



September 2017 Vol. 1, No. 2

PRESENTATIONS/PUBLICATIONS/RESEARCH HIGHLIGHTS

He, H. S., Gustafson, E. J., and Lischke, H. 2017. Modeling forest landscapes in a changing climate: theory and application. *Landscape Ecology* 32: 1299–1305. doi: [10.1007/s10980-017-0529-4](https://doi.org/10.1007/s10980-017-0529-4).

Jin, W., **He, H. S.**, **Shifley, S. R.**, Wang, W. J., **Kabrick, J. M.**, and Davidson, B. K. 2017. How can prescribed burning and harvesting restore shortleaf pine-oak woodland at the landscape scale in central United States? Modeling joint effects of harvest and fire regimes. *Forest Ecology and Management*. doi: [10.1016/j.foreco.2017.07.040](https://doi.org/10.1016/j.foreco.2017.07.040).

Jin, W., **He, H. S.**, **Thompson, F. R.**, Wang, W. J., Fraser, J. S., **Shifley, S. R.**, Hanberry, B. B., and **Dijak, W. D.** 2017. Future forest aboveground carbon dynamics in the central United States: the importance of forest demographic processes. *Scientific Report* 7: 41821. Nature Publishing Group. doi: [10.1038/srep41821](https://doi.org/10.1038/srep41821).

Michael Byrne was interviewed by Mongabay for an article about a recent paper some colleagues and he published about some of the mako shark work he's been involved with for the past few years. The study is about how we were able to use satellite telemetry to quantify fishing mortality rates of shortfin mako sharks. Our telemetry-based estimates of fishing mortality were much higher than the previous estimates available at the time based on fisheries-dependent data, and call into question the sustainability of fishing pressure on the North Atlantic population. The most recent International Commission for the Conservation of Atlantic Tunas (ICCAT) stock assessment of mako sharks was completed this summer (after this paper was in press), and the updated stock assessment falls in line with these findings, in that the assessment concludes that the North Atlantic population is both overfished and experiencing overfishing. Mako sharks are a valuable commercial species, so given these recent findings it will be interesting to see if ICCAT adopts any catch regulations for this species when they meet later this Fall. The full article can be found at the link below:

<https://news.mongabay.com/2017/09/fishing-mortality-of-mako-sharks-ten-times-higher-than-fisheries-estimates/>

Beyond The Columns

A poster session for MU Undergraduate Researchers to present their summer research projects that were conducted off-campus!

Tuesday, September 12
4:30 - 5:30 p.m.
McQuinn Atrium
Bond Life Sciences Center



Two of our SNR undergraduates will be presenting:

Rachel Patteson

(Stephen Anderson, Natural Resources)

Senior, Soil, Atmospheric and Environmental Sciences
University of Alaska/International Arctic Research Center

Summer Mentor: Igor Polyakov, Oceanography

Investigating the role of wind in generating surface currents over the slope area of the Laptev Sea, Arctic Ocean

Madalyn Stoecker

Junior, Natural Resources Science and Management

Missouri Botanical Garden

Summer Mentor: Ivan Jimenez, Center for Conservation and Sustainable Development

Testing the "Allopatry-to-Sympatry" Hypothesis in Escallonia

EVENTS/MEETINGS/ANNOUNCEMENTS

Join PRT GSA at noon on Monday, September 18, for pizza at our first meeting of the year. We'll brainstorm ideas for events this year and elect new officers. This organization hosts snacks for the occasional guest speaker and has in the past participated in volunteer work such as helping with the citywide PARKing day. We have also taken group day hikes, hosted garage sales, and participated in a Venture Out program. We have used our affiliation with ORG to receive travel funding to attend conferences. Membership is open to any interested graduate student regardless of degree program. RSVP to Lisa Groshong (lisagroshong@mizzou.edu) by Friday, September 15, for meeting location. Include your pizza requests.

Call for Abstracts for the **2017 Great Plains Limnology Group at Mizzou** on October 13 & 14, 2017 on the University of Missouri campus, Columbia. We are excited to announce that we will



have a plenary talk on the Saturday morning by **Dr. John Downing** (left photo taken from the website: <http://www.seagrant.umn.edu/about/downing>), Director of the Sea Grant College Program and a professor in the Department of Biology at the University of Minnesota, Duluth. Dr. Downing was previously Regent's Excellence Professor of Ecology, Evolution, and Organismal Biology and Chair of the Environmental Science Graduate Program at Iowa State University. He is the former Chair of the Executive Board of the Council of Scientific Society Presidents and former President of the Association for the Sciences of Limnology and Oceanography. Reflected in over >175 academic publications (H-index 65, i10 index 123, 20,000+ citations), his areas of expertise range from aquatic ecology and fisheries biology to whole ecosystem management, resource economics, and global carbon cycling. His plenary talk will be entitled "The global importance of Great Plains limnology". The MU Limnology lab welcomes abstract submissions for the 2017 Great Plains Limnology

Group meeting. We welcome presentations on all aspects of aquatic ecology including invertebrates and fish. Preliminary work and student presentations are encouraged. Based on abstracts received, we will arrange sessions on Saturday, October 14th composed of 15-20 minute presentations. For more details, please visit our website: <http://faculty.missouri.edu/~northr/gplg.html>. If you would like to attend but not present, please fill in our survey by Monday, October 2nd: <http://faculty.missouri.edu/~northr/gplg.html> so we can keep track of attendance. Friday night will be a social mixer at a local pizza place. We only intend to have one day of presentations - on Saturday, October 14th in combination with a poster session. If you would like to present at the meeting please send a Word document to the email address: MULimnology@gmail.com by Friday, September 15th. Please include: (1) Title, author list, and a 50 word (max) abstract of work you will be presenting at the meeting; (2) Indicate poster or oral presentation preference; (3) Indicate attendance for the Friday night social mixer and Saturday session; (4) Indicate if you are a new scientist and/or team leader and are interested in participating in a rapid round introductory session. We are planning on a 3-minute lightning presentations session to provide the opportunity for new scientists to the region to introduce themselves and become acquainted with established groups; and (5) Provide 5 key words describing your research interests in general. These will be used for ice breaker activities at the social mixer.

The Center for Watershed Management and Water Quality in the College of Agriculture, Food and Natural Resources at the University of Missouri is sponsoring this event. Registration costs will be based on attendance - but will be <\$25/person. Registration fees can be paid by check or cash in person at the conference. (<http://snr.missouri.edu/waterquality/about.php>)



Prairie Fork Education Center: Memories for a lifetime were created when 43 students participated in the Discover Nature Youth Dove Clinic (left photo: participants, instructors and mentors). During the clinic the students learned how to shoot clay pigeons as well as doves; they were able to talk to a biologist about dove behavior as well as dove habits; and, they also talked to a Conservation Agent (bottom photo: Jeff Demand, Wildlife Biologist and Area Manager, talks about dove biology

and behavior in the newly improved education building) about the hunting rules, regulations, ethics and proper bird identification. With Missouri weather we were able to show case all of the new updates to the education building from needing fans on Friday night to using the heaters and appreciating the new insulation on Saturday morning before the hunt. We used the new outside lights in the parking lot as well as the additional lighting improvements within the building.



We are currently accepting Fall 2017 reservations and Spring 2018 reservations at this time at <http://prairiefork.missouri.edu/education/events.asp> (Submitted by and photos by Amber Edwards.)

This *Weekly Reader* will be distributed electronically every Friday (except during breaks). Please send announcements to Cindy Greenwood, Editor (greenwoodci@missouri.edu) by Thursday @ 5 p.m. If you'd like to unsubscribe from the *Weekly Reader*, please email Cindy. Thanks to Laura Hertel for the *Weekly Reader* Tiger logo.