

# Tedward Erker

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## Summary of Qualifications and Skills

Biometry M.S. and Forestry Ph.D. (expected spring 2019) with 5 years of research and data analysis experience and 2 years of high school teaching experience. Comfortable with a wide range of statistical methods including generalized linear models and tree-based methods. Driven to understand complex problems and distill key findings for nonexpert audiences via fully reproducible reports and compelling figures. Independently motivated. A positive, constructive team member and leader. Passionate about working in education.

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## Experience

2015–Now **Research Assistant**, *UW-Madison*.

Investigate interactions between humans and the urban forest:

- Map Urban Forests of Wisconsin
  - Tested 3 machine learning algorithms to classify nearly a terabyte of imagery
  - Processed imagery in parallel at UW's Center for High Throughput Computing
- Carbon Budget of Urban Forest:
  - Assessed impact of tree canopy on residential building energy use and carbon emissions
- Canopy Foliar Trait Mapping with Imaging Spectroscopy.
  - Apply partial least squares regression to Sub-achievement (a);
  - Sub-achievement (b), with sub-sub-achievements (don't do)
  - Sub-achievement (c);

2013–2015 **Teaching Assistant**, *UW-Madison*.

- Statistical Methods for Bioscience II, Spring 2015
  - Led 2 weekly discussion groups, graded homework and exams for this graduate-level course
- Forest Ecology, Fall 2013 and Fall 2014
- Living With Wildlife, Spring 2014

2010–2012 **Chemistry and Biology Teacher**, *Confluence Prep Academy*, St. Louis.

- Educated over 120 students in six classes daily.
- As first year teacher, developed chemistry curriculum for new charter school integrating College Readiness Standards with Missouri Science Standards.

2010–2012 **Corps Member**, *Teach For America*, Chicago & St. Louis.

Selected from over 46,000 applicants nationwide to join the national teacher corps of recent college graduates who commit two years to teach in under-resourced public schools.

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## Education

Sep 2013 - Present

**Ph.D. Forestry**

Department of Forest and Wildlife Ecology, University of Wisconsin–Madison

GPA: 3.929

Sep 2013 - Present

**M.S. Biometry**

Department of Statistics, University of Wisconsin–Madison

Aug 2006 - May 2008 & Aug 2009 - May 2010

**B.A. Environmental Studies–Ecology/Biology**

Summa Cum Laude, Washington University in St. Louis

GPA: 3.83