

We facilitate the well-being of animals using sound science and ethics to investigate and promote the best animal care and management practices.

Purdue shines once again at the Animal Welfare Assessment Contest



Purdue – and CAWS – were well represented by faculty and students at the 2024 Fall AVMA Animal Welfare Assessment Contest held November 22-24, 2024, at University of Wisconsin – River Falls. The undergraduate student Team Purdue placed 3rd, graduate student team Black & Gold placed 2nd, and graduate student team Boilermaker Special placed 4th in the team divisions. Hayley Sutherland placed 2nd in the individual division. Purdue faculty, Dr. Marisa Erasmus coached the teams and Dr. Heather Neave and Purdue researcher Dr. Judith Stella participated in the contest as judges. Dr. Candace Croney also contributed by writing the commercial dog breeding case study.

Team Black & Gold: Levi Byrd, Maddie Pinkerton, Elizabeth Schafer, Hayley Sutherland

Team Boilermaker Special: Gideon Ajibola, Mattie DeHaven, Nathan Griffith, Zimbabwe Osorio Santos, Isabella von Seggern

Team Purdue: Jenna Boewe, Teresa Carlson and Lexi Smith

Recent CAWS Seminars



March 26th, 2025: Dr. Suresh Neethirajan, Associate Professor, Agriculture and Computer Science, Dalhousie University

Animal Agency in Livestock Farming: Human-Animal-Computer Interactions in Human-Centric Intelligent Systems
co-sponsored by the Purdue University Department of Animal Sciences

The integration of Artificial Intelligence (AI) in livestock farming is transforming human-animal-computer interactions (HACI), raising profound ethical, legal, and scientific questions. This talk explores how digital minds and artificial agents mediate relationships between humans and animals, focusing on interspecies communication, animal agency, and ethical AI models in precision agriculture.

February 19th, 2025: Dr. Esteban Fernandez-Juricic, Professor, Biological Sciences, Purdue University

Opportunities for integrating animal sciences and quantitative ecology: A personal perspective

I will describe some opportunities for the research integration between animal sciences and quantitative ecology. I will discuss some examples that led to funded collaborations between the Departments of Animal Sciences and Biological Sciences, as well as how to embrace the era of research transparency and computational reproducibility through a better understanding of both classic statistical analyses and newly developed quantitative tools (i.e., artificial intelligence).



Seminar recordings are available to watch on the Events page of the CAWS website: vet.purdue.edu/CAWS/news-events.php

Supporting our mission

The Center for Animal Welfare Science (CAWS) was formally established in 2014.

Supported jointly by the Colleges of Agriculture and Veterinary Medicine, and led by Dr. Candace Croney, CAWS aims to address contentious social issues in animal welfare, inform policy development, and explore the broad effects of the human-animal bond, our obligations to animals, and their evolving roles in society.

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Want to contribute to the next issue?

Get in touch!

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Awards and Accolades

Drs. Marisa Erasmus and Leanne Nieforth received a College of Agriculture AgSEED award to enhance elementary school students' empathy and understanding of animal welfare.



Dr. Schinkel, with his team at the IHT Group, won the AE50 Award: Recognizing Excellence in Agricultural Innovation, for their IHT Cooling Pads, which reduce heat stress in sows.

Dr. Darren Karcher's PhD student, Brittney Emmert, was awarded a predoctoral fellowship from the Agriculture and Food Research Initiative's (AFRI) Education and Workforce Development Program (USDA/NIFA) to investigate keel bone fractures in commercial laying hens.



Celebrating Contributions: Retiring CAWS Members



Dr. Nancy Edwards

Dr. Edwards is retiring after almost 28 years at Purdue. Her research has included studies of animal-assisted therapy, the impact of aquariums on the health and behavior of individuals with dementia, and the use of robotic animals as companions for elderly people.

Dr. Edwards has received several teaching and leadership awards, a testament to her dedication to her role as faculty and mentor. We are grateful for her contributions to our understanding of the human-animal bond!

Dr. Allan Schinckel

Dr. Schinckel has been a member of Purdue University's faculty for over 42 years. In addition to his research, teaching and mentorship, he is co-developer of award-winning cooling pads designed to reduce heat stress and improve welfare in sows.

Although he is retiring, Dr. Schinckel will still be on campus, continuing some research and teaching graduate courses. We appreciate Dr. Schinckel's contribution to CAWS over the years.



New CAWS Members

Since Fall 2024, CAWS has welcomed the following new members:

- Dr. Emily Curry
- Dr. Amanda Darbyshire
- Dr. Heather Neave
- Dr. Leanne Nieforth

Check out their research interests on our website!



To update us about **your** work and its impacts, or to share information that may be of value to our members, please reach out to us at: caws@purdue.edu

CAWS in the Media

Yes, cats fetch too



Dr. Candace Croney's research team worked with Agricultural Communications at Purdue to release an accessible summary of their study "Making fetch happen: Prevalence and characteristics of fetching behavior in owned domestic cats (*Felis catus*) and dogs (*Canis familiaris*)" in the Conversation.

The article received over 190,000 views, and was picked up by several media outlets, including PBS and the Washington Post.

Eggs on everyone's minds

Due to increased egg prices, and the spread of Highly Pathogenic Avian Influenza (HPAI), Dr. Darren Karcher has been fielding LOTS of public questions about biosecurity in egg production operations, ensuring food safety, and the impacts on the consumer.



He recently spoke with the Daily Journal, WVPE, Farm Progress, and Inside Indiana Business on what is happening on the ground to address HPAI.

New and Collaborative CAWS Publications

highlighting CAWS members working together

Mulim, H.A., Hernandez, R.O., Vanderhout, R., Bai, X., Willems, O., Regmi, P., **Erasmus, M.A.** and **Brito, L.F.**,(2024). Genetic background of walking ability and its relationship with leg defects, mortality, and performance traits in turkeys (*Meleagris gallopavo*). *Poultry Science*, 103(7), 103779.

Kroger, C. A., Lee, W., Fraley, G. S., **Brito, L. F.**, & **Karcher, D.** (2024). Genetic parameters for egg quality traits in Pekin ducks. *Poultry Science*, 103(12), 104264.

Green, H. E., Oliveira, H. R. D., Alvarenga, A. B., Scramlin-Zuelly, S., Grossi, D., **Schinckel, A. P.**, & **Brito, L. F.** (2024). Genomic background of biotypes related to growth, carcass and meat quality traits in Duroc pigs based on principal component analysis. *Journal of Animal Breeding and Genetics*, 141(2), 163-178.

Bhowmik, N., Cook, S. R., **Croney, C.**, Barnard, S., Romaniuk, A. C., & **Ekenstedt, K. J.** (2024). Heritability and Genome-Wide Association Study of dog behavioral phenotypes in a commercial breeding cohort. *Genes*, 15(12), 1611.

Whittle, R. H., **Karcher, D. M.**, **Erasmus, M. A.**, & Weimer, S. L. (2025). Effects of genetic strain, stocking density, and age on broiler behavior. *Poultry Science*, 104(2), 104723.



Kern, J., Jorgensen, M. W., Boerman, J. P., **Erasmus, M.**, Johnson, J. S., & **Pempek, J. A.** (2024). Effect of repeated HPA axis stimulation on hair cortisol concentration, growth, and behavior in preweaned dairy cattle. *Journal of Animal Science*, 102, skae171.

Abraham, M. E., Serpa, P., **Fraley, G. S.**, & **Karcher, D. M.** (2025). Age effects on measurements of hypothalamic-pituitary-adrenal axis activation in laying hens. *Poultry Science*, 104844.

Abraham, M. E., Robison, C. I., Serpa, P. B., Strandberg, N. J., **Erasmus, M. A.**, **Fraley, G. S.**, ... & **Karcher, D. M.** (2024). Cage-free pullets minimally affected by stocking density stressors. *Animals*, 14(10), 1513.

Regional, National & International Welfare Events



PEC Symposium - Welfare by Design: Tech-Driven Advances in Poultry Care

online: May 20th, 9 AM to noon ET

Register at: poultry-welfare-extension.com/

Speakers:

- Dr. Marian Dawkins
- Dr. Janice Siegford
- Dr. Tom Tabler

May 21-23: Dairy Cattle Welfare Symposium, Columbus, OH

June 22-25: American Dairy Science Association Annual Meeting, in Louisville, KY

June 24-26: UFAW International Animal Welfare Conference 2025, virtual

July 14-17: Poultry Science Association Annual Meeting, in Raleigh, NC

August 4-8: 58th Congress of the International Society for Applied Ethology (ISAE), in Utrecht, The Netherlands

September 18-19: 7th European Veterinary Congress of Behavioural Medicine and Welfare (EVCBMAW), in Helsinki, Finland

October 20-23: International Symposium on Animal Environment and Welfare (ISAEW), in Chongqing, China (hybrid virtual option available)

