

# Jacob T. Wittman

PHD STUDENT

1980 Folwell Avenue, St. Paul, MN

☎ 319 651 9490 | ✉ [wittja01@gmail.com](mailto:wittja01@gmail.com) | 📷 [wittja01](#) | 🌐 [wittja01](#) | 🐦 [wittja01](#)

## Education

---

### University of Minnesota

PHD ENTOMOLOGY, CONCENTRATION: FOREST ENTOMOLOGY, MINOR: BIOSTATISTICS

- Dissertation Topic: Emerald ash borer biocontrol modeling

St. Paul, MN

Sept. 2018 - 2022 (anticipated)

### University of Minnesota

MSC ENTOMOLOGY, CONCENTRATION: FOREST ENTOMOLOGY

- GPA of 4.00
- Thesis Title: Effects of host type and food deprivation on the movement behavior of late-instar larvae of gypsy moth *Lymantria dispar* (Lepidoptera: Erebidae)

St. Paul, MN

Jun. 2016 - Sept. 2018

### Luther College

TEACHING LICENSE IN SECONDARY EDUCATION BIOLOGY

- GPA of 4.00

Decorah, IA

Sept. 2012 - Dec. 2013

### Luther College

BA IN BIOLOGY & ENVIRONMENTAL STUDIES

- GPA of 3.68

Decorah, IA

Sept. 2008 - May 2012

## Teaching Experience

---

### University of Minnesota

TEACHING ASSISTANT

- Insect Biology (ENT 1005)

St. Paul, MN

Sept. 2018 - Dec. 2018

### DREAM Technical Academy

SCIENCE TEACHER

- Grades 7 - 12

Willmar, MN

Jun. 2014 - Jun. 2016

### Faribault High School

LONG-TERM SUBSTITUTE - BIOLOGY

- Biology (Grade 11)
- Integrated Life Science (Grade 9)

Faribault, MN

Feb. 2014 - Apr. 2014

### Huntington Learning Center

TUTOR

- Science (Grades 6 - 12)
- Math (Grades 6 - 12)
- ACT (Grades 11 - 12)

Plymouth, MN

Oct. 2013 - Aug. 2014

### Edina High School

STUDENT TEACHER

- Biology (Grade 11)
- AP Biology (Grade 12)

Edina, MN

Oct. 2013 - Dec. 2013

### Stillwater Junior High

STUDENT TEACHER

- Life Sciences (Grade 7)

Stillwater, MN

Aug. 2013 - Oct. 2013

## Publications

---

1. Stivers, EK, JT Wittman, and KJ Larsen (2019). A comparison of adult butterfly communities on remnant and planted prairies in northeast Iowa. *Journal of the Lepidopterists' Society* **In Press**.
2. Wittman, JT and BH Aukema (2019). Foliage type and availability alters the movement behavior of late instar European gypsy moth *Lymantria dispar* (Lepidoptera: Erebidae). *Journal of Insect Behavior*, 1–14.
3. Wittman, JT, RA Nicoll, SW Myers, PH Chaloux, and BH Aukema (2019). Characterizing and simulating the movement of late instar gypsy moth (Lepidoptera: Erebidae) to evaluate the effectiveness of regulatory practices. *Environmental Entomology*.
4. Wittman, J, E Stivers, and K Larsen (2017). Butterfly Surveys are Impacted by Time of Day. *Journal of the Lepidopterists' Society* **71**(2), 125–129.
5. Wittman, J, A Weckwerth, C Weiss, S Heyer, J Seibert, B Kuennen, C Ingels, L Seigley, K Larsen, and J Enos-Berlage (2013). Evaluation of land use and water quality in an agricultural watershed in the USA indicates multiple sources of bacterial impairment. *Environmental Monitoring and Assessment* **185**(12), 10395–10420.

## Presentations

---

1. Wittman, JT, and BH Aukema (2018). *Effects of host foliage on the movement behavior of larvae of gypsy moth (Lymantria dispar)*. Oral presentation at the Entomological Society of America, Annual Meeting, November 11 – 14, Vancouver, British Columbia, Canada.
2. Wittman, JT, PH Chaloux, SW Myers, and BH Aukema (2018). *Keeping gypsy moth where they are: Investigating how far gypsy moth larvae can move*. Oral presentation at the Western Forest Insect Work Conference, March 26 - 29, Denver, CO.
3. Wittman, JT, PH Chaloux, SW Myers, and BH Aukema (2018). *Developing science to support practice: Determining distances required to protect log decks from wandering gypsy moth larvae*. Poster presentation at the USDA Interagency Forum on Invasive Species, January 9 – 12, Annapolis, MD.
4. Wittman, JT, SW Myers, PH Chaloux, and BH Aukema (2017). *Evaluating gypsy moth (Lymantria dispar) larval movement potential and effective barriers limiting their movement*. Oral presentation at the Entomological Society of America, Annual Meeting, November 5 – 8, Denver, CO.
5. Wittman, JT, SW Myers, PH Chaloux, and BH Aukema (2017). *Supporting policy with science: Are buffer zones around wood products effective at preventing the spread of gypsy moth (Lymantria dispar)*. Oral presentation at the International Union of Forest Research Organizations - Forest Insects and Pathogens in a Changing Environment: Ecology, Monitoring, and Genetics, September 11 – 15, Thessaloniki, Greece.
6. Wittman, JT, PH Chaloux, D Lance, SW Myers, and BH Aukema (2016). *Evaluating the effectiveness of buffer zone practices in preventing the spread of gypsy moth (Lymantria dispar)*. Oral presentation at the Gypsy Moth Program Advisory Committee Meeting, November 22, St. Paul, MN.
7. Wittman, JT, PH Chaloux, D Lance, SW Myers, and BH Aukema (2016). *I Would Walk 500 Miles: Orientation and Movement Potential of Gypsy Moth Larvae in a Simulated Lumber Yard*. Oral presentation at the Annual Gypsy Moth Review, October 25 – 27, Columbus, OH.
8. Nicoll, RA, JT Wittman, SW Myers, D Lance, and BH Aukema (2016). *Do buffer zones prevent the spread of gypsy moth (Lymantria dispar) larvae?* Poster presentation at the Upper Midwest Invasive Species Conference, October 16-19, La Crosse, WI.
9. Wittman, J., E Stivers, and KJ Larsen (2016). *Bees, Butterflies and Beetles: A Comparison of Remnant and Planted Prairies in Northeast Iowa*. Oral presentation at the Day of Insects, April 9, Ames, IA.
10. Stivers, E, JT Wittman, and KJ Larsen (2015). *A comparison of adult butterfly communities on remnant and planted prairies in Northeast Iowa*. Poster presentation at Entomological Society of America, 63rd Annual Meeting. November 14 – 18, Minneapolis, MN.
11. Wittman, JT, A Weckwerth, and J Enos-Berlage (2012). *Exploring the Dry Run Creek Watershed: Molecules, Microbes, and Macroinvertebrates*. Poster presentation at the Iowa Water Conference. March.

## Software

---

1. Wittman, JT and BH Aukema (2019). *servosphereR: Analyze data generated from SynTech Servosphere trials*. R software package. <https://cran.r-project.org/web/packages/servosphereR/>.

## Grants

---

### Characterizing dispersal of larval gypsy moth to improve quarantine regulations

St. Paul, MN

MINNESOTA INVASIVE TERRESTRIAL PLANT AND PEST CENTER

2018

- \$35,000

## Fellowships & Honors

---

### Chiang Travel Award

St. Paul, MN

DEPARTMENT OF ENTOMOLOGY, UNIVERSITY OF MINNESOTA

2018

- \$200

### Chiang Travel Award

St. Paul, MN

DEPARTMENT OF ENTOMOLOGY, UNIVERSITY OF MINNESOTA

2017

- \$200

### McLaughlin Gormley King (MGK) Fellowship

St. Paul, MN

DEPARTMENT OF ENTOMOLOGY, UNIVERSITY OF MINNESOTA

2016 - 2017

- \$42,600

### Howard Hughes Medical Institute Teacher Scientist Fellowship

Decorah, IA

LUTHER COLLEGE

2012 - 2013

- \$12,500

## Institutional and Departmental Service

---

### Grant Reviewer

St. Paul, MN

COUNCIL OF GRADUATE STUDENTS, UNIVERSITY OF MINNESOTA

2019

### President

St. Paul, MN

FRENATAE (ENTOMOLOGY GRADUATE STUDENT ASSOCIATION, UNIVERSITY OF MINNESOTA)

2019 - present

### Treasurer

St. Paul, MN

FRENATAE (ENTOMOLOGY GRADUATE STUDENT ASSOCIATION, UNIVERSITY OF MINNESOTA)

2018 - 2019

### Insect Education Outreach Coordinator

St. Paul, MN

FRENATAE (ENTOMOLOGY GRADUATE STUDENT ASSOCIATION, UNIVERSITY OF MINNESOTA)

2017 - 2018

### Council of Graduate Students Representative

St. Paul, MN

FRENATAE (ENTOMOLOGY GRADUATE STUDENT ASSOCIATION, UNIVERSITY OF MINNESOTA)

2016 - 2017