

Hardwood Ecosystem Experiment



**100
Year Project**



February 3, 2022

NEWS



Exciting New Projects Starting in 2022!

Two new projects will be starting on the HEE this year! The first project is related to Purdue University's Digital Forestry Initiative. Dr. Songlin Fei (please see his introduction below) is leading a team of researchers who will be using the HEE sites to examine the viability of using remote sensing for forest inventory. By calibration with previous HEE overstory inventories, he hopes to refine existing remote sensing methodologies to create species-tagged, individual tree maps that extend across HEE units. In addition, Dr. Fei will also be testing the feasibility of using unmanned aerial systems for invasive species mapping.

The second new project starting on the HEE in 2022 is investigating the effects of timber harvesting on squirrel populations. This study will be led by Dr. Liz Flaherty and Dr. Pat Zollner from Purdue University (please see introductions below) and will be taking place in addition to the small mammal surveys. While performing small mammal surveys, Dr.



Flaherty and Dr. Zollner will also be evaluating the potential use of noninvasive camera sampling to monitor small mammal populations.



HEE Bat Research in the News

Research by Dr. Joy O'Keefe and her former Ph.D. student, Dr. Tim Divoll, was recently featured in an article from The Wildlife Society and one by the University of Illinois. The articles discuss their research on the effects of forest management on Indiana bats and northern long-eared bats. Findings from their research were published in *Forest Ecology and Management* (see citation below). You can read the articles about their findings by following this link for [The Wildlife Society article](#) this link for the [University of Illinois article](#)



Field Tech Positions Available!

We have various technician positions available for the 2022 field season! We are hiring three technicians to help with squirrel and small mammal trapping on the HEE (April to July), two technicians to work on bird surveys and small mammal trapping (May to July), and two technicians to start in June and work on small mammal trapping. For more details, please check out the HEE Jobs page <https://heeforeststudy.org/jobs/>

WELCOME

New HEE Researchers

Dr. Songlin Fei is a Professor and Dean's Chair of Remote Sensing at Purdue University. Dr. Fei is leading the Integrated Digital Forestry Initiative at Purdue and will be using the HEE sites and HEE overstory data to develop new digital tools for forest management.



Dr. Elizabeth 'Liz' Flaherty and Dr. Patrick 'Pat' Zollner from Purdue University will now be directing the small mammal research and monitoring on the Hardwood Ecosystem Experiment. Dr. Flaherty is an Associate Professor of Wildlife Ecology and Habitat Management. Dr. Zollner is a Professor of Wildlife Science. The small mammal project has previously been led by Dr. Rob Swihart since the HEE started in 2006. Dr. Swihart, who was fundamental in development of the HEE, will be gradually reducing his role in the HEE over the next year and helping with the transition of the small mammal work to Dr. Flaherty and Dr. Zollner. They will continue to monitor the small mammal population on the HEE and look at long-term effects of timber harvesting and prescribed burning on small mammals.

Welcome to Dr. Fei, Dr. Flaherty, and Dr. Zollner!



New HEE Graduate Student

Addison Allen is in her second semester of her PhD at Purdue University in Dr. Liz Flaherty's lab. Addison got her Bachelor of Science and Master of Science in Biology at the University of Oklahoma. For her PhD, she is studying squirrel population responses to different harvest treatments. Her interests include board games, reading true crime books, and painting.

PUBLICATIONS

Connare, B. and **K. Islam.** 2022. Failure to advance migratory phenology in response to climate change may pose a significant threat to a declining Nearctic-Neotropical songbird. *International Journal of Biometeorology*, <https://doi.org/10.1007/s00484-022-02239-9>.

Divoll, T.J., Aldrich, S.P., **Haulton, G.S.,** and **J.M. O'Keefe.** 2022. Endangered Myotis bats forage in regeneration openings in a management forest. 2022. *Forest Ecology and Management*, 503 (1), Endangered Myotis bats forage in regeneration openings in a managed forest – ScienceDirect

Want to keep up with what is going on with the Hardwood Ecosystem Experiment? Follow us on Twitter!

<https://twitter.com/hardwoodecosys1?lang=en>

If you are not on the HEE newsletter e-mail list, but would like to be added, please email the HEE Project Coordinator, Charlotte Owings, at freemac@purdue.edu



The Hardwood Ecosystem Experiment

Purdue University
Department of Forestry and Natural Resources
Pfendler Hall of Agriculture
715 W. State St. West Lafayette, IN 47907

www.heeforeststudy.org

Copyright © 2022, Purdue University, all rights reserved. Purdue University is an equal access/equal opportunity university. If you have trouble accessing this page because of a disability, please contact the Krannert Help Desk at kcchelp@purdue.edu.