NWRC Research Scientists: Dr. Page E. Klug

Last Modified:

Dr. Page Klug is the Supervisory Research Wildlife Biologist and Field Station Leader at NWRC’s North Dakota Field Station.

As the Project Leader for Bird Damage to Agriculture, Dr. Klug’s research focuses on methods development and population biology of birds in conflict with agricultural crops, concentrated animal feeding operations, and urban environments. Her primary research focus is on the development of new tools and strategies for managing conflicts between sunflower producers and blackbirds. Methods studied include frightening devices, wildlife repellents, and evading strategies, such as wetland management, decoy conservation plots, and altered agricultural practices. Klug works to optimize methods by accounting for blackbird biology and landscape ecology at various scales.

Research Project

Bird Damage to Agriculture

This project focuses on evaluating the ability of drones and other auditory and visual deterrent tools to disperse nuisance birds; studying how seasonal timing, siting, and spacing of crops along with surrounding landscape influence distribution of birds and crop damage; evaluating alternative crops (e.g., oilseed hemp) for use as decoy crops to protect sunflower or other high value commodities; and studying how blackbird movement, migration, and breeding influence autumn bird populations.



Current Research

- Development of best practices for using drones as frightening devices to reduce avian crop damage
- Development of methods for monitoring birds during the non-breeding season
- Evaluations of statewide blackbird damage to sunflower in the Northern Great Plains and its relationship to producer estimates
- Evaluation of strategies to encourage birds to evade sunflowers and focus on alternative forage

- Evaluation of blackbird migration, breeding physiology, and behavior across the annual cycle

Academic Affiliations

- Adjunct Faculty in Biological Sciences and Affiliated Graduate Faculty at North Dakota State University

Publications

View Dr. Page E. Klug's publications.

- Google Scholar
- ResearchGate

Education

- Ph.D., Biology, Kansas State University Dissertation: Interactions between grassland birds and their snake predators: the potential for conservation conflicts in the tallgrass prairie
- M.S., Biology, The effects of grassland patch and landscape characteristics on the activity and abundance of predators of grassland birds, University of Nebraska at Omaha
- B.S., Environmental Science and Policy/Biology, Drake University

Contact

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