Jocelyn M. Woods, Ph.D.

Department of Animal & Dairy Sciences
University of Wisconsin-Madison

EDUCATION

Ph.D. Animal Science, University of Wisconsin, Madison, WI – GPA 3.9/4.0   2025
Dissertation: *The tail of a lamb: The welfare and behavior implications of tail docking sheep*
Committee: Drs. Sarah Adcock (PI), Jennifer Van Os, Guilherme Rosa, Brian Greco, and Ricki
Colman

B.S. Psychology, Minor in Biology, DePaul University, Chicago, IL – GPA 3.9/4.0   2016

RELEVANT EXPERIENCE

Graduate Research Assistant   January 2021 – Present
Department of Animal & Dairy Sciences, University of Wisconsin—Madison
Languages: R, Python, SQL

> Designed and conducted 11 independent research projects: 9 on the welfare implications of tail
> docking sheep, 1 validating a real-time location system, and 1 developing a machine learning
> algorithm to identify sheep behavior. Collected wound images, fecal samples, infrared images,
> tissue samples, sensor data, and video data. Prepared and analyzed extensive datasets using R
> and Python. Delivered scientific and outreach presentations.

Research Assistant   October 2018 – January 2021
Center for the Science of Animal Care & Welfare, Chicago Zoological Society
Languages: R, MATLAB

> Conducted 7 behavioral research studies on species including white-bellied pangolins, ring-
> tailed lemurs, Amur leopards, sloth bears, Western lowland gorillas, reticulated giraffes,
> African lions, Sumatran tigers, and red river hogs. Collaborated with animal care staff to design
> behavior and welfare monitoring systems. Communicated with AZA-accredited institutions to
> gather letters of support for grant packages. Disseminated research at national and international
> conferences and outreach events.

Research Intern   May 2017 – October 2018
Lester E. Fisher Center for the Study & Conservation of Apes, Lincoln Park Zoo
Languages: R

> Conducted an independent research project on how visitors impact visitor-directed aggression
> by Japanese macaques. Communicated research aims to zoo guests. Trained incoming interns
> on Japanese macaque identification and behavioral monitoring protocols.

Behavioral and Enrichment Intern   September 2016 – February 2017
Lincoln Park Zoo

> Developed ethograms for species across the zoo. Conducted an independent research project to
> examine the influence of enrichment on the welfare of Francois' langurs. Attended operant
> conditioning training sessions for a variety of species. Designed novel enrichment items.

PUBLICATIONS
*denotes mentee

Woods, J. M. & Adcock, S. J. J. *Under Review.* The maternal-offspring relationship in tailed and docked ewes and their lambs. *Applied Animal Behaviour Science.*

Woods, J. M. & Adcock, S. J. J. *Under Review.* Sexual attractivity and receptivity in tailed and docked ewes. *Applied Animal Behaviour Science.*

Woods, J. M. & Adcock, S. J. J. (2025). Healing progression of tail docking and ear tag wounds in lambs. *Scientific Reports, 15,* 3061. https://doi.org/10.1038/s41598-025-86204-7

Woods, J. M. & Adcock, S. J. J. (2024). Validation of an indoor real-time location system for tracking sheep. *Computers and Electronics in Agriculture, 227,* 109535. https://doi.org/10.1016/j.compag.2024.109535

Woods, J. M. & Adcock, S. J. J. (2023). Estimating animal location from non-overhead camera views. *Applied Animal Behaviour Science, 266,* 106032. https://doi.org/10.1016/j.applanim.2023.106032

Woods, J. M. & Miller, L. J. (2022). Bird welfare in zoos and aquariums: General insights across industries. *Journal of Zoological and Botanical Gardens, 3*(2), 198-222. https://doi.org/10.3390/jzbg3020017

O'Malley, M.*, **Woods, J. M.**, Bryant, J., & Miller, L. J. (2021). How is Western lowland gorilla (*Gorilla gorilla gorilla*) behavior and physiology impacted by 360° visitor viewing access? *Animal Behavior and Cognition, 8*(4), 468-480. https://doi.org/10.26451/abc.08.04.02.2021

Woods, J. M., Lane, E., & Miller, L. J. (2020). Preference assessments as a tool to evaluate environmental enrichment. *Zoo Biology, 39*(6), 382-390. https://doi.org/10.1002/zoo.21566

Woods, J. M., Ross, S. R., & Cronin, K. A. (2019). The social rank of zoo-housed Japanese macaques is a predictor of visitor-directed aggression. *Animals, 9*(6), 316. https://doi.org/10.3390/ani9060316

MANUSCRIPTS IN PREPARATION

Woods, J. M. & Adcock, S. J. J. *In Preparation.* Predicting parturition and identifying pain in docked and undocked ewes. *PLoS One.*

Woods, J. M. & Adcock, S. J. J. *In Preparation.* The influence of tail docking on fecal egg count and sheep microbiome composition. *Journal of Animal Science.*

Pantel, S. K.*, **Woods, J. M.**, Adcock, S. J. J., & Crawford K. L. *In Preparation.* Traumatic neuroma formation indicates chronic pain in tail-docked sheep. *Research in Veterinary Science.*

Woods, J. M. & Adcock, S. J. J. *In Preparation.* Untangling the threads: Association networks of docked and undocked lambs. *Animal Behaviour.*

Woods, J. M. & Adcock, S. J. J. *In Preparation.* Investigating the trans-generational effects of neonatal tail docking on sheep behavior. *Animal Welfare.*

PRESENTATIONS

Refereed conference abstracts
*denotes mentee

Pantel, S. K.*, **Woods, J. M.**, Adcock, S. J. J. & Crawford, L. K. Characterizing neuroma formation after tail docking in sheep. American College of Veterinary Pathologists, Seattle, Washington, November 2024.

Woods, J. M. & Adcock, S. J. J. Using a real-time location system to assess how tail docking affects lamb activity and proximity to the dam. International Society for Applied Ethology, Curitiba, Brazil, July 2024.

Woods, J. M. & Adcock, S. J. J. Healing progression of tail docking and ear tag wounds in lambs. American Society of Animal Science Midwest Meeting, Madison, Wisconsin, March 2024.

Woods, J. M. & Adcock, S. J. J. The ramifications of tail docking ewes on mating behavior and reproductive performance. American Society of Animal Science, Albuquerque, New Mexico, July 2023.

Adcock, S. J. J., **Woods, J. M.** & Peckler, G. Application of real-time location systems for automated behavioral monitoring in sheep. American Society of Animal Science, Albuquerque, New Mexico, July 2023.

Woods, J. M. & Adcock, S. J. J. Accurately determining animal location from non-aerial cameras. International Animal Behavior Twitter Conference, virtual, January 2023.

Wudi, S. T.*, **Woods, J. M.** & Adcock, S. J. J. Who's lying? Machine learning and lying behavior in sheep. Animal Behavior Society, virtual, July 2022 (Poster).

Woods, J. M. & Adcock, S. J. J. Validation of novel ultra-wideband technology to monitor captive animal movement. Animal Behavior Society, San Jose, Costa Rica, July 2022 (Poster).

Woods, J. M. & Adcock, S. J. J. Validation of novel ultra-wideband technology to monitor captive animal movement. Midwest Primate Interest Group, Chicago, IL, October 2021 (Poster).

O'Malley, M.*, **Woods, J. M.**, Bryant, J. & Miller, L. J. How is Western lowland gorilla (*Gorilla gorilla gorilla*) behavior and physiology impacted by 360-degree viewing access? Midwest Primate Interest Group, Chicago, IL, October 2021.

Woods, J. M. & Miller, L. J. Exploring the relationship between daily visitor attendance and aggression displayed by three zoo primate species. Midwest Primate Interest Group meeting, virtual, October 2020.

Woods, J. M. & Miller, L. J. Exploring the relationship between daily visitor attendance and aggression displayed by three zoo primate species. International Society for Applied Ethology, virtual, August 2020.

Woods, J. M., Lane, E., & Miller, L. J. Preference assessments as a tool to evaluate environmental enrichment. Animal Behavior Society, virtual, July 2020.

Woods, J. M., Lane, E., & Miller, L. J. Preference assessments as a tool to evaluate environmental enrichment. Midwest Primate Interest Group, DeKalb, IL, October 2019.

Woods, J. M., Ross, S. R., & Cronin, K. A. Japanese macaque rank is a predictor of aggression toward zoo visitors. Animal Behavior Society, Chicago, IL, July 2019.

Woods, J. M., Ross, S. R., & Cronin, K. A. Japanese macaque rank is a predictor of aggression toward zoo visitors. Midwest Primate Interest Group, Bloomington, IN, October 2018.

Woods, J. M., Ross, S. R., & Cronin, K. A. Japanese macaque rank is a predictor of aggression toward zoo visitors. American Society of Primatologists, San Antonio, Texas, August 2018.

Woods, J. M., Wark, J. D., & Kao, A. Using behavioral observations of François' langurs to evaluate the effectiveness of enrichment. Midwest Primate Interest Group, Evanston, IL, October 2017 (Poster).

Woods, J. M., Wark, J. D., & Kao, A. Using behavioral observations of François' langurs to evaluate the effectiveness of enrichment. Association of Zoos and Aquariums, Indianapolis, IN, August 2017 (Poster).

Non-refereed presentations

Woods, J. M. & Adcock, S. J. J. Healing progression of tail docking and ear tag wounds in lambs. School of Veterinary Medicine Research Day, University of Wisconsin-Madison, March 2025 (Poster).

Woods, J. M. & Adcock, S. J. J. Healing progression of tail docking and ear tag wounds in lambs. Graduate Student Infographic Poster Competition, University of Wisconsin-Madison, April 2024 (Poster).

Woods, J. M. & Adcock, S. J. J. The ramifications of tail docking ewes on mating behavior and reproductive performance. Graduate Student Infographic Poster Competition, University of Wisconsin-Madison, May 2023 (Poster).

Wudi, S. T.*, **Woods, J. M.** & Adcock, S. J. J. Who's lying? Machine learning and lying behavior in sheep. Undergraduate Research Scholar Symposium, University of Wisconsin-Madison, May 2022.

Woods, J. M. & Adcock, S. J. J. Where are ewe? Validation of novel location technology. Graduate Student Infographic Poster Competition, University of Wisconsin-Madison, May 2022 (Poster).

Seminars

Woods, J. M. & Adcock, S. J. J. The influence of tail docking ewes on behavior surrounding parturition. Animal and Dairy Sciences Seminar, University of Wisconsin-Madison, December 2024.

Woods, J. M. & Adcock, S. J. J. The ramifications of tail docking ewes on mating behavior and reproductive performance. Animal and Dairy Sciences Seminar, University of Wisconsin-Madison, November 2023.

Outreach presentations

Woods, J. M. Sheep social networks: Will ewe be my friend? Catalysts for Science Policy, Delta Beer Lab, Madison, WI, April 2025.

Woods, J. M. A day in the life of an animal welfare scientist. Skype a Scientist, Oak Knoll Middle School's Environmental Science class, virtual, September 2023.

Woods, J. M. & Adcock, S. J. J. Tail docking: Considering the long and short of it for sheep welfare. Day at the Capitol, Madison, WI, April 2023.

Woods, J. M. & Adcock, S. J. J. Behavioral needs. University of Wisconsin-Madison, Animal Welfare Course, September 2022.

Woods, J. M. The tail of a lamb: Exploring welfare implications of docking sheep. Lincoln Park Zoo's Animal Welfare Science Group, virtual, May 2022 (invited).

Woods, J. M., Peckler, G., Adcock, S. J. J. Tracking animal behavior for better health. Sheep Day, Arlington, WI, April 2022.

Woods, J. M. & Lauderdale, L. K. Careers in zoo science. King Scholars Career Panel, virtual, October 2020.

Woods, J. M., Yen, I. & Huskisson, S. Careers in animal behavior. Teen Conservation Leadership Conference Panel, Chicago, IL, July 2019.

AWARDS AND DISTINCTIONS

2024   The Humane Society International Travel Award ($2500)
2024   Department of Animal and Dairy Sciences Infographic Poster Competition Award ($500)
2023   Department of Animal and Dairy Sciences Infographic Poster Competition Award ($500)
2022   Animal Behavior Society Graduate Student Travel Award ($300)
2022   NSF GRFP Honorable Mention
2021   NSF GRFP Honorable Mention

TEACHING AND MENTORING

Undergraduate Supervisor   December 2021 – Present
University of Wisconsin-Madison

    Supervised 12 undergraduate research interns. Trained interns on safety and appropriate on-farm protocols for handling sheep. Taught data collection techniques such as wound and infrared thermal photography and behavioral scan sampling. Created in-depth SOPs for interns to follow when aiding in research. Performed inter-observer reliability to ensure rigor in data collection and analysis.

Education Officer   August 2020 – Present
Midwest Primate Interest Group (MPIG)

    Developed a student competition for the MPIG annual conference. Organized judges and student participants. Provided timely feedback to student presenters.

ANSCI245: Animal Welfare Course
University of Wisconsin-Madison
Discussion Instructor   September 2024 – December 2024

    Led and instructed three 2-hour discussion sections with a total enrollment of 84 students. Developed course lectures. Graded course assignments and provided constructive feedback. Supervised a graduate teaching assistant. Taught students how to write a scientific paper for end of term project successfully.

Teaching Assistant   August 2021 – December 2023

    Graded course assignments and provided constructive feedback. Developed course lectures and activities. Taught undergraduate students how to conduct literature reviews and write scientific reports.

Teaching Assistant, ANSCI865: Design and Analysis of Biological Studies   January 2024 – May 2024
University of Wisconsin-Madison

    Graded course assignments and provided constructive feedback. Held discussion sessions with graduate students to review course material and answer questions.

Collaborative Mentoring Program for Animal & Dairy Science Students (COMPASS)
University of Wisconsin-Madison
Mentor   September 2021 – May 2024

    Advised 3 mentees on navigating their undergraduate careers over one year. Connected mentees to faculty and research staff within their area of interest.

Lead Coordinator   September 2022 – August 2023

    Coached graduate students on effective mentoring skills to be applied to their undergraduate mentees. Matched mentors to mentees based on compatibility. Organized and led orientations for mentors and mentees as well as monthly professional development trainings for mentors. Arranged a networking lunch with faculty, graduate, and undergraduate students.

Assistant Coordinator   September 2021 – August 2022

Aided in the launch of a new mentoring program between graduate and undergraduate students. Helped match mentors to mentees and design and conduct orientations and professional development opportunities.

Mentor, BIO152: Introductory Biology Independent Research Project   December 2021 – May 2023
University of Wisconsin-Madison

Developed independent research projects for 3 undergraduate students to analyze and present over the course of a semester. Taught students about research design, statistical analysis, and developing an effective presentation.

Graduate Supervisor   August 2022 – November 2022
University of Wisconsin-Madison

Developed a research project on the impacts of tail docking on dam-lamb behavior for a visiting Master's student from Italy to work on. Trained the student in video analysis techniques.

Mentor, Undergraduate Research Scholar Program   September 2021 – September 2022
University of Wisconsin-Madison

Led a student through a year-long research project on detecting sheep behavior from accelerometer data using a machine-learning model. Student presented results at an international conference.

Intern Supervisor   October 2018 – January 2021
Chicago Zoological Society – Brookfield Zoo

Trained 7 research interns to conduct behavioral observations using ZooMonitor. Helped design independent research projects. Supervised the development of scientific presentations. Supervised 1 research intern through the process of analyzing data and writing a study for publication.

Substitute Teacher   January 2018 – September 2018
Evanston/Skokie School District 65

Disseminated lesson plans to students (preschool-middle school). Developed lesson plans and activities. Engaged students to complete assignments. Guided students with learning disabilities to succeed in their assignments.

Peer Mentor   September 2014 – May 2016
DePaul University Psychology Department

Guided undergraduate students through coursework and scheduling. Explained the degree options within the Psychology department and the necessary course trajectories for each. Provided resources for services and programs across campus to improve their success.

SERVICE AND OUTREACH

Animal Science Graduate Student Association (ASGSA), University of Wisconsin-Madison – Vice President (2023-2024), Professional Development Chair (2024-present)

Research and Graduate Education Committee, University of Wisconsin-Madison – Student Member (2021-present)
Midwest Primate Interest Group – Social Media Chair and Education Officer (2020-present)
DePaul University's [Featured Alumni Campaign](#)
Chicago Public School Science Fair, 2019 – Judge
West Suburban Consortium for Academic Excellence Science Fair, 2019 – Judge

Journal Reviews
Behavioral Processes, Animals, Journal of Zoological and Botanical Gardens, Frontiers in Veterinary Science, Animal Behavior and Cognition

Grant Reviews
Association of Zoos and Aquarium's Conservation Grants Fund (2020)