MICHIGAN STATE UNIVERSITY



DEPARTMENT OF FORESTRY | www.for.msu.edu



10 FEATURE: STRONGER & BROADER

An update from David MacFarlane on the new undergraduate curriculum, as well as information on the recent scholars program, Forests Forever, from new Undergraduate Advisor, Walter Chomentowski.

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DEAR MSU FORESTRY ALUMNI AND FRIENDS,

I am writing to assure you that I see a bright future for the Department of Forestry at Michigan State University. I recognize that the Department went through some challenging times recently, as the College of Agriculture and Natural Resources struggled to reorganize and redefine department boundaries. In my view, the upheaval and strained relationships caused by the proposed restructuring would have been too great a cost to pay for changes that would have yielded negligible or no increase in administrative efficiency. But that era is in the past.

I would rather focus on the future. CANR has made a number of investments in Forestry—investments that originate from the confidence that we have in the Department's faculty and leadership. CANR's most substantial investments are represented by the hiring of two new tenure-track faculty members: Dr. Jessica Miesel and Dr. Phoebe Zarnetske. CANR and AgBioResearch also have made substantial investments in lab renovations and development of online courses. In a state that is 55% forested and in a world that is increasingly discovering the important contributions of forests to human well-being and environmental quality, it is hard to imagine how MSU could fulfill its land grant mission without a Department that is focused on forests.

My optimism is bolstered by the Department of Forestry's innovation and assumption of a leading role in CANR and MSU. An overhauled undergraduate curriculum, in effect Fall 2013 semester, has attracted healthy Freshman and Sophomore cohorts, reversing a trend of declining enrollments. The Department also created a new program to attract and retain high-achieving undergraduates, the Forests Forever Scholars Program, which leveraged more than \$44,000 in matching scholarships from the Provost's Office in the program's first year. An important addition to the graduate curriculum is the new certificate in Forest Carbon Science, Policy and Management, the first of its kind in the US and perhaps the world. The Forest Carbon Certificate will be offered fully online during the 2013-14 academic year, enabling students from throughout the world to enroll.

Please know that the Department of Forestry has my full backing. Thank you for all of your contributions to this proud Department and for your continued support.

Best wishes,

2013 MSU FORESTRY PHOTO WINNER

Red Cedar Snow Storm - Bridge over the Red Cedar on Harrison Road.

- Evan Farinosi, photographer

The Michigan State Forester is a publication of the Department of Forestry. It is mailed free-of-charge to members of the Alumni Association and is freely distributed to MSU students, staff, faculty, and friends.

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CHAIRPERSON'S PERSPECTIVE



DEAR MSU FORESTRY ALUMNI AND FRIENDS,

Undergraduate education is at the core of what we do. As detailed in this issue of the Michigan State Forester, the Department of Forestry has taken several steps to strengthen that core. We overhauled our undergraduate curriculum. The new curriculum is at the forefront of knowledge for future forestry professionals and leaders.

At the same time that we are highlighting hands-on teaching and learning, we are making an effort to increase online instruction. This may seem to run counter to the grain of hands-on learning. However, these approaches complement each other in important ways. First, good online teaching IS interactive and often requires students to answer questions, solve problems, or collect 'field specimens' with a camera before moving on to the next lesson. In addition, using online lessons to cover fundamentals frees up time for hands-on learning. We are excited about the creative potential that online instruction offers.

Rapid progress in our undergraduate program has been facilitated by establishing a Director of Undergraduate Studies. **DR. LARRY LEEFERS** served as director for the first year of the position and did a fantastic job of re-invigorating our undergraduate program on several fronts: curriculum, recruitment, scholarships, and marketing. **DR. DAVE MAC-FARLANE** is continuing this work and has provided crucial leadership in implementing our new curriculum.

For the first time in our 110 year history (to my knowledge), the Department of Forestry has a dedicated Undergraduate Academic Advisor. **MR. WALTER CHOMENTOWSKI**, who holds B.S. and M.S. degrees in Forestry, started this position in January and has made great strides in providing our current and future undergraduate students advice on scholarships, course schedules, internships, and careers.

A major thrust of our recruiting efforts is the Forests Forever Scholars Program, which provides outstanding students renewable scholarships and opportunities to develop as leaders. I am delighted that in the first year of Forests Forever program, we have an incoming cohort of eight outstanding new freshman and sophomore Scholars, coming from as far away as California and Nevada.

It is a wonderful time to be a Forestry major at Michigan State University. We have an exciting, cutting edge program with dedicated faculty, outstanding students, and generous scholarship support. Our current enrollment is ~45 students. Our goal is to reach 100 students after three years under the new curriculum. And I am asking for your help in keeping this momentum going. Please direct outstanding high school students our way!

All my best,

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LETTER FROM FAA PRESIDENT



DEAR FOLKS,

I just returned from a week-long fishing trip in Michigan's Upper Peninsula and I marvel at this wonderful natural resource base! Forests, lakes, mountains, swamps, barren plains and all sorts of wonders to behold. There are mosquitoes, too, lots of 'em, but they add to the 'adventure' that comes from spending time and enjoying the unique outdoor setting. It makes me proud to have pursued a career in natural resource management—not that I had a lot to do with managing the resource attributes in the Upper Peninsula—but that I was part of an undeterminable number of men and women who followed similar pathways and through study, hard work, and mountains of dedication were able to forge careers protecting and managing and utilizing these awe-inspiring realms, not just in Michigan, but throughout the world. I'm proud to be a forester!

I get that same kind of 'proud' feeling while sitting at the luncheon for the Forestry Graduating Seniors hosted by the MSU Forestry Alumni Association (FAA) in order to congratulate the graduating seniors on their successful completion of obtaining a degree in Forestry. I take comfort in their energy, enthusiasm, their wide-spread accomplishments and their desire to move out beyond the campus and find their niche in some aspect of Forestry.

I feel proud, too, of the many men and women who help instruct, encourage and nurture these students during their time at Michigan State University. The efforts of professors, associate professors, instructors, staff and support personnel, and many others, yield BIG DIVIDENDS for the future of the students as well as for the well-being of the natural resource base.

To that end, therefore, I feel privileged to work with **RICH KOBE**, the Forestry Department Chairman, in order to provide support, encouragement, and advice from the FAA. Rich has the enthusiasm and desire to see the Forestry Department make long strides from the nearly catastrophic events of two years ago where the Department was on the verge of elimination. Your FAA Officers and Chairman Kobe have established a system of regular meetings that are designed to hash-out ideas, discuss priorities, provide feed-back and enhance communication between alumni and the Forestry Department. The first two meetings were filled with great discussion and forward-thinking opportunities! More to come on that front to be sure.

In addition, the College of Agriculture and Natural Resources Alumni Association (CANRAA) Board has asked for a representative from the FAA to serve as an 'ex-officio' member...we're going to do that...and that can be another opportunity to network with other alumni organizations to share ideas, experiences, and opportunities to build success. That's where YOU become a very important person. Your ideas and input are a necessary attribute to support the future of the Forestry Department and the FAA. I encourage you to check out the MSU Forestry website (www.for.msu.edu) which features an 'Alumni Section', and feel free to send me your ideas for making FAA a better, stronger, and more responsive organization. Feel free to contact me at: willig27@aol.com with ideas, suggestions, and offers to help.

As always, I've tried counting my blessings, but it turns out, I can't count that high! I hope the same holds true for you.

Enjoy the newsletter and best wishes!

BILL SCHMIDT, B.S. '71, M.S. '72

SAM DORCHEN (B.S. '59)

When unable to find employment in the residential construction field during the recession in 1959, I went on to the University of Michigan and obtained a B.Arch. in 1962. Found employment with Albert Kahn Associates for the next 9 years. Opened my first office in 1971 and have been in private practice since that time. My diverse practice includes municipal buildings, commercial and industrial structures and a number of vacation homes around the Michigan Great Lakes shoreline and multifamily housing projects currently in 12 states from coast to coast. My firm name is Dorchen/Martin Associates-located in Southfield, Michigan-and the diversity mentioned earlier is exemplified by the fact that we have been involved

ALUMNI NOTES

with new and remodeled auto dealerships in many states, most of the new and renovated McDonald's in lower Michigan and a variety of medical projects in southeast Michigan. I have fond memories of my time at MSU and most recently visited the campus to view the new Broad Museum. I failed to find any of the buildings in which I attended classes but did locate the Candlewood Hotel on the west side of campus my firm designed.

JOHN HENDEE (B.S. '60)

Still active in retirement as a volunteer Board member of the WILD Foundation, working for protection of wild areas and wildlife worldwide. Co-chaired three symposium sessions on *Mechanisms for Protection of Wild Values on Private Lands* at the 10th World Wilderness Congress in Salamanca, Spain. Thanks to Mike Moore and others for recognition of the old forestry cabin location, where I was janitor as needed at \$5 per hour from 1958-60.

RONALD BERNHARD (B.S. '62)

I retired after 34 years in the field of Forestry. First with the Bureau of Land Management in Coos Bay, Oregon and then with the New York State Department of Environmental Conservation. That was quite a leap from managing Douglas-fir to Sugar Maple, but no problem for a MSU Forester. I remain active in the local Chapter of the NYS Forest Owners Assoc. and I keep busy on our 20-acre tree farm cutting firewood and tending to 4 acres of Christmas trees. Connie and I have fond memories of MSU. As newlyweds

our first home was in Spartan Village. Connie worked in the Football Office for Duffy Daugherty which meant good seating for the home games. We enjoyed many social gatherings in the Forestry Cabin, the Forester's Conclave and the Shindig. I have included a picture of the Class of '62 at Dunbar Summer Camp (right). Perhaps some old timers will recognize themselves. Most students did not look forward to going to school in the UP all summer, especially the married students, but somehow we survived and in retrospect Dunbar was a great experience. Our class room time was broken up with several field trips, "woods time" and in the evenings we often played softball games against the "locals." I was really pleased that the Forestry Department made it back "from the brink" and it sounds like you folks have things under control. Keep up the good work. Go Green!

ROBERT K. MORRISON (B.S. '63)

To begin with, I truly appreciate my experience attending and graduating from the MSU School of Forestry in 1963. Having come from a working class family, I am eternally grateful that I had the opportunity to attend MSU. Contrary to many of today's students, I graduated debt free. I received no scholarships, no financial aid, no parental assistance, etc. I worked summers for the Michigan Conservation Department and had many part-time jobs while attending school. These included working at the union bookstore, managing the union billiard room, maintenance



work in the dorm complex, washing 24 UPS trucks every night, and many other jobs. Having worked for the Michigan Conservation Department, I went on to work several years for the South Dakota Dept. of Game, Fish and Parks followed by a long career with the New York State Dept. of Environmental Conservation. My career with New York included Forester Trainee, Forester, Senior Forester, Assistant Regional Forester, and Regional Forester. Having worked with a great staff, I took an early retirement (in 1996) at age 54 after a bout with cancer. In 1999, we sold our log home on 37 forested acres and moved to Florida. I have been a long time life member of the MSU Alumni Association, a 49 year member (and Fellow) of the Society of American Foresters, a contributor to MSU, and a regular (every couple of years) visitor to the MSU campus. I add the above information to show that I have had a great career and

am strongly indebted to MSU for providing me the opportunity to enjoy a great life. Here's hoping others will continue to benefit from the same opportunity.

TIM CHICK (M.S. '91)

I recently received my Golden Membership Award for 50 years as a member of SAF. Still teaching Integrated Vegetation Management to forestry students at Paul Smith's College in upstate New York.

NICOLE FROST (M.S. '97)

I accepted the position of Dickinson County Controller/Administrator. I relocated to the Iron Mountain area in June, after the graduation of my daughter, Ashley, from Fulton High School.

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LINDSEY GARTNER (B.S. '00)

I just started a new job! After 11 years with the Colorado State Forest Service, I left for a position with Ecosphere Environmental Services as a GIS Specialist. I've been working toward a Masters in GIS for several years, so this is just the kind of position I've been looking for. EES does a lot of contract work, especially with oil & gas, but a smattering of forestry as well. Also, Russ and I welcomed our second son, Rowan, last October.

HEIDI M. FREI (B.S. '02, M.S. '06) My daughter, Marisol Zola Frei, was born on Feb. 12, 2013 in Lansing. She weighed 7 lbs., 6 oz. and was 21 inches long. She's now 8 months old and just beautiful!

Colombian Forestry School Rooted in MSU Forestry Alumni Highlight: Wayne Gaskins (B.S. '47, M.S. '48)

n 1956, MSU Forestry graduate Wayne Gaskins was asked to go to Medellín, Colombia as a MSU Forestry representative in the U.S Agency for International Development's program. His assignment: to start a new forestry school at the National University of Colombia at Medellín. When he committed to the 2-year term, there were only two students in the program—and they were close to graduation. Determined to attract more students, Gaskins and his Columbian counterpart, Dr. Ruiz Landa, traveled to each state in Colombia, looking for students and handing out scholarships. By the time the new year started, the pair had recruited about 15 new students. "We had made a mark for Michigan State in overseas assistance and gave our then President John Hannah a good example for his next step to lead the USAID program," says Gaskins.

Today, the Colombian forestry school at the National University of Columbia in Medellín—known as the Department of Forestry (DCF)—is alive and more-than well. The DCF has a team of 24 teachers, 10 laboratories and an experimental field in the Piedras Blancas watershed, near the city of Medellín. They offer programs in Forest Technology and Forest Engineering, as well as a M.S. in Forest and Environmental Conservation and a Ph.D. in Ecology. In 60 years, the program has graduated about 1,400 engineers and 300 technicians. In 2014, the program will graduate its first Ph.D. student in Ecology of Colombia. "This academic impact is of great importance for a country like Colombia," says Professor Guillermo Vasquez-Velasquez. "Columbia has 60 million hectares in natural tropical forests (including parts of the Amazon forest), a flourishing industry of forest plantations, and

many concerns for watershed management, wildlife conservation, and ecological restoration of lands in the Andes mountains."

For the DCF's 25th anniversary, Gaskins and his wife created a graduate-level fellowship program in the United States for DCF graduates. Many of the recipients of the state-side fellowship program continued on to postgraduate work and today, they are successfully employed and making their contribution to forest resource management.



Stronger & Broader

MSU Department of Forestry updates undergraduate program and launches new sc

he Fall 2013 semester brought big changes to the MSU Bachelor of Science degree program in Forestry, including a new curriculum and a new scholars program, Forests Forever.

The B.S. in Forestry had not been significantly revised for about 10 years. The faculty felt that we should create a stronger and more broadly appealing Forestry curriculum, emphasizing the critical role of forests in human well-being (i.e., economic and health benefits from a range of forest products / ecosystem services) and environmental quality (e.g., carbon sequestration, protection of water resources, biodiversity, wildlife habitat) in a global context. The curriculum retains core elements of traditional forestry programs, such as our "field camp" (see Field Studies 2013 in this issue), which other programs nationally have not retained as they have evolved.

The curriculum revision process included reviewing how we teach and what we teach. We are emphasizing hands-on, experiential, field-based learning as well as including more online instruction. Online instruction to cover fundamental material will help free up in-person hours to focus on experiential learning; the ratio of lab to lecture time has significantly increased in the new curriculum. For example, incoming forestry students will experience a "first fall" consisting of about six hours of lab time per week in dendrology and basic field methods. With regard to what we teach, we focused on major themes, informed by surveys of students, alumni and forestry professionals, as well as knowledge of the changing nature of our discipline. We set out to make the forestry major more explicitly interdisciplinary, with a view towards resolving forest-centered environmental and natural resource problems and to better reflect the complex challenges of modern forest science, highlighted in new courses like "Forest Ecosystem Services," "Renewable Wood Products" and "Human Dimensions of Forests."

We also set out to incorporate a more explicit global perspective increasing our offerings of forestry-based study abroad courses to locations like Costa Rica and the Balkans. Additionally, the new curriculum focuses on developing critical skills to be more generally attractive to potential employers, including more rigorous quantitative and geo-spatial training (we now require calculus and statistics as well as a geographic information systems course of all of our students). We also wanted to develop student critical thinking abilities and will require an additional technical writing course. Throughout the curriculum, we will continue to emphasize development of written and verbal communication as well as working collaboratively. We have also developed a formal professional internship in forestry and are hoping to connect more with alumni working in various aspects of forestry to build this program. We are very excited about these changes and hope you are too.



Forests Forever Scholars Program

The MSU Department of Forestry has been educating students for more than a century. The number of undergraduates studying forestry as a major has fluctuated over time and is currently at approximately 45 students. Many of the current students entered the major from other schools in the college or other departments. The department would like to increase enrollment and prepare top notch students for the wide range of employment opportunities available to the forestry major.

In cooperation with the Office of the Provost, the MSU Department of Forestry has developed the Forests Forever Scholars Program to meet academic and enrollment goals. Forests Forever is a scholars program in which students participate in leadership-based activities throughout the school year. Students in the program will participate in community service projects and serve as ambassadors for the department on and off campus. Scholarly activities such as round table discussions with visiting speakers will also be part of the program. All Forest Forever Scholars are recipients of Department scholarships. Given the leadership dimension of the program, not all scholarship recipients are Forests Forever Scholars. For students in the Forest Forever Scholars program, scholarships are matched by the Provost's office. Students are awarded between \$2,000 - \$10,000 per year until graduating with a B.S. in Forestry, provided that they participate in program functions and meet academic requirements.

Fall 2013 is the first semester for the program and Forestry has scoured the country for students with a combination of outstanding academic achievement and creative extracurricular activities to invite into Forests Forever. The department has awarded more than ten scholarships in its first year to incoming freshman, students transferring from other majors and schools and current forestry students. We are excited about the potential these students have for raising academic achievement and leadership in the department, the university, and the workplace once they graduate.

SCHOLARSHIPS AWARDED TO FORESTS FOREVER SCHOLARS

Budres Foundation Scholarship Eleanor M. and Wilhelm M. Beckert Forestry Endowed Scholarship Reginald A. Emmert Forestry Alumni Endowed Scholarship Department of Forestry Endowed Scholarship Henning Family Memorial Scholarship



he 2013 MSU Forestry Field Studies course (aka "Field Camp"!) involved both intensive field work and a chance for students to explore regional forest ecosystems. With the guidance of Dr. Mike Walters and Resident Forester, Greg Kowalewski, the class produced an excellent forest management plan for a 45-acre track located on the MSU Fred Russ Research Forest. They stayed at the Lumberjack Resort located on a private lake, in cabins built from salvaged timber coming from Russ Forest. As part of these activities, students visited with a consultant forester, visited Coldwater Veneer and toured long term management demonstration sites at Russ Forest. The students produced maps, a stand inventory, a management and harvest plan and even marked the timber and wrote the sale notice. This is a continuation of several years of field camp activities of a similar kind, initiated by Dr. Walters and Dr. David MacFarlane. For example, the 2012 Forestry Field Studies class developed management guidelines for part of the 60-acre MSU Lukens property located on Lake Michigan near Onekama,

Michigan, which included the harvest of white ash (killed by Emerald Ash Borer), American beech (beechbark disease), poor formed sugar maple and thinning of conifer stands. That harvest was completed the winter of 2013 yielding \$26,000 of profit, which, less expenses, has been added to the Lukens Scholarship fund.

The second part of the camp was based at the historic Pigeon River Country (PRC) State Forest, in a historic Civilian Conservation Core-built log cabin. Here, the students learned to conduct extensive forest ecosystems inventory on Michigan Department of Natural Resources (MDNR)-managed state forest lands, with each student team reviewing a square-mile compartment. The PRC cabin also served as a base camp for exploring regional ecosystems, including a visit to the historic remnant old growth white pines in Hartwick Pines State Park, with a private tour by MDNR ecologist and MSU forestry alumnus, Craig Kasmer. Students also had a two-day whirlwind tour of boreal forest ecosystems in Ontario, with support from the Ontario Ministry of Natural Resources and the Canadian Forest Service, including a visit to their new regional forest fire command post. Finally, to get a taste of life as a forestry consultant, the students spent the day with consulting forester Jerry Lambert, including a (real) stump speech on managing lands for non-industrial forest landowners and a chance to help Jerry plant jack pine seedlings at an MDNR restoration site.



MSU Forestry a Big Hit at the 1st MSU Science Festival



he Department of Forestry shined as one of the leading Departments participating in the 1st Annual MSU Science Festival, held in April 2013 on MSU's campus in East Lansing. The Science Festival is a University-wide public outreach event focused on the great science research and education that are occurring at MSU. One of festival's goals was to highlight the importance of science in everyday life. An estimated 8,000-10,000 people from throughout Michigan and farther afield attended the event.

The number and diversity of events offered by the Department were unrivaled. A few of the events included *The Dirty Little Secrets of Trees* (an interactive tour of Baker Woodlot), *The Secret Life of Trees* (a hands-on activity where young visitors planted tree seedlings in mini-greenhouses made from plastic cups) and *Say it in 7: We Conserve What We Value: Forests, Trees and Climate Change* (a 7-minute mini-talk by DR. DAVID SKOLE that explored "carbon services" (the removal of carbon from the atmosphere) provided by trees and how these services can stop emissions from deforestation, increase carbon sequestration, and be leveraged to alleviate rural poverty.

This was an incredible sample of the exciting research that is occurring in MSU Forestry today! **Mark your calendars for the 2nd Annual MSU Science Festival**, which will be held April 1-6, 2014. MSU Forestry plans another strong showing!

MSU Hosts 61st Midwestern Conclave

he MSU Forestry Club hosted the 61st Annual Midwestern Foresters' Conclave this past April 2013 at the Ingham County Fairgrounds in Mason, MI. Students came from various schools across the midwest including University of Wisconsin, University of Minnesota and Purdue. **RYAN HAUSER-JERYC**, president of the MSU Forestry Club, was in charge of organizing the event.

Making the event special this year was the STIHL TIMBERSPORTS Series, which held the midwest professional and collegiate qualifier event immediately after the Midwestern Forester's Conclave. The STIHL TIMBERSPORTS SERIES is the longest-running show on ESPN (other than SportsCenter).

MSU was represented by **RAY GURLEY ('13)**, in the STIHL TIMBERSPORTS Collegiate Series. The Collegiate Series included four disciplines—underhand chop, the single buck chop, the standing block and the stock saw. Gurley placed 5th overall.



2nd Annual Forestry Graduate Research Symposium

he Department of Forestry enjoyed the 2nd Annual Forestry Graduate Research Symposium on February 1, 2013 in the Michigan State University Union. **PATRICK SMITH, PH.D. ('00)** of the United States Agency for International Development and MSU Forestry alum, opened the symposium by talking about the role of science in government. Prospective and retrospective research talks by 12 MSU Forestry graduate students proceeded throughout the day. **ELLEN HOLSTE** won \$150 for the best prospective talk, entitled *"Restoring Tropical Forests: the Role of Mycorrhizal Fungi and Soil Nutrients"*. **SARA TANIS** won \$150 for the best retrospective talk, entitled *"Giving Ash Trees a Boost: Do Cultural Applications of Paclobutrazol or Fertilizer Alter Tree* Growth and Physiology?". Congratulations to both! Awards for simple amusement included Most Likely to Cut Down a Tree to **NEIL VERPLANCK**, Most Likely to Hug a Tree to **ERIKA KRAUS**, and Most Likely to Introduce a New Species to **DAVID MINOR**.

This event was sponsored by the Anderson Family Endowment, the Korea House Restaurant, the Michigan Forest Association, the MSU Council of Graduate Students (COGS), the Jane E. Wonders Fund, the MSU College of Agriculture and Natural Resources, and the MSU Graduate School. Attendees included department students, faculty, and staff, as well as members of the Society of American Foresters and MSU Forestry Alum. We look forward to next year!



Fall 2012 & Spring 2013 Graduates

- **B.S.** Randi Bradley, Adrian Donovan, Patricia Fuller, Raymond Gurley, Russell Kibat, Jacob Reid, Angela Rice, Nick Sanchez, Benjamin Schram, Max Yancho
- M.S. Neil Verplanck, Pungky Widiaryanto
- Ph.D. Sara Tanis



2013 Student Scholarship Recipients

Alumni Association Senior Award	Ben Schram
Budres Foundation Award	Ben Schram & Alex Grieve
Chapman Foundation Award	Max Yancho
Carl O. Basel Senior Award	Russell Kibat & Ben Schram
Clare & Myrtle Hendee Award	Raymond Gurley
Henning Family Memorial	Ben Schram
Herbert Humphrey Award	Raymond Gurley
James Graham Helmbrecht Award	Corey Reed
Karl Dressel Award	Corey Reed
Karl H. Lukens Scholarship	Corey Reed
Reginald A. Emmert Animal Science and Forestry Alumni Endowed Scholarship	Alex Grieve, Max Yancho, Ryan Hauser-Jeryc & Ben Schram

FACULTY & STAFF NOTES







WALTER CHOMENTOWSKI joined the MSU Forestry staff at the beginning of 2013 as the Undergraduate Academic Advisor. With a B.S. and M.S. in Forestry, Mr. Chomentowski will advise undergraduate students as they navigate their way to a B.S. in Forestry. He has spent 26 years in forestry-related research and that experience will come in handy when informing students on the most recent trends in forestry and what they can do with their degree in the future. In addition to advising undergraduate students on their schedule of courses while at MSU, Mr. Chomentowski will recruit students into the forestry department, administer and organize scholarships, coordinate student internships, and serve as the Forestry Club advisor.

SANDRA DUNNEBACKE started as the new business manager in the Department of Forestry in the Fall of 2013. Mrs. Dunnebacke holds an MBA from the University of Michigan and a Bachelor's from Northwood University/ LCC in Accounting. She is well experienced in business management and HR and will make important contributions towards continuing to standardize, document, and update business practices.

ANDREW FINLEY was awarded the National Science Foundation's (NSF) CA-REER Award—one of NSF's most prestigious awards supporting early careerdevelopment activities of faculty members who most effectively integrate research and education within the context of the mission of their organization. Dr. Finley's proposal, "Advancements in Spatio-temporal Modeling and Education in Support of NEON and Large-scale and Long-term Ecological Research," will be funded for a five-year period. This research, in collaboration with the Boulder-based National Ecological Observatory Network (NEON), will develop new flexible spatio-temporal modeling frameworks designed to assess NEON's research in the areas of climate change, land use, invasive species, biogeochemistry, biodiversity, ecohydrology, and infectious diseases.



RICHARD KOBE received funding from the National Science Foundation to continue research with Corine Vriesendorp (Ph.D., '02) on the dynamics of seedling regeneration in wet tropical forests in Costa Rica. Dr. Kobe presented research results at the Association for Tropical Biology & Conservation meetings and 50th anniversary celebration of the Organization for Tropical Studies in San Jose, Costa Rica in June 2013.



MAUREEN MCDONOUGH was appointed by the National Academy of Sciences as a member of the Workshop on Engaging Family Private Forest Owners on Issues Related to Climate Change. This is the fourth public workshop of the Climate Change Education Roundtable and is funded by the U.S. Department of Agriculture's Forest Service and National Institute for Food and Agriculture. The workshop will discuss strategies that are rooted in behavioral, social and educational sciences for engaging private individual, family, and community forestland owners in conversations about climate.

CHEIKH MBOW, adjunct associate professor in MSU's Department of Forestry and senior scientist on climate change and development at the World Agroforestry Centre (ICRAF) in Nairobi, Kenya, has been appointed to the Science Committee for Future Earth, a new 10-year research program on global sustainability designed on behalf of the Science and Technology Alliance for Global Sustainability. The committee will comprise 18 members and encompasses the diversity of disciplines and expertise needed to address global environmental change in all its dimensions, including natural and social sciences, humanities and engineering. For more information on Future Earth, visit www.icsu.org/future-earth.





The Department welcomed new faculty member, JESSICA MIESEL. Dr. Miesel joined the faculty as an assistant professor in applied forest ecology and management. Originally from Grand Rapids, MI, Miesel earned her doctorate from The Ohio State University in evolution, ecology, and organismal biology, and completed her undergraduate education at Otterbein College in life and earth sciences. Miesel's research focuses on fire ecology and management in temperate ecosystems. "My specific interests include fire effects on coniferous forest soils, fire and fire surrogate forest management strategies, and the role of natural and anthropogenic black carbon in soil ecosystem processes," says Miesel. Her teaching responsibilities will include a Forest Ecology course and one graduate-level course related to her research expertise.

RAYMOND MILLER, director of the MSU AgBioResearch Forest Biomass Innovation Center and adjunct professor in the MSU Department of Forestry, has been appointed to the U.S. Department of Energy and U.S. Department of Agriculture Biomass Research and Development Technical Advisory Committee. The biomass committee advises the U.S. Secretaries of Energy and Agriculture to help the nation reach environmentally friendly fuel standards.



SARAH NEUMANN joined the Department as a Research Assistant Professor in Forest Ecology at the beginning of 2013. Dr. Neumann has a Ph.D. in Forestry and in Ecology, Evolution and Behavioral Biology from Michigan State University ('08) and a B.S. in Biology, University of the South ('99). Her research focuses on plant-soil feedbacks as a mechanism for shaping community composition, structure and productivity of temperate and tropical forests. In particular, she is interested in feedbacks between plants and their soil community and the impact that these feedbacks can have on maintenance of tree species diversity, exotic plant invasions as well as native species shifting range boundaries due to climate change.

The Department of Forestry welcomed new faculty member, PHOEBE ZARNETSKE in Fall 2013 as an Assistant Professor in the Departments of Forestry and Fisheries & Wildlife, with an adjunct appointment in Plant Biology. Dr. Zarnetske's research lies at the intersection of community ecology, invasive species, and global change. She uses a combination of empirical and theoretical modeling, experimentation and observational studies to reveal the effects of climate change, invasions, and multi-species interactions on ecological community composition and ecosystem services. She has worked on a variety of systems and species including coastal dunes of US Pacific Northwest, avian indicator species in Utah forests, cavity nesting birds across the US, aquatic invaders in New Zealand rivers, and fish communities in Arctic Alaska. Much of her work is interdisciplinary in nature, and includes collaborations with geomorphologists, engineers, mathematicians, paleoecologists, and managers. At MSU, Dr. Zarnetske plans to continue her research on species interactions and climate change, including modeling bird distributions in forests with bark beetle outbreaks and conducting long term warming experiments on plant communities. She is also excited to explore the Michigan dunes for potential projects.



GIVING BACK



The Alan L. & Connie M. Fowler Endowment

n 2013, the MSU Department of Forestry accepted a generous gift from Alan L. and Connie M. Fowler. The gift was used to create an endowment in their name. Alan had the following words to share about Michigan State and the endowment.

"Michigan State provided a powerful springboard propelling me into a career and life experiences that I could never have imagined as a boy growing up in Hillsdale County, Michigan. MSU gave me the confidence to take on new challenges as I moved through a series of diverse forestry positions with the U.S. Forest Service, the Ohio Forestry Association and CSX Transportation. Finally, in a major career change, I worked as a sales and marketing executive with a leading design and construction firm. MSU has served me well throughout these life experiences. I'm proud to be a forester and pleased that my wife, Connie, and I can now give something back in recognition of the education and positive influence received at Michigan State University that helped make our journey possible.

It is our hope that funds generated by this endowment will be used to provide enhanced learning opportunities for students in natural resource management fields, especially forestry. Real-world internships, international study, scholarship assistance and hands-on field trips are of particular interest. It is also our wish that in some small way we can help foster the principles of conservaton among future graduates of MSU. As renowned forester and write Aldo Leopold framed it philosophically in his classic Sand County Almanac: "Conservation is a state of harmony between men and land." If America is to remain a leader among nations, this harmony must be found as wise management and wise use of our natural resources is, and will remain, a critical challenge."

NEWS FROM OUR CENTERS

TREE RESEARCH CENTER (TRC)

This year marked the 50th anniversary of the Tree Research Center (TRC), continuing a heritage of Forestry Department tree nurseries spanning 110 years. The first department nursery was established on campus in 1903 and additional nurseries were added at Dunbar and Russ Forests in 1925 and 1949, respectively. These nurseries grew over 60 million seedlings for research and reforestation until their demise in the early 1960s.

Groundbreaking for the TRC started in the summer of 1963 and the first tree seeds were sown that autumn. Early site development is credited to department nursery superintendent, Dr. Ira Bull and nurserymen, Gailen Wortley and Roy Brown.

In 2013, Paul Bloese continues overseeing hundreds of statewide genetic plantations in addition to new TRC projects. This spring, Paul worked with Ray Miller (FBIC), establishing the first of six 10-acre poplar energy plantations for a MSU Power Plant pilot study and assisted Bert Cregg and Pascal Nzokou in planting a Turkish fir Christmas tree genetic trial. The Sandhill whole-tree chipping harvest was completed and Paul is developing strategies for site cleanup and future research projects.

Emerald ash borer work continues by Dr. Deb Mc-Cullough and Terese Poland/Lea Bauer (U.S. Forest Service). In December, a group of Russian scientists seeking solutions for ash borer management in Moscow toured the TRC and in May, Sara Tanis earned her Ph.D. with Dr. McCullough. This spring, new faculty member Jessica Miesel started a biochar seedling study, Fei Pan installed a wood chip decomposition trial, and Dr. Nzokou's graduate student Ismail Koc returned to start Ph.D. work in seedling drought studies. Dr. Mike Walter's graduate student John Willis started a hardwood regeneration study and Dr. Sarah Neumann completed a soil feedback pilot study with Dr. Rich Kobe.

Randy and Paul round out their work year assisting with teaching, outreach, and extracurricular activities. The Forestry Club was especially busy at the TRC this year. Besides their annual homecoming parade float, maple syrup, and Shindig activities, they also hosted the Midwest Forestry Conclave and Stihl Timbersports competition held at the Ingham County F<u>airgrounds</u>.



KELLOGG EXPERIMENTAL FOREST (KF)

Dr. Lars Brudvig, a MSU restoration ecologist, is studying oak savanna restoration at the MSU MacCready Reserve. The Kellogg Forest crew is the property site management team for the MacCready Reserve and assisted Dr. Brudvig with this project and Dr. Landis with fen restoration as well. The restoration project often requires prescribed burning. With three burns scheduled this season, students were invited to attend the burns as spectators, or if they had completed the Forestry Wild Land Fires class, were qualified to step in and assist.

Dr. Chhin's Wildland Fire class toured the MacCready Reserve prescribed burn sites collecting field data to estimate burn site characteristics. Other activities at the MacCready Reserve included the Kellogg Forest crew planting the last 4 acres of the Hardwood Forestry Foundation (HFF) oak restoration project replacing glossy buckthorn with native red oaks that demonstrate a range a deer browse protection techniques.

The Kellogg Forest worked with Dr. MacFarlane as part of the biomass field and lab crew. This year, MacFarlane's crew left KF and collectd data and samples from



a range of locations throughout Michigan located on both MSU and DNR properties (MSU has over 30 offcampus property locations totaling more than 20,000 acres).

The Kellogg Forest crew is working with Dr. Fulbright and a team of researchers for the second year, testing treatment options for blue spruce decline in parts of Michigan. A major contributor to the decline is blamed on Phomopsis. Treatments include three fungicides and tree injection.

A team of MSU professors and staff are working to promote green energy at MSU. The plan includes establishing energy plantations and thinning forest stands/planations to provide green chips for the MSU fluid boiler. The goal is to plant 10 acres per year for 6 years, totalling 60 acres. The first of the planting will be harvested at year 6. A second phase is the utilization of torrefied pellets in the 3 pulverized coal boilers. Present plans are to purchase and test torrefied pellets in the MSU boiler. If successful, hopes are that MSU will purchase a torrefaction reactor for research and a green energy production model.

FOREST BIOMASS INNOVATION CENTER (FBIC)

There are currently 14 active research projects underway at FBIC, most of which require the long-term sustained support that Centers like ours are uniquely equipped to supply. Funding for applied forestry research (including the maintenance of long-term field trials, specialized equipment and facilities, and fieldexperienced research technicians) is becoming increasingly difficult, jeopardizing decades of investments that have been made to answer both basic and applied questions being asked by growers, consumers, and communities throughout the region.

The Center's director is engaged with several transdisciplinary teams of university, state, regional, national, and international partners seeking to advance the sustainable use of woody biomass in the production of renewable energy and bioproducts. In this way, we hope to combine resources with those of others to solve problems that are bigger than any one investigator or institution could do by itself. Examples of these projects include:

- Deploying improved varieties of poplar and willow hybrids as biomass crop options for Michigan's landowners and bioenergy industry.
- Supporting MSU's torrefied wood and energy farm project which engages FBIC personnel along with campus-based researchers, technicians, students, and staff in an effort to replace coal at the Simon Power Plant and to develop new bioenergy industries in Michigan.
- Exploring the possibility of creating bio-oil from wood using a process called fast pyrolysis, followed by upgrading at local depots (perhaps the same ones capable of producing torrefied wood).

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Connecting with Us

In an effort to maintain better contact with MSU Forestry Alumni, this 2013 issue of MSU Forester has been mailed to all alumni who have provided their mailing address. Our goal for 2014 is to publish two brief electronic issues of MSU Forester and one year-end print issue.

- If we have your e-mail address, we will send you an electronic copy of the newsletter when future issues are ready. If you would like to receive future electronic versions of the newsletter, please provide us with your email address.
- If you would like to receive the year-end print issue, please let us know and we will do our best to mail a copy to you. Also let us know if you prefer receiving all issues of the newsletter as a hardcopy.
- If you do not wish to receive our newsletter at all, please let us know and we will remove you from our distribution list.

Please contact Juli Kerr (kerrju@msu.edu, (517) 355-0090) to submit your e-mail address, to request print versions, or to be removed from our distribution list.

Thanks for staying in touch!

Sarah Finley, MSU Forester Editor

Other ways to stay in touch:

Website:	www.for.msu.edu
Facebook:	www.facebook.com/MSUForestry