

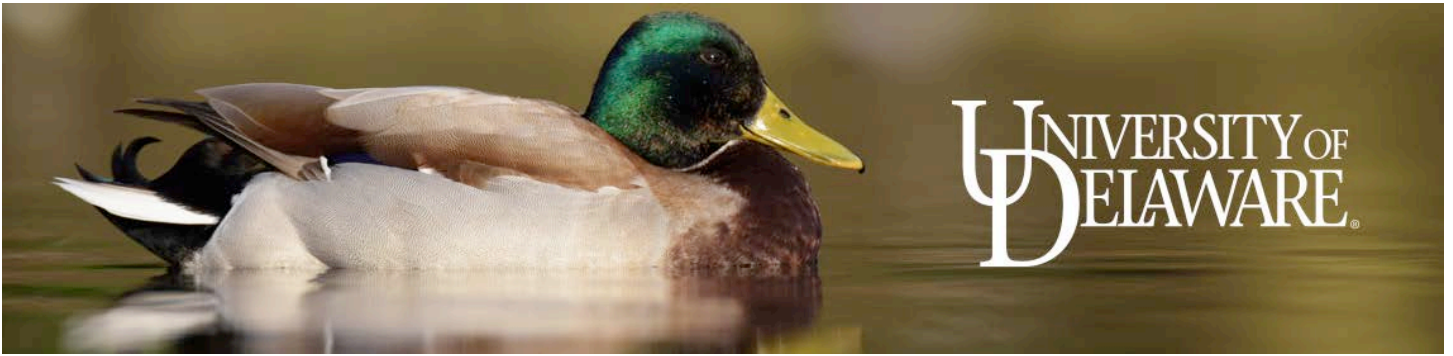


Waterfowl and Upland Gamebird Conservation Program: A Prospectus for Partnership

University of Delaware

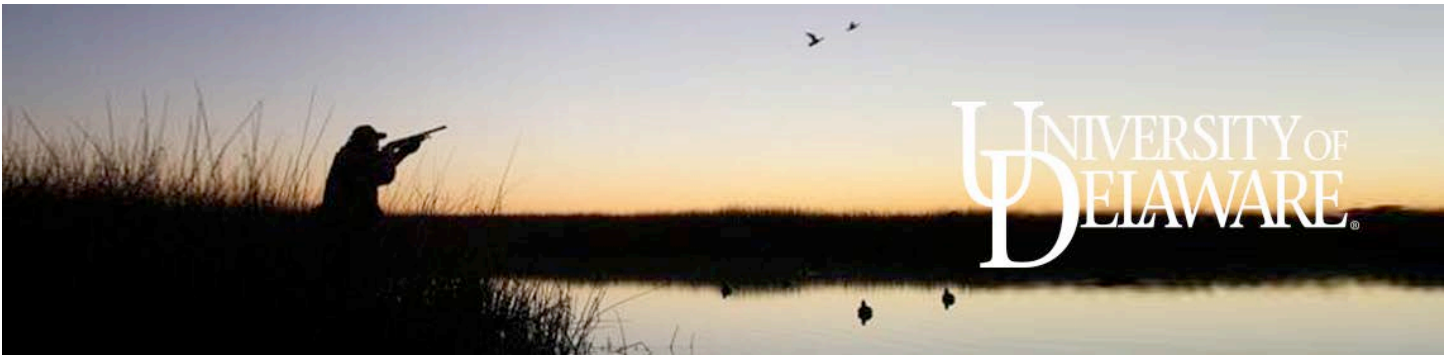
“Gamebirds and their habitats are sustained through efforts of well-trained professionals dedicated to their conservation. North America waterfowl and upland gamebirds could be in jeopardy if universities decrease or discontinue training specialists in gamebirds and their habitats. The University of Delaware has a long, productive history in teaching and conducting research for conservation of waterfowl and upland gamebirds in the Atlantic Flyway. It is an internationally recognized program that deserves sustainment.”

Richard M. Kaminski, Ph.D.
James C. Kennedy Director of Waterfowl and Wetlands
Clemson University



The University of Delaware proposes future partnerships to ensure the long-term survival of waterfowl, upland gamebirds, and their habitats at the heart of the Atlantic Flyway.

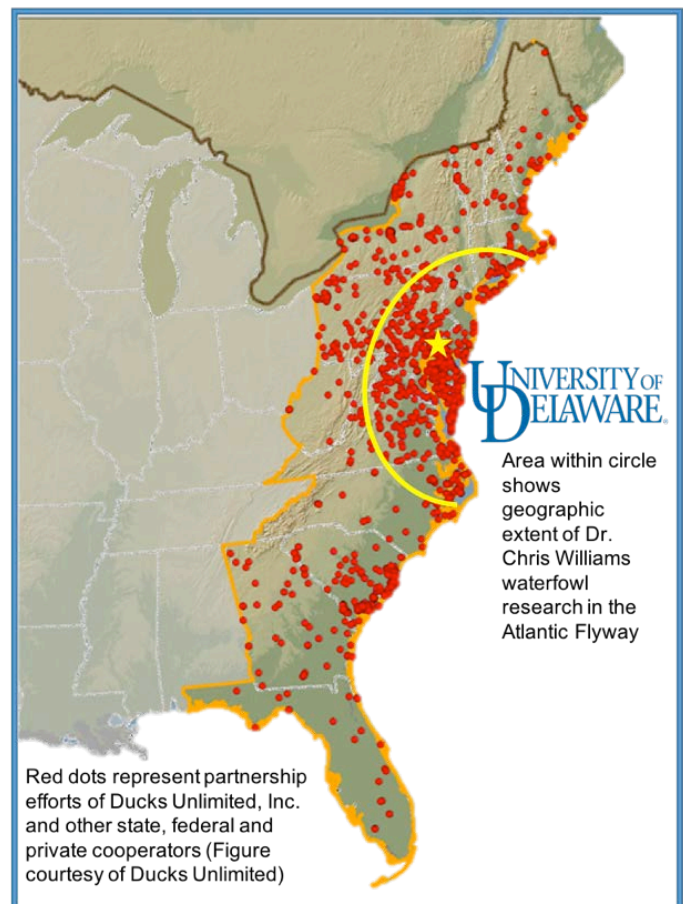
Under the direction of Dr. Chris Williams, an internationally noted waterfowl and upland gamebird expert, the University of Delaware's program has grown to prominence and is widely recognized for having produced a strong generation of conservation leaders. Thanks to extensive existing partnerships across the Atlantic Flyway and our history of exceptional research and outreach programs, the University of Delaware is uniquely poised to take an even larger role in the future of waterfowl, upland gamebirds, and wildlife conservation. The time for action is now.



The University of Delaware: A Legacy of Excellence

The University of Delaware is a Land Grant, Sea Grant and Space Grant institution. The Carnegie Foundation for the Advancement of Teaching classifies UD as a research university with very high research activity—a designation accorded to less than three percent of U.S. colleges and universities. UD ranks among the nation's top 100 universities in federal R&D support for science and engineering and ranked as 29th best Public Institution in the United States by U.S. News and World Report. A state-assisted, privately governed institution, UD offers a broad range of degree programs: three associate programs, 147 bachelor's programs, 119 master's programs, 54 doctoral programs, and 15 dual graduate programs through our seven colleges and in collaboration with more than 70 research centers. Our student body encompasses nearly 23,000 students including more than 18,300 undergraduates, more than 3,700 graduate students, and nearly 800 students in professional and continuing studies from across the country and around the globe.

The University of Delaware is situated at the heart of the 3000-mile Atlantic Flyway and houses one of the most robust populations of wintering waterfowl in the United States as well as historically some of the most robust northern bobwhite populations in the United States. The Mid-Atlantic contains several very significant areas for gamebirds including the Chesapeake Bay, Delaware Bay, New Jersey coast, Long Island, the New Jersey Pine Barrens, and the Appalachian Mountains. The Mid-Atlantic Coast provides wintering habitat for at least 20 species of waterfowl including about: 70 percent of black ducks, 80 percent of Atlantic brant, 80 percent of greater snow geese and 80 percent of Atlantic and North Atlantic Flyway populations of Canada geese. The region also supports breeding populations of wood ducks, black ducks, and mallards.





The Department of Entomology and Wildlife Ecology

The Department of Entomology and Wildlife Ecology offers outstanding academic programs for students preparing for research, teaching, and extension careers in wildlife conservation, entomology, and ecology. Our teaching, research, and extension efforts emphasize whole-organism biology, conservation biology, and the interactions between humans and other species. Research and teaching in the field of wildlife includes topics like: wildlife conservation and management, wildlife habitat management, wildlife policy and administration, mammalogy, ornithology, wildlife research techniques, wildlife population ecology, and conservation biology. A mixture of laboratory and field learning experiences are coupled with in-class lectures and assignments. The department offers two Bachelor of Science (B.S.) degree programs: Wildlife Ecology and Conservation, and Insect Ecology and Conservation; two Master of Science (M.S.) degree programs in Wildlife Ecology, and Entomology; and a Ph.D. in Entomology and Wildlife Ecology. With 12 faculty and three extension professionals, the program enrolls 147 undergraduate, 80 minors, and 36 graduate students and postdoctoral researchers. Our graduates serve as college professors and biologists at state, federal, and private organizations around the world.



Dr. Williams teaching waterfowl ecology



Faculty Leadership

Dr. Chris Williams grew up in Juneau, Alaska and received undergraduate degrees in Zoology and Botany from Miami University of Ohio, and M.S. and Ph.D. degrees in Wildlife Ecology from the University of Wisconsin–Madison. For the last 14 years he has been a professor of Wildlife Ecology at the University of Delaware leading an internationally recognized program in waterfowl and upland gamebird conservation. He teaches classes in “Wildlife Conservation and Ecology,” “Wildlife Policy and Administration,” “Population Ecology,” and a seminar in “Waterfowl Ecology.” Dr. Williams has more than 23 years of experience researching wildlife with emphasis on waterfowl and upland gamebirds. Dr. Williams has mentored 28 graduate/post-doctoral students, 29 undergraduate research students, published 67 publications, and presented his research over 190 times at national and regional meetings. Dr. Williams serves as an Associate Editor for The Journal of Wildlife Management and the National Quail Symposium. He hosted the 7th North American Duck Symposium in February 2016 for the first time on the Atlantic Flyway, bringing regional priorities and issues to 430 attending waterfowl biologists from North America and the world.



Dr. Chris Williams

Watch three videos highlighting Dr. Williams’ research as it relates to conservation of Northern Bobwhite reintroduction into the New Jersey Pine Barrens, American Black Ducks in the Chesapeake Bay, and Atlantic brant goose in the Arctic:

Northern Bobwhite: <https://www.youtube.com/watch?v=yIM10642nqA>

Black Ducks: https://www.youtube.com/watch?v=_Nki4ovGrNI

Brant: <https://www.youtube.com/watch?v=irlurt-2yBI>



A History of Strong Partnership

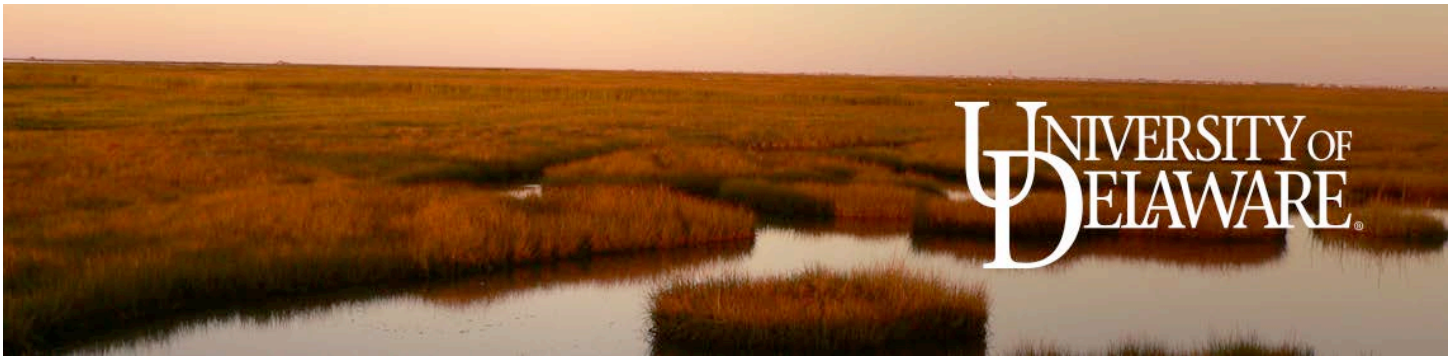
Over the years, Dr. Chris Williams’ waterfowl and upland gamebird program has established numerous partnerships and raised \$3.8 Million to assure critical conservation questions are being answered while training the next generation of waterfowl and gamebird biologists.

Dr. Williams’ partnerships include:

- Mr. and Mrs. William F. D’Alonzo
- Greentree Foundation
- Tall Timbers Research Center
- New Jersey Audubon
- The Nature Conservancy
- Delaware Environmental Institute
- Wildlife Management Institute
- The Wildlife Society
- New Jersey Waterfowlers
- Ducks Unlimited
- Virginia Department of Game and Inland Fisheries
- Delaware Division of Fish and Wildlife
- New Jersey Division of Fish and Wildlife
- North Carolina Wildlife resources Comission
- Atlantic Flyway Council Migratory Gamebird Technical Section
- United States Fish and Wildlife Service
- Great Lakes Joint Venture
- Arctic Goose Joint Venture
- Black Duck Joint Venture
- Wildlife Services USDA
- Kenai National Wildlife Refuge
- Bombay National Wildlife Refuge
- Prime Hook National Wildlife Refuge
- United States Forest Service
- United States Geological Service
- Patuxent National Wildlife Research Center
- Polar Continental Shelf Program



Dr. Williams and the University of Delaware Ducks Unlimited student leaders



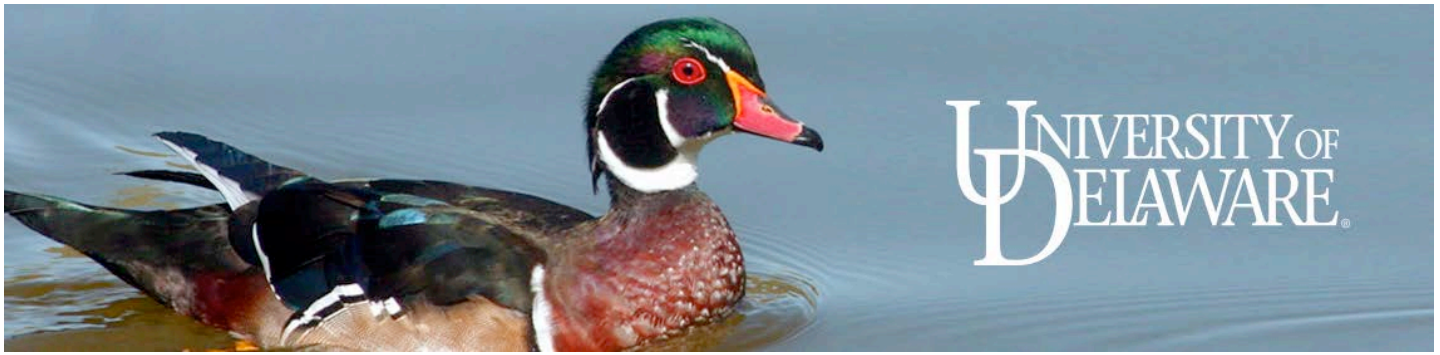
New Generations of Leadership

Dr. Williams and his team have already produced leaders in wildlife conservation. Graduates of the University have been employed at:

- Louisiana State University (Assistant Professor of Wildlife)
- University of Wisconsin-Stout (Assistant Professor)
- Regional Biologist, Ducks Unlimited, Ann Arbor, Michigan
- Waterfowl Research Biologist, Iowa Department of Natural Resources
- Wildlife Biologist at Michigan Department of Natural Resources, Saginaw, Michigan.
- Upland Gamebird Biologist, Ohio Department of Natural Resources
- Wildlife Biologist, U.S. Fish and Wildlife Service, Florida Keys National Wildlife Refuge Complex, Big Pine Key
- Agriculture Policy Coordinator at Association of Fish and Wildlife Agencies, Washington D.C.
- Conservation Project Manager, National Aquarium, Baltimore, Maryland
- Research Coordinator, Alaska SeaLife Center
- Ecologist, Solitude Lake Management
- Northern Bobwhite Conservation Initiative
- American Bird Conservancy
- Environmental Defense Fund, San Francisco, CA
- Tri-State Bird Rescue and Research
- Post-doctoral Researcher, University of Delaware
- Ph.D. Student, University of Florida
- Ph.D. Student, Edith Cowan University, Australia
- M.S. Student, West Virginia University



One of Dr. Chris Williams' past graduates at work in the field



Current Funding Needs

Through future Foundation partnerships, the University plans to invest in achieving three primary goals and will focus on teaching, research, and outreach in waterfowl and upland gamebird conservation.

Teaching

Funds will assist Dr. Williams to 1) provide more coursework in waterfowl and upland gamebird ecology, 2) provide undergraduate research and field experience opportunities, and 3) better equip the next generation of professional wetland, natural resource and conservation managers.

Research

Funding will increase graduate student and faculty research in answering today's priority problems around waterfowl and upland gamebird conservation and habitat management. This research is often performed in conjunction with public and private partners, which increases its reach and impact. Increased program funds would especially support the expansion of research partnerships with State and Non-Governmental Organizations.

Outreach

Funding will enhance UD's outreach to and work with public and private partners, with a primary goal of promoting science-based knowledge to educate undergraduate and graduate students, as well as private stakeholders and grade school students, about gamebird and wetland conservation. Additionally, Dr. Williams is an active advisor to the University of Delaware Ducks Unlimited Student Chapter with fundraising dinners and shoots as well as outreach programs such as wetlands management, Greenwing activities, and waterfowl related field trips.



Dr. Williams (right) and UD's Ducks Unlimited Student Chapter work to restore habitat



Dr. Williams teaches middle school students about the value of waterfowl in the Mid-Atlantic



The University of Delaware appreciates your consideration to help advance the education and conservation of waterfowl and upland gamebirds. We would welcome the opportunity to discuss this prospectus and are prepared to provide a complete proposal at any time.



Dr. Chris Williams and his student team

MARK RIEGER, PH.D.

Dean, College of Agriculture and Natural Resources
mrieger@udel.edu
302-831-2501

JAKE BOWMAN, PH.D.

Chair, Department of Entomology and Wildlife Ecology
jlbowman@udel.edu
302-831-4621

CHRIS WILLIAMS, PH.D.

Professor, Department of Entomology and Wildlife Ecology
ckwillia@udel.edu
302-831-4592

ROB M. RUDD

Senior Director of Corporate and Foundation Relations
robrudd@udel.edu
302-831-7462

DANIEL SARKISSIAN

Director of Development, College of Agriculture and Natural Resources
djs@udel.edu
302-831-4595