight: receiving the Hardwood Research Award from the National Hardwood Research Council for his development of a hardwood log-bucker training program for implementation in the eastern US. This award is only given out once a year and may be the only industry-sponsored award in forestry and wood products. Jim says his greatest achievement was not a paper or training program—it was his students. He focuses on how rewarding it was to develop the Master of Forestry program and help 47 students earn master’s degrees in the past 10 years. “I worked them twice as hard and gave them half the credit, and those are both good things,” Jim says, chuckling.

Jim had the fortune of ending his teaching career with a particularly good Forest Resource Management class. “This was a group of phenomenal students who worked hard, thought clearly, and excelled. They were great students who also melded to form a great class; one doesn’t necessarily lead to the other.”

In retirement, Jim looks forward to spending more time with his spouse, dogs, gardens, and orchard. His other goal is to “personally meet every fish in Michigan and . . . Montana.”
Research Highlights

Savannah De Luca, first-year SFRES student

Dr. Evan Kane graduated from Michigan Tech in 1999 with a Bachelor of Science in Applied Ecology and Environmental Sciences. In 2001, he earned a Master of Science in Forestry. Pursuing his education further, in 2006 he earned a PhD in Interdisciplinary Forest Ecology at the University of Alaska–Fairbanks. Returning to Michigan, Evan made his way back to Michigan Tech after a stint at Michigan State University. Today, Evan is an Assistant Professor at Michigan Tech, where he works closely with scientists at the United States Forest Service Northern Research Station. His focus is below-ground processes: soil carbon cycling, plant/soil relationships, decomposition, and fire effects.

Inspiration for Evan’s research emerged from his education at Michigan Tech, where he took his first soils class with Dr. Marty Jurgensen. He also had the opportunity to participate in fieldwork with Dr. Andy Burton. According to Evan, they inspired his initial interest in the carbon cycle. These experiences inspired him to go on to graduate school at the University of Alaska in Fairbanks. There, he studied wildfires and their effects on the carbon cycle, peatlands, and permafrost soils. Being able to see first-hand how wildfires alter ecosystems piqued his interest. “While conducting research in Alaska, many of the sites I studied were affected by wildfires. I saw firsthand the relationship between the carbon cycle and wildfires.”

One aspect of Evan’s research focuses on soil carbon within boreal and arctic ecosystems, and the potential for export in streams. He explains that there are significant amounts of carbon in these soils due to the climate. The saturated soils are low in oxygen and this creates an environment deficient in productive decomposers, causing carbon to accumulate. This process is not as straightforward as textbooks might indicate. Recent work suggests a potential for really high rates of soil carbon decomposition even in saturated peatland and forest soils. Evan’s research deals with the possibility that “certain organic molecules have huge electron shuttling capacity in these organic soils, and this can facilitate high rates of metabolism, even in saturated soil.”

Of course, there are always obstacles when conducting research. He cites the greatest challenge to be lack of funding. “There are always eager and passionate people ready to work, but locating money to support students’ enthusiasm is difficult.” He would like more undergraduates to work in these ecosystems, but grant money is not easy to obtain. Even with these challenges, Evan’s work continues to progress. He hopes this research will provide insight on the actual amount of carbon dioxide being released into the atmosphere. Current calculations are based on assumptions that decomposition rates in these frozen or saturated soils are always slow. These findings will improve estimates of soil carbon release to the atmosphere, particularly if the climate warms or soil moisture changes in the future.

Forest Biomaterials Initiative

The School successfully spearheaded the first state-wide conference on Michigan Forest Biomaterials in Traverse City in October 2013, designed to enhance the role of forest products in the state’s economy and overall quality of life for its citizens. Attendees included academicians, state and federal government officials, representatives from several state agencies, and industry leaders. This was followed by two steering committee meetings, which resulted in a strategic plan draft to propel the initiative forward. This is one of four University-wide initiatives currently being featured for development. Donor contributions would be used to fund travel by faculty, staff, and students to meetings around the state.

Forest Health Initiative

Despite a list of devastating invasive insects and microorganisms, aggravated by climate change, the State of Michigan does not have a single senior-level forest pathologist in a state agency, and academia has only one tenure-track faculty member (at Michigan State). The Michigan Department of Natural Resources has proposed to cost-share a tenure-track faculty position with Michigan Tech, and we seek funds to meet their match. This individual promises to enhance the prestige and noteworthiness of Michigan Tech and contribute significantly to the health of Michigan’s forests.
Thanks for your feedback!

In our fall issue, we asked for your opinions on the content and format of this newsletter. Several responses were received—thank you. You asked for more research stories, more alumni stories, and supported digital vs. paper. One response was the same across the board—you’d appreciate more updates! We’ve taken your responses to heart and come up with the following plan:

➤ We’re going to produce the newsletter quarterly and three out of the four will be digital. This gives us the ability to pack in many more alumni and research updates. It also allows us to reach you instantly, wherever you may be (summer home, winter home, moving between seasonal positions, or cruising timber in Central America).

➤ The fourth newsletter will remain a magazine-style hard copy that is delivered to your mailbox the old-fashioned way. This issue will include noteworthy changes to the School’s facilities and programs, outstanding research efforts, spectacular student achievements, and an ever-changing alumni feature. It will include breaking news as well as the most important highlights from our digital editions, so don’t worry that you’ll be missing out if you choose not to receive the digital newsletter.

The new format will begin in fall 2015, so keep an eye on your inbox for the first edition of the SFRS e-newsletter.

Don’t have email and don’t want to miss out? The digital newsletters will be available to print from our website www.mtu.edu/forest.

Your next paper copy will arrive summer 2016.