# Eileen Reeves

Michigan Technological University

College of Forest Resources and Environmental Science

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## Education

### Michigan Technological University – PhD, anticipated graduation August 2025

* Dissertation Advisor: Andrew Burton

### University of Notre Dame – Bachelor of Science, May 2019

* Major: Environmental Science

## Academic Positions

* Student Advisory Committee, University of Notre Dame, Department of Biological Sciences, September 2018 – May 2019.

## Teaching Positions

* Teaching Assistant, Michigan Technological University, College of Forest Resources and Environmental Science. FW3020, Forest Ecology, Fall 2020, 2021, 2022, 2023
* Teaching Assistant, Michigan Technological University, College of Forest Resources and Environmental Science. FW1050, Natural Resources Professional, Spring 2023
* Teaching Assistant, Michigan Technological University, College of Forest Resources and Environmental Science. FW3200, Biometrics and Data Analysis, Spring 2024
* Co-instructor, Michigan Technological University, College of Forest Resources and Environmental Science. FW3020, Forest Ecology, Fall 2024

## Fellowships and Awards

* **New Phytologist Award, 2023.** Award is given annually for best poster presentation by a graduate student at the Ecological Society of America Conference.

## Selected Works in Progress

* I have completed lab work and analysis and am preparing of a work for publication on a novel application of real time PCR for quantifying RNA expression in decomposing wood. Directly measuring the enzyme activity level of fungi decomposing wood has not previously been studied. Most analyses of decomposition in wood are done via laboratory incubations, lignin: decomposition ratios, or other methods that cannot completely capture the way that fungi are active in logs in the field.
* I have successfully used metabarcoding to identify fungal species present in the same logs. While metabarcoding is common in soil, air, and fecal samples, it has not been widely applied to naturally decaying wood. This represents a significant shift from previously established methods that rely on fruiting body surveys or incubations of wood samples collected in the field and cultured in a lab. Those methods tend to overlook rare, cryptic, and species that do not culture well.

## Conference Presentations

## Reeves, E.C., A.J. Burton, C, Külheim. 2024. Introducing the rot squad: Metabarcoding of decaying wood reveals saprotrophic fungal community composition. Oral presentation and published abstract at the Ecological Society of American Annual Meeting, Long Beach CA, Aug 4-9.

## Burton, A.J., E.C. Reeves, S. Mensah Opoku, C. Trettin and M. Jurgensen. 2023. Transfer of decaying wood C into mineral soil C pools: A long-term continental study. Poster presentation and published abstract at the Ecological Society of America Annual Meeting, Portland OR, Aug 6-11.

## Reeves, E.C., A.J. Burton, and C. Külheim. 2023. Testing viability of RT-PCR for in situ measurements of fungal decomposition of wood. Poster presentation and published abstract at the Ecological Society of America Annual Meeting, Portland OR, Aug 6-11.

## Burton, A.J., E.C. Reeves, and J. Eikenberry. 2022. Persistence of N saturation effects four years after the cessation of experimental N deposition to northern hardwood forests. Poster presentation and published abstract at the Ecological Society of America Annual Meeting, Montreal, Canada, Aug 14-19.

## Reeves, E., A.J. Burton, and J. Eikenberry. 2022. Soil microorganisms show only partial recovery three years after cessation of chronic experimental N deposition. Oral presentation and published abstract at the Ecological Society of America Annual Meeting, Montreal, Canada, Aug 14-19.

## Burton A.J., E.C. Reeves, and J.R. Eikenberry. 2021. Persistence of N saturation effects following reduction of experimental N inputs to northern hardwood forests. Oral presentation and published abstract, annual meeting of the Soil Science Society of America, Salt Lake City UT, Nov 7-10.

## Burton A.J., E.C. Reeves, K.E. Schneider, and J.R. Eikenberry. 2020. Persistence of N saturation effects after N inputs are reduced in northern hardwood forests. Oral presentation and published abstract, annual meeting of the Soil Science Society of America, virtual meeting.

## Research Grants

* Metabarcoding of decaying wood to identify saprotrophic fungi, Ecosystem Science Center Annual Student Research Grant, Ecosystem Science Center, Michigan Technological University, $1000, 2024.