

Jennifer Hoyt Watt, Ph.D.

Associate Director, Environmental and Sustainability Studies Program
Associate Professor (lecturer), Environmental and Sustainability Studies
Adjunct Assistant Professor, Geography
University of Utah
Gardner Commons, room 4540
Salt Lake City, UT 84112

Education

- Ph.D. – Geography, University of Utah (2013)
- Higher Education Teaching Specialist (HETS) Designation (2013)
- Master of Science – Environmental Science and Policy, Northern Arizona University (2008)
- Bachelor of Science – English (Minor in Earth Science), Black Hills State University (2001)

Awards

- Certificate of Achievement for Outstanding Adjunct, Awarded by the Geography Department, University of Utah (2019)
- Sustainability Education Integration, Awarded by the University of Utah Chief Sustainability Officer (2018)
- Faculty Commitment to Students Award, Awarded by University of Utah Student Leadership and Commitment (2018)
- Superior Teaching Award (Career-line), Award by the College of Social and Behavioral College (2018)
- Runner up for the Superior Teaching Award (Career-line), Award by the College of Social and Behavioral College (2017)
- Runner up for the Superior Teaching Award (Career-line), Award by the College of Social and Behavioral College (2016)

Teaching Experience

- **Course Design and Development for new online emphasis in Environmental and Sustainability Studies, ENVST 2000 and ENVST 5556 (Spring 2020-Fall 2020)**
- **Course Design, Development and Instructor for new ENVST 2000 face-2-face course (Spring 2020).**
- Course Design and Development, Physical Geography Lab, Department of Geography, (Fall 2018).
- Course Instructor – ENVST Capstone Course (ENVST 5555), Environmental and Sustainability Studies Program, University of Utah (Fall 2015-current)
- Course Instructor – ENVST Minor Capstone Course (ENVST 5556), Environmental and Sustainability Studies Program, University of Utah (Fall 2015-current)
- Course Instructor – Introduction to Environmental and Sustainability Studies (ENVST 2100), Environmental and Sustainability Studies Program, University of Utah (Spring 2015-current)

- Course Design and Instruction – Sustainability Leadership Committee (ENVST 5400), Environmental and Sustainability Studies Program, University of Utah (Fall 2013-current)
- Course Instructor – Environmental and Sustainability Science, lecture and lab (ENVST 2050), Environmental and Sustainability Studies Program, University of Utah (Fall 2013, Spring 2014)
- Course Instructor - Field Experience: Environmental and Sustainability Studies (ENVST 2000), Environmental and Sustainability Studies Program, University of Utah (Summer 2012-current)
- Course Instructor - Internship: Environmental and Sustainability Studies (ENVST 4800), Environmental and Sustainability Studies Program, University of Utah (Spring 2012-current)
- Course Instructor – Earth Environments and Global Change (Geog 1000), Department of Geography, University of Utah (Fall 2008-Spring 2010, Fall 2011-current)
- Course Development – Earth Environments and Global Change (Geog 1000), developed new online course (Summer 2012)
- Teaching Assistant – Introduction to Environmental and Sustainability Studies (ENVST 2100), Environmental and Sustainability Studies Program, University of Utah (Fall 2011)
- Course Instructor – Environmental Biology lecture and lab (online course) (Bio 105), Math and Science Division, Yavapai College (Fall 2007, Spring 2008, Fall 2008)
- Course Instructor – Biology Concepts (Bio 100), Math and Science Division, Yavapai College (Spring 2007)
- Course Instructor- Geologic Hazards Lab (Geol 112), Department of Geology, Northern Arizona University (Spring 2007)

Teaching Workshops

- Working with International Students, Center for Teaching and Learning Excellence, University of Utah (May 2011).

Service

- Undergraduate Research Opportunities Program, Logan Hastings (Fall 2019-Spring 2020)
- Undergraduate Research Opportunities Program, Camryn Ernst (Fall 2019-Fall 2020)
- Undergraduate Research Mentor, Isaac Cheek (Fall 2019-Spring 2021)
- Undergraduate Research Opportunities Program, Quinn Graves (Summer 2018-Spring 2019)
- University Press Faculty Advisory Committee (July 2018-June 2021)
- University Studies Committee (July 2018-June 2021)
- Chair of the Edible Campus Gardens Steering Committee (Spring 2016-current)
- Faculty Advisor for SCIF Project, Garden Design Intern (December 2017)
- Undergraduate Research Opportunities Program, Jordin Hartley (Summer 2017-Spring 2018)
- Faculty Advisor for SCIF Project, ADA Pathway in Pioneer Garden (Summer 2017)
- Undergraduate Research Opportunities Program, Georgie Corkery (Fall 2016-Spring 2017)

- Undergraduate Research Opportunities Program, Matt Anglioli (Fall 2016)
- Faculty Advisor for SCIF Project, Solar Panels at Centennial Valley (Fall 2016)
- Faculty Advisor for the EPA Rainworks Challenge Project, Interdisciplinary team from ENVST and College of Architecture. (Fall 2016-Spring 2017)
- Faculty Advisor for SCIF Project, Pioneer Garden Fence (Spring 2016-Summer 2016)
- Faculty Advisor for funded SCIF Project, Hunter Klingensmith, OSH wastewater (Spring 2016)
- College Council Career Line Representative (Spring 2016-current)
- Sustainability Action Committee, Food Working Group (Spring 2016-current)
- Sustainability Action Committee, Education Working Group (Spring 2016-current)
- Faculty Advisor for funded SCIF Project, Warren Beecroft, Air Masks (Spring 2016)
- Organic Gardens Assistant Horticulture Search Committee (Spring 2015)
- College of Social and Behavioral Science ADVANCE Task Force member (2014-2015)
- Undergraduate Research Opportunities, Carlie Teague (Fall 2014-Spring 2015)
- University Press Faculty Advisory Committee (Fall 2013-Spring 2016)
- Planning Committee, EarthU Sustainability in Diversity Dinner (Spring 2015-current)
- Sustainability Journal Advisory Board (Fall 2013)
- Undergraduate Research Opportunities Program, Max Stiefel (Fall 2013-Spring 2014)
- Faculty Advisor for funded SCIF Project, Tyler Higginson (Fall 2013)
- Faculty Advisor for Sustainability Leadership student group (Fall 2012-current)
- Faculty Advisor for Fossil Free U student group (Fall 2012-Spring 2013)
- Faculty Advisor for funded SCIF Project, Sustainable Workshops (Fall 2012-Spring 2013)

Graduate Students – Committee Chair

- Jordin Hartley, MS, Department of Geography, University of Utah (Expected SP20)

Graduate Students – Committee Member

- Katherine Bui, MS, Environmental Humanities, University of Utah (Expected SP20)
- Vanessa Chavez, MS, Geography, University of Utah (Graduated Fall 2015)

Funded Proposals

- University of Utah Individual Teaching Grant, Geography 1005-Earth Environments and Global Change Lab. Awarded **2019** \$3,500.
- CSBS Seed Grant, Sierra de San Pedro Collaborative Research Project in Baja California, Mexico. Awarded **2018** \$6,400
- Global Change and Sustainability Center Seed Grant, Sierra de San Pedro Collaborative Research Project in Baja California, Mexico. Awarded **2018** \$10,000
- CLAS Grant. Sierra de San Pedro Collaborative Research Project in Baja California, Mexico. Awarded **2017** \$4,000
- Society, Water, and Climate Research Grant. Historic Climate Induced Bark Beetle Epidemic and Management Responses in the Sierra Nevada. Awarded **2017** \$11,000.
- REDD Center Off-Campus Faculty Award to continue mountain pine beetle work in the Northern Rocky Mountains. Awarded **2017** \$3,000.

- Global Learning Across the Disciplines (GLAD) Grant to broadly integrate global learning into the Environmental and Sustainability Studies curricula. Awarded **2016** \$10,000.
- Technology Assisted Curriculum Center Grant (TACC), Online Minor Course Development Grant. Awarded **2013**, 20,000.
- US Environmental Protection Agency: Southwest Center for Environmental Research and Policy: Funding to support field-work, collecting sediment cores from Cienegas, in Northern Mexico. This research is investigating monsoon patterns over long time periods (~40,000 years). Awarded **2012**, \$23,748.

Pending Proposals

- Reconstructing 40,000 years of climate variability in Baja California, Mexico: Funding to support field work for three faculty and four students and laboratory expenses. Requested \$29,98.

Journal Articles

Watt, J. H. & Brunelle, A. (2020). The potential for pollen records to detect mountain pine beetle disturbance in a pine dominated forest, Idaho, USA. *Western North American Naturalist* XX.

Watt, J.H. and Brunelle, A. (in progress). A Holocene record of Mountain Pine Beetle outbreaks at Lake of the Woods, Montana, USA

Morris, M., Mustaphi, C.C., Carter, V., **Watt, J.H.**, Derr, K., Pisaric, M.F.J., Anderson, R.S., Brunelle, A. (2014). How do bark beetle remains in lake sediments correspond to severe outbreaks? A review of published and ongoing work. *Quaternary International*, 11, 387.

Other Publications

Watt, J.H. (2013). Using Sedimentary Evidence to understand past outbreaks of *Dendroctonus ponderosae* in the Northern Rocky Mountains, USA. Dissertation, University of Utah.

Watt, J.H. (2008). A Late-Holocene Reconstruction of Spruce Beetle (*Dendroctonus rufipennis*) disturbance from Antler Pond, Colorado, USA. Masters thesis, Northern Arizona University.

Presentations and Abstracts

Hartley, J., **Watt, J.H.**, Brunelle, A., Clark, B (2019). Reconstructing a Fire History Record History for a Whitebark Pine Dominated Site in the White Cloud Mountain Range. *Poster and Abstract* Pacific Climate Conference, Monterey CA.

Graves, Q., **Watt, J.H.**, Brunelle, A., Clark, B (2019). Reconstructing the paleoecology of climate and vegetation change from a ciénega on the Sierra de San Pedro Mártir, Baja California, Mexico. *Poster and Abstract* Pacific Climate Conference, Monterey CA.

Watt, J.H., Brunelle, A., Clark, B. and Jenkins, J. (2019). Historic Climate Induced Bark Beetle Epidemics and Management Responses in the Sierra Nevada Mountains, USA. *Abstract and Poster*, Pacific Climate Conference, Monterey, CA.

Hartley, J. and **Watt, J.H.** (2018). Reconstructing a fire history record and disturbance patterns for a high elevation site in the Northern Rocky Mountains, USA. *Poster and Abstract*, Posters on the Hill, Utah State Capital Building.

Watt, J.H., Brunelle, A., Bentz, B., Kipfmueller, K. (2017). A multi-method approach to studying disturbance in the Northern Rocky Mountains, USA. *Oral Presentation*, Western Forest Insect Work Conference, Jackson Hole, WY.

Corkery, G. and **Watt, J.H.** (2017). Investigating historic mountain pine beetle outbreaks in the Sawtooth Mountains, Idaho, USA. *Abstract and Poster*, Undergraduate Research Opportunities Program Symposium.

Teague, C., **Watt, J.H.**, Brunelle, A. (2015). A High Resolution Record of Mountain Pine Beetle Outbreaks from 7500-8500 Cal Yr BP at Maker Lake, Montana. *Abstract and Poster*, College of Social and Behavioral Science College Research Day.

Howard, K., Brunelle, A., **Watt, J.H.** (2014). Holocene records of Mountain Pine Beetle outbreaks in the Northern Rocky Mountains. *Abstract and Poster*, Research Posters on the Hill, Capital Building, Salt Lake City.

Vanessa, C., Howard, K., **Watt, J.H.**, Brunelle, A., and Blissett, S. (2013). A Paleocological history for the Sierra de Juarez Region of Baja California, Mexico. *Abstract and Poster*, Southwest Consortium of Environmental Research and Policy, Arizona State University, Arizona.

Watt, J.H., Brunelle, A., and Brewer, S. (2013). Methods for detecting past mountain pine beetle outbreaks in pine dominated forests, Idaho, USA. *Abstract and Poster*, Global Change Sustainability Center Symposium, University of Utah, Utah.

Watt, J.H., Brunelle, A., and Kipfmueller, K. (2011). A late-Holocene record of disturbance from the Northern Rocky Mountains, USA. *Abstract and Poster*, PACLIM, Monterey, CA.

Watt, J.H. and Brunelle, A. (2010). Using lake sediment cores to investigate past mountain pine beetle outbreaks. *Oral Presentation*, Geological Society of America Annual Meeting, Denver, Colorado.

Watt, J.H., Brunelle, A., and Bentz, B. (2010). Paleocological data and their utility in identifying past bark beetle outbreaks and vegetation response. *Oral Presentation*, Western Forest Insect Work Conference, Flagstaff, Arizona.

Watt, J.H., Brunelle, A., and Bentz, B. (2009). Using lake sediment cores to investigate past mountain pine beetle outbreaks. *Abstract and Poster*, PACLIM, Monterey, CA.

Watt, J.H., Anderson, R.S., and Lynch, A. (2006). Reconstructing past disturbance of spruce beetle (*Dendroctonus rufipennis*) from lake core sediments. *Abstract and Poster*, PACLIM, Monterey, CA.

Brunelle, A., Blissett, S., **Watt, J. H.**, Minckley, T., Morris, J., Morris, S., Spruance, C. (2006). Sedimentary charcoal as a proxy for past drought: exploration of new data from the southwestern United States. *Abstract and Poster*, PACLIM.