

# Rebecca Teed

Department of Earth and Environmental Sciences  
Wright State University  
3640 Colonel Glenn Highway, Dayton OH 45435  
rebecca.teed@wright.edu (937) 775-3446  
<http://www.wright.edu/~rebecca.teed>

## EDUCATION:

- Ph.D. - University of Minnesota - Ecology, Evolution, and Behavior: 1999
- M. Phil. - University of Cambridge - Quaternary Studies: 1993
- B.A. - Williams College – Biology: 1990

## PROFESSIONAL TEACHING & RESEARCH EXPERIENCE:

- Associate Professor, Department of Earth & Environmental Sciences, Wright State University (2012 – present)
- Assistant Professor, Department of Earth & Environmental Sciences/ Department of Teacher Education, Wright State University (2006 – 2012)
- Visiting Assistant Professor, Department of Geological Sciences, Wright State University (2004 – 2005)
- Research Associate, Science Education Resource Center, Carleton College (2003 – 2004)
- Research Associate, Department of Biology, Carleton College (2001 – 2003)
- Adjunct faculty, Dept. of Geology/Graduate School, University of Minnesota (2002 – 2004)
- Lecturer, European Division, University of Maryland, Overseas Division (2000 – 2001)
- Research Associate, Department of Geology, University of Minnesota (1999 – 2000)

## PEER-REVIEWED PUBLICATIONS

- Teed, R. and Franco, S. (2014). Increasing teachers' confidence and pedagogical content knowledge through a workshop and follow-up program on climate change. *Journal of Geoscience Education*, **62**(5): 587-597.
- Basista, B., Harris, C., Tomlin, J., Mathews, S., and Teed, R. (2011). Dual appointments in science and mathematics education: Supporting collaboration for education in a democracy. *Education in a Democracy: A Journal of the NNER (National Network for Educational Renewal)* **3**: 47-74.
- Teed, R., and Slattery, W. (2011). Changes in geologic time understanding in a class for pre-service teachers. *Journal of Geoscience Education* **59**: 151-162.
- Teed, R., Umbanhowar, C.E., Jr., and Camill, P. (2009). Multi-proxy lake sediment records at the northern and southern boundaries of the aspen parkland region of Manitoba, Canada. *The Holocene* **19** (6): 937-948.
- Slattery, W., Teed, R., Cole, T. and Davis, C. (2007). A multi-disciplinary Earth systems course designed for pre-service middle school teachers. *Journal of Geoscience Education* **55**: 218-221.

- Umbanhowar, C.E. Jr., Camill, P., Geiss, C., and Teed, R. (2006). Asymmetric vegetation responses to mid-Holocene aridity at the prairie–forest ecotone in south-central Minnesota. *Quaternary Research* 66 (1): 53-66.
- Teed, R. (2005). A student-centered project for Earth system history. *Journal of Geoscience Education* 53: 96-100.
- Camill, P., Umbanhowar, C.E., Teed, R., Geiss, C.E., Dvorak, L., Kenning, J., Limmer, J., Walkup, K., Aldinger, J. (2003). Late Glacial and Holocene Climatic Effects on Fire and Vegetation Dynamics at the Prairie-Forest Ecotone in South-Central Minnesota. *Journal of Ecology* 91: 822-836.
- Allison, T.D., Art, H.W., Cunningham, F.E., and Teed, R. (2003). Forty-two years of succession following clear-cutting in a northern hardwoods forest in northwestern Massachusetts. *Forest Ecology and Management* 182: 285-301.
- Teed, R. (2000). A >130,000-Year-Long Pollen Record from Pittsburg Basin, Illinois. *Quaternary Research* 54: 264-274.

### **BOOK CHAPTERS**

- Grimley, D., Teed, R., and Phillips, A. 2011. Stop 8: Central Illinois Materials sand pit/Catfish Pond paleoecology. In D.A. Grimley and A.C. Phillips (Eds.), Ridges, mounds, and valleys: Glacial-interglacial history of the Kaskaskia Basin, southwestern Illinois (pp. 107-109). Champaign IL: Illinois State Geological Survey Prairie Research Institute. Open File Series 2011-1.

### **RECENT PRESENTATIONS AT SCIENTIFIC CONFERENCES**

- Teed, R. 2018. Do Student Note-Sheets Increase Quiz Scores? Geological Society of America Annual Meeting, Indianapolis, IN.
- Teed, R. 2018. The One-minute Paper and Other Interactive Tricks for a Large-group Class. American Physiological Society Institute for Teaching and Learning, Madison WI. (INV)
- Teed, R. 2017. CiG3: An open-ended pre/post-test for introductory geology. Geological Society of America Annual Meeting, Seattle, WA.
- Teed, R. 2017. Do better-prepared students learn more from collaborative tests? Geological Society of America Annual Meeting, Seattle, WA.
- Holmgren, C.A., and R. Teed. 2017. From mass extinctions to modern extinctions: Teaching with InTeGrate's online Changing Biosphere module. Geological Society of America Annual Meeting, Seattle, WA.
- Warren, E. 2017. Source determination of arsenic, lead, and cadmium in the Yellow Spring sediment in Glen Helen Nature Preserve, OH. Geology Society of America North-Central Section Meeting, Pittsburgh, PA.
- Teed, R. 2016. Preliminary pollen analysis of sediments from Crystal Lake, western Ohio. American Quaternary Association Biennial Meeting, Santa Fe, NM.
- Schmus, M., Teed, R. 2016. Measuring Student Learning Gains and attitudes in Earth and Environmental class for pre-service teachers after additional assignment to rocks and mineral identification lab. Earth Educators Rendezvous. Madison, WI.

- Wilson, A.D., and Teed, R.E. 2016. Shedding some light into crystal lakes: How diatoms can indicate change. Geology Society of America North-Central Section Meeting, Champaign IL.
- Schmus, M., Teed, R., and Hundley, S.A. 2016. Measuring student learning and attitudes of pre-service teachers after an additional assignment to the rock and mineral identification labs during Earth and environmental course. Geology Society of America North-Central Section Meeting, Champaign IL.
- Teed, R. 2015. Cooperative Learning: Who Benefits? Earth Educators' Rendezvous. Boulder, CO.
- Freeman, E. and Teed, R. 2015. Observing Patterns in Pittsburg Basin, Illinois, Pollen Data Using Detrended Correspondence Analysis. Geology Society of America North-Central Section Meeting, Madison, WI.
- Richardson-Coy, R. and Teed, R. 2013. Diatom Identification Handbook for the Glen Helen Nature Preserve, Yellow Springs, Ohio. Geology Society of America North-Central Section Meeting, Kalamazoo, MI.
- Freeman-Ballev, E., Deuter, L., and Teed, R. 2013. Preliminary Loss-on-Ignition Data from Crystal Lake OH. Geology Society of America North-Central Section Meeting, Kalamazoo, MI.
- Teed, R. 2013. Transitioning to a Student-Centered Class. Geological Society of America 125th Anniversary Annual Meeting, Denver CO.
- Teed, R., and Franco, S. 2012. Results from a Workshop and Follow-up Program on Climate Change for In-Service Teachers. Geological Society of America National Meeting, Charlotte, NC.
- Teed, R. 2012. Pre- and Post-Test Results from a PBL Earth Systems Class. Earth System Science Education Alliance Annual Meeting, Monterey CA. Poster (Aug. 1st).
- Teed, R. 2012. Measuring Gains from Team-Based Learning. Geological Society of America North-Central Section Meeting, Dayton OH.
- Teed, R., Wright, C., Basista, B. 2011. Learning gains from a brief lecture/demonstration of moon phases. Geological Society of America Annual Meeting, Minneapolis MN.
- Teed, R., Williams, T., and Slattery, W. 2011. Increases in scientific logical thinking skills in a program for pre-service teachers. Geological Society of America Annual Meeting, Minneapolis MN.
- Slattery, W., Davis, C., and Teed, R. 2011. What do they bring to the table? Determining the logical thinking skills of students beginning an earth science general education course. Geological Society of America Annual Meeting, Minneapolis MN.
- Teed, R., and Stambaugh, B. 2011. Assessing Critical Thinking and Social Skills Gains in an Earth Systems Class. Poster presented at the Earth Science Education Alliance, Marquette MI.
- Grimley, D., Teed, R., and Phillips, A. 2011. Stop 8: Central Illinois Materials sand pit/Catfish Pond paleoecology. Oral Presentation given at the 55th Midwest Friends of the Pleistocene Conference, Carlyle IL on May 22. (INV)

**GRANTS FUNDED**

Teed, R. Apr. 2016. A Pollen and Diatom Record from Crystal Lake, Medway, OH. \$5,000, 100% portion, WSU Women in Science Giving Circle.

Schen, M., Teed, R., Apr. 2013 (originally Sept 2010). Developing Scientific Reasoning Abilities in Pre-service Teachers. (WSU 0942573, DUE-0942573) - 3 years, \$124,898, National Science Foundation.

Teed, R., Schen, M., Basista, B., Smith, T., Tomlin, J., Hundley, S., Frysinger, P., Jan. 2011. Earth, Life, and Physical Science Professional Development Program for Grade 5-12 Teachers. (WSU 668301) - 1 year, \$193,609, 8% overhead, 100% portion, Ohio Board of Regents.

Teed, R.E., May 2009. Changes in Geologic Time Understanding in a Class for Pre-service Teachers. \$4,000, 100% portion, West Ohio Center of Excellence for Science and Mathematics Education.

Slattery, W., Teed, R.E., Aug. 2008. Delivering On-Line Professional Development Courses to a New Population of K-12 teachers. (WSU 666911) - 3 years, \$39,220, 8% overhead, 50% portion, Institute for Global Environmental Studies.

Lunsford, S., Slattery, W., Teed, R., and Ciampaglio, C. Nov. 2005. Partners in Integrated Earth Systems Science (PIES). (WSU 06-232-21) – \$63,806, Ohio Board of Regents - Title II: Improving Teacher Quality Program.

**TEACHING****Courses Taught at Wright State:**

- EES 7000, Principles of Instruction in Earth and Environmental Sciences
- GL/EES 345/607/3450, Concepts in Geology
- GL/EES 346/699/3460, Earth Systems
- EES 3250 Climate Change
- GL 699, Earth Science Enhancement
- ED 670, MST Project Development
- EES 401(W)/699, Earth Science Research
- SM 145(W), Foundations in Scientific Literacy and Problem Solving
- EES 199, Cave Geology, co-taught with Chris Atchison

**Courses Taught at University of Minnesota**

- GEOL 5001, Earth Systems Science for Teachers

**Courses Taught at University of Maryland**

- BIOL 101 & 102, General Biology
- BIOL 220, Human Genetics
- MATH 100, Pre-Algebra
- IFSM 201, Concepts and Applications of Information Technology
- Workshops on Networking, MS Word, Excel, FrontPage, and PowerPoint

**PROFESSIONAL SERVICE:****Departmental Committees & Service**

- Department Liaison for the American Association of University Professors – WSU chapter
- Managing the poster printer
- Webmaster – Earth & Environmental Sciences Department (2013 – 2015)
- MST Studies Committee (member: 2004 – 2015)
- Undergraduate Studies Committee (member: 2009 – 2014, chair: 2015 – 2016)
- Graduate Studies Committee (member: 2009 – 2011, 2015 – present)
- MST (Earth Science) Program (director: 2004 – 2005, Winter 2007)

**College Committees**

- College of Science and Math Curriculum Committee (2017-present)
- College of Science and Math Instructional Collaborative (member: 2014 – present)
- College of Science and Math Steering Committee (elected member: 2013 – 2015)
- College of Science and Math Petitions Committee (member: 2009 – 2013)
- Science and Math Education Council (member: 2006 – 2009)
- Teacher Education Council (member: 2004 – 2009)
- Ctr. for Science & Math Ed. Curriculum Committee (member: 2007– 2009)

**University Committees**

- University Appeals Committee (member: 2012 – 2014, co-chair: 2014 – 2016)
- Undergraduate Academic Policy Committee (member: 2013 – 2014)
- Information Technology Committee (member: 2010 – 2012)
- Ad hoc Independent Studies Committee (member: 2010)

**Wright State University Center for Teaching and Learning Events**

- Poster at the Student Success Symposium, 2015 – Using pre-tests and post-tests to measure student learning
- Workshop Leader – Game-based Learning, September 17<sup>th</sup>, 2014
- Workshop Leader - Assessment Workshop, April 20<sup>th</sup>, 2012
- Workshop Leader - Cooperative Learning, October 20<sup>th</sup>, 2011

**Professional Service**Associate Editor

- *Journal of Geoscience Education* (2012 – present)

Peer review of manuscripts submitted for publication in scientific journals

- Reviewer for the *Journal of Geoscience Education* (2005, 2007, 2011 – present)
- Reviewer for *The Holocene* (2017), *Science Education* (2016), *Hydrology and Earth System Science* (2012), *Quaternary Science Reviews* (2010)

Peer review of research proposals:

- U.S. National Science Foundation – Population and Community Ecology Cluster: 2010

American Association of University Professors

- Wright State Chapter Executive Committee (member-at-large 2015 – 2016)

**Community Service**

- Gave a presentation on what geologists do for a Cub Scout troop in Beaver Creek (2016)
- Volunteered to help visitors to Caesar's Creek State Park find and identify fossils for National Fossil Day (2014)
- Worked with graduate students at Wright State to assemble and deliver rock kits for Dayton City Schools (Kiser, Eastmont, and Ruskin Pre-K-8; 2013).
- Taught an Earth history workshop for the Science Education Council of Ohio (K-12 science Teachers), Dayton (2013)
- Assisted colleagues at Wright State (Beth Basista) and Central State (Kumar Nedunari) to develop and give a workshop on hydraulic flow and energy conservation for teachers from the Dayton Public School system (2009)
- Reported relevant Wright State research findings at a zoning board meeting for Clark County on behalf of the Crystal Lake Housing Association (2010)

**PROFESSIONAL MEMBERSHIPS:**

- American Quaternary Association
- Geological Society of America

**WEB MODULES**

- Holmgren, C., and Teed, R., Changing Biosphere: [http://serc.carleton.edu/integrate/teaching\\_materials/biosphere/index.html](http://serc.carleton.edu/integrate/teaching_materials/biosphere/index.html)
- Teed, R., McDaris, J, and Roseth, C. Cooperative learning: <http://serc.carleton.edu/introgeo/cooperative/index.html>
- Teed, R. Game-based learning: <http://serc.carleton.edu/introgeo/games/index.html>
- McDonald, H., Teed, R., Hoyt, G., Imazeki, J., Millis, B., Vasquez-Cognet, J. Interactive lectures: <http://serc.carleton.edu/introgeo/interactive/index.html>
- Teed, R. Role-playing exercises: <http://serc.carleton.edu/introgeo/roleplaying/index.html>
- Teed, R. Using an Earth history approach: <http://serc.carleton.edu/introgeo/earthhistory/index.html>