

Curriculum Vitae

David M. Williams

Michigan State University
Department of Fisheries and Wildlife
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East Lansing, Michigan 48824
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PRIMARY RESEARCH INTERESTS

Wildlife Ecology and Management, Movement Ecology, Landscape Ecology, Ecological Modeling, Disease Ecology

CURRENT POSITION

Assistant Professor, Fixed Term

Department of Fisheries and Wildlife, Michigan State University, East Lansing, MI
October 2012-present

Associate Director: Boone and Crockett Quantitative Wildlife Center

Department of Fisheries and Wildlife, Michigan State University, East Lansing, MI
January 2014 – present

PREVIOUS POSITIONS

Research Associate, Boone and Crockett Fellow

Department of Fisheries and Wildlife, Michigan State University, East Lansing, MI
June 2010-September 2012

High School Science Teacher and Science Department Chair

Ocean Tides School, Providence, RI
1999-2005

EDUCATION

The State University of New York College of Environmental Science and Forestry

Faculty of Environmental and Forest Biology, Syracuse, NY

Doctor of Philosophy in Fisheries and Wildlife Biology and Management, 2010

Major Professor: William F. Porter, Ph.D.

Dissertation: *Scales of movement and contact structure among white-tailed deer in central New York*

The University of Rhode Island, Kingston, RI

Master of Science in Fisheries and Aquaculture, 1998

Major Professor: Joseph DeAlteris, Ph.D.

Eastern Nazarene College, Quincy, MA

Bachelor of Science in Biology, 1995

PUBLICATIONS

- Guber, AK, **DM Williams**, AC Dechen Quinn, SB Tamrakar, WF Porter, and JB Rose. 2016. Model of pathogen transmission between livestock and white-tailed deer in fragmented agricultural and forest landscapes. *Environmental Modelling and Software* 80:185-200.
- Bowling, AC, **DM Williams**, CJ Parent, WF Porter, MV Schiavone, and B Swift. 2016. Brooding over broods: Regional impacts of habitat quality on wild turkey productivity. *Proceedings of the National Wild Turkey Symposium*
- Snow NP, WF Porter, and **DM Williams**. 2015. Underreporting of wildlife-vehicle collisions does not hinder predictive models for large ungulates. *Biological Conservation* 181: 44-53.
- Guber, AK, **DM Williams**, AC Dechen Quinn, SB Tamrakar, JB Rose, and WF Porter. 2014. SWAT-SIR model for predicting fate and transport of manure-borne pathogens in fragmented agriculture-forest ecosystems. *Proceedings – 7th International Congress on Environmental Modelling* 3:1474-1481.
- Dechen Quinn AC, **DM Williams**, WF Porter, SD Fitzgerald, and K Hynes. 2014. Effects of capture-related injury on post-capture movement of white-tailed deer. *Journal of Wildlife Diseases* 50(2): 250-258.
- Snow NP, **DM Williams**, and WF Porter. 2014. A landscape-based approach for delineating hotspots of wildlife-vehicle collisions. *Landscape Ecology* 29(5): 817-829.
- Williams DM**, AC Dechen Quinn, and WF Porter. 2014. Informing disease models with temporal and spatial contact structure among GPS-collared individuals in wild populations. *PLoS One* 9(1): e84368.
- Dechen Quinn AC, **DM Williams**, and WF Porter. 2013. Landscape structure influences space use by white-tailed deer. *Journal of Mammalogy* 94(2): 398-407.
- Kohl MT, PR Krausman, K Kunkel, and **DM Williams**. 2013. Bison versus cattle: are they ecologically synonymous? *Rangeland Ecology and Management* 66(6): 721-731.
- Williams DM**, AC Dechen Quinn, and WF Porter. 2012. Landscape effects on scales of movement by white-tailed deer in an agricultural-forest matrix. *Landscape Ecology* 27(1): 45-57.
- Dechen Quinn AC, MS Kirchgessner, BA Rudolph, **DM Williams**, and WF Porter. Applying new analytical tools to the wicked problem of wildlife disease management. *Transactions of the 77th North American Wildlife and Natural Resources Conference. (In press)*
- Williams DM**, AC Dechen Quinn, and WF Porter. 2012. Impact of habitat-specific GPS positional error on detection of movement scales by first-passage time analysis. *PLoS One* 7(11): e48439.
- Dechen Quinn AC, **DM Williams**, and WF Porter. 2012. Postcapture movement rates can inform data-censoring protocols for GPS-collared animals. *Journal of Mammalogy* 93(2): 456-463.
- Williams DM**. 2010. Scales of movement and contact structure among white-tailed deer in central New York. The State University of New York College of Environmental Science and Forestry, Syracuse, NY.

Reports & Popular Publications

- Cain RL and **DM Williams**. B&C Records: Why they began, how far they have come, and where they can go. Fair Chase, Fall 2016.
- Dechen Quinn A, **D Williams**, and W Porter. Dead Deer Walking. Fair Chase, Winter 2011.
- Dechen Quinn A, **DM Williams**, W Porter, M Smith, F DeSantis Jr., and S McNulty. 2009. Risk assessment of a chronic wasting disease outbreak in New York: final report.

New York State Department of Environmental Conservation.

DeAlteris JA, A Fridman, **DM Williams**, and J Guimond. 2002. Estimation of the tractive force of the Northern Right Whale (*Eubalaena glacialis*). Revised final report submitted to the National Marine Fisheries Service, Northeast Region Protected Resources Division, Gear Research Team.

Books/Book Chapters in Review or Preparation

WF Porter, CJ Parent, and **DM Williams**, editors. Wildlife and Landscapes: Principles and Applications for Broad-Scale Management. Johns Hopkins University Press in Affiliation with The Wildlife Society, Baltimore, MD, USA. (Accepted: *In progress*).

Manuscripts in Review or Preparation

Crawford, JC, AC Dechen Quinn, **DM Williams**, BA Rudolph, KT Scribner, and WF Porter Fine-scale spatial genetic structure of deer in a suburban landscape. Journal of Mammalogy (*In submission*).

Shirkey B, AO Finley, DR Luukkonen, **DM Williams**, and SR Winterstein. Environmental and anthropogenic factors influencing diving duck distributions on Lake St. Clair. Journal of Great Lakes Research (*In revision*)

Smith M, AC Dechen Quinn, **DM Williams**, WF Porter, and S McNulty. Implications of seasonal migration of white-tailed deer to spread of infectious disease. Journal of Wildlife Management (*In revision*)

Whitman BJ, WF Porter, AC Dechen Quinn, **DM Williams**, J Frair, and HB Underwood. Movement behavior preceding fall mortality for white-tailed deer in central New York. Wildlife Biology (*In revision*).

Williams DM, KS Seewald, AC Dechen Quinn, and WF Porter. To get to the other side: landscape influences on road crossing behavior of white-tailed deer. Journal of Wildlife Management (*In prep*)

Williams DM, NP Snow, and WF Porter. Trophy records and conservation: factors influencing the distribution of trophy white-tailed deer. (*In prep*)

Dechen Quinn AC, **DM Williams**, and WF Porter. Using resource selection functions to inform disease risk models for white-tailed deer. (*In prep*)

TEACHING EXPERIENCE

Michigan State University

Co-Instructor, Spring 2017: *Wildlife Policy* (FW449)

Co-Instructor, Spring 2017: *Wildlife Policy-Study Away in Yellowstone NP* (FW449)

Instructor, Fall 2014: *Analysis and Management of Populations* (FW424)

Instructor, Spring 2012, Fall 2013, 2014, and 2016: *Independent Study in Fisheries and Wildlife* (FW490)

Instructor, Spring 2011-2013: *Applications of Geographic Information Systems to Natural Resources Management* (FW419)

Instructor, Spring 2013: *Advanced Topics* (FW 891)

Guest Lecturer

Fall 2014: *Undergraduate Seminar in Fisheries and Wildlife* (FW293)

Spring 2011: *Effective Scientific Communication* (FW893)

The State University of New York College of Environmental Science and Forestry

Instructor, Fall 2008: *Wildlife Seminar: Theory of Animal Movement* (EFB797)

Co-Instructor, Fall 2007: *Wildlife Seminar: Analysis of Animal Movement* (EFB797)

Co-Instructor, Spring 2007: *Winter Mammalian Ecology* (EFB484/684)
Guest Lecturer

Spring 2007: *Senior Synthesis in Conservation Biology* (EFB414)

Fall 2006: *Wildlife Habitats and Populations* (EFB493/693)

Teaching Assistant, Fall 2006: *Management of Wildlife Habitats and Populations*:
(EFB493/693)

Graduate Teaching Fellow, August 2005-August 2006: National Science Foundation
GK-12 Program at SUNY-ESF

Ocean Tides School, Providence, RI

High School Science Teacher/Department Chair, 1999- 2005: *Biology, Chemistry,
Earth Science, Oceanography, Astronomy, Computer Science*

The University of Rhode Island

Teaching Assistant, Spring & Fall 1997: *Introduction to Zoology* (ZOO111)

Teaching Fellow, August 1995 – Dec 1996: Rhode Island Sea Grant, Marine Science
Education K-12.

MENTORING

Michigan State University: Master's Student Advisor – Jennifer Smith

Michigan State University: Master's Student co-advisor – Leslie Skora

Michigan State University: PhD Student co-advisor –Rebecca Cain, Jonathan Cook,
Alexandra Shoffner

Michigan State University: PhD Candidate co-advisor – Sonja Christensen

Michigan State University: Postdoctoral scholar –Chad Parent, Bryan Stevens, and Joanne
Crawford

Michigan State University: PhD Student Committee – Eric Clark , Talesha Dokes, and Sean
Sultaire

Michigan State University: Master's Student Committee – Yushi Oguchi (completed) and
Brendan Shirkey (completed)

Michigan State University: McNair Scholar's Program – Kyle Seewald (completed)

Michigan State University: MSU Professorial Assistantship Program – Sydney Manning and
Hunter Stanke

Michigan State University: Undergraduate Student Research –Alexandria Dutcher, Steve
Gurney, Kristie Hsieh, Garrett Knowlton, Sydney Manning, Gerald Nowak, Kali Rush,
Kyle Seewald, and Hunter Stanke

HONORS & AWARDS

Boone and Crockett Club Postdoctoral Fellowship (2010-2012)

National Science Foundation Graduate Teaching Fellowship (2005–2006)

Rhode Island Sea Grant Graduate Teaching Fellowship (1995-1996)

RESEARCH GRANTS

Impacts of reporting bias on the spatial patterning of where record-book white-tailed deer
are harvested. MSU CANR Undergraduate Research Funds (2017). **DM Williams**, R
Cain, and G Knowlton (undergraduate). \$2,000

Evaluating the Interaction of Emerging Diseases on White-tailed Deer Populations. The Hal
& Jean Glassen Memorial Foundation (2016-2020). WF Porter and **DM Williams**.
\$260,033

Evaluating fall harvests with practicable wild turkey management models: incorporating
observation uncertainty and regulation cycle. MSU CANR Undergraduate Research
Funds (2017). **DM Williams**, B Stevens, and S Manning (undergraduate). \$2,000

Management solutions for chronic wasting disease. Michigan Department of Natural Resources (2016-2020). WF Porter, **DM Williams**, SA Christensen. \$250,000

Management solutions for chronic wasting disease. Michigan State University—College of Agriculture and Natural Resources, AgBioResearch, and MSU Extension (2016-2020). WF Porter, **DM Williams**, SA Christensen. \$300,000

The role of density-dependence on movement and resource selection of black bears in the Northern Lower Peninsula of Michigan. MSU CANR Undergraduate Research Funds (2016). **DM Williams**, J Smith, and S Gurney. \$2,000

Research and biometrics consultation and support to Wildlife Division via the Boone and Crockett Quantitative Wildlife Center at Michigan State University. Michigan Department of Natural Resources. (2015-2016). WF Porter and **DM Williams**, \$89,606

American woodcock reproductive rates in relation to forest structure at local and landscape scales. Division of Wildlife, Michigan Department of Natural Resources (2015-2019). **DM Williams**, DR Luukkonen, and SR Winterstein. \$319,000.

Assessing habitat-specific detection probabilities for white-tailed deer. Lyman Briggs College, MSU (2014). **DM Williams**, SA Christensen, and K Rush (undergraduate). \$1,000

Local-scale assessment and monitoring of deer populations following a major mortality event. Division of Wildlife, Michigan Department of Natural Resources (2013-2018). PIs: **DM Williams**, WF Porter, and AC Dechen Quinn. \$251,917

Spatially explicit capture-recapture estimation of black bear abundance in Michigan's Northern Lower Peninsula. Division of Wildlife, Michigan Department of Natural Resources (2013-2016). PIs: **DM Williams** and WF Porter. \$183,438

Landscape ecology of trophy-quality white-tailed deer in the eastern United States. Boone and Crockett Club Endowment (2013). **DM Williams**. \$1,000

Monitoring dynamics of white-tailed deer populations and epizootic hemorrhagic disease. Lansing Chapter of Safari Club International (2013). **DM Williams**, AC Quinn, WF Porter. \$5,000

Multi-modeling framework for predicting fate and transport of pathogens originating from wildlife and livestock interactions in fragmented agriculture-forest ecosystems. MSU Water Initiative Research Grant (2012-2013). PIs: A Guber, J Rose, W Porter, **DM Williams**, AC Dechen Quinn. \$99,471

Spatio-temporal dynamics of bear harvest in Michigan's Upper Peninsula. MSU CANR Undergraduate Research Funds (2012). **DM Williams** and G Nowak (undergraduate). \$2,000

Road crossing behaviors of deer. MSU Ronald E McNair Scholars Program (2012). **DM Williams** and K Seewald (undergraduate). \$1,000

Facilitating urban-suburban deer management in Michigan: social, spatial, and population considerations. Division of Wildlife, Michigan Department of Natural Resources (2011-2016). PIs: SJ Riley, WF Porter, KT Scribner, AC Dechen Quinn, **DM Williams**: \$583,202

Lake States woody biomass partnership. US Department of Agriculture (2013). R Miller, A David, B Berguson, W Porter, C Saffron, D Keathly, D Shonnard, D Rothstein, **D Williams**, D Zamora, F Pan, G Roloff, G Stanosz, K Potter-Witter, L Leefers, M Kilgore, P Nzokou, R Froese, and B Jackson. [Michigan State University, Michigan Tech University, University of Minnesota, University of Wisconsin, University of Georgia]. \$9,550,613. (*not funded*)

SERVICE & OUTREACH

Chronic Wasting Disease Summit – National Wildlife Federation – Invited Participant
Michigan Wild Turkey Stakeholder Group
Boone and Crockett Club Official Measurer
MSU FW GSO Research Symposium – Faculty Advisor
Michigan Chapter of the Wildlife Society – President (current), President-elect (2015-16)
MSU Department of Fisheries and Wildlife, Beautification Committee
MSU Department of Fisheries and Wildlife, Search Committee – Robert Montgomery
Cub Scout Pack #15, Lansing, MI – May 2013
MSU FW GSO Research Symposium – Judge – 2011-2013, 2015-2016
MSU Fisheries and Wildlife Club GIS Workshop – Co-creator & Instructor – November 2012
Woodview Church of the Nazarene KidZone Program – September 2012
MSU Undergraduate Research Forum – Judge – Spring 2012
SUNY-ESF Wildlife Ecologist Search Committee: Spring 2010
Syracuse Academy of Science – Science Fair Judge – Spring 2010
SUNY-ESF Environmental Summit – Judge – 2006-2009
SUNY-ESF Environmental Challenge – Judge – 2006-2008
Spanish Action League, Syracuse, NY – July 2008
SUNY-ESF Summer S.C.I.E.N.C.E. – Instructor – 2006 & 2007
CNY Works, Syracuse, NY – July 2007
Girls Inc. of CNY, Syracuse, NY – July 2007
Fowler High School, Syracuse, NY – School-wide science fair organizer – 2006
Lincoln High School, Lincoln, RI – Science Fair Judge – Spring 2004 & 2005
Rhode Island Envirothon – May 1996-1997
RI Boy Scout Explorers Program – 1995-1997
Beta Phi Mu, ENC Biology Club – President – 1994-1995

Reviewer:

Canadian Journal of Zoology
European Journal of Wildlife Research
John Hopkins University Press – Wildlife Society book series
Journal of Wildlife Management
Landscape Ecology
Michigan Journal of Sustainability
Methods in Ecology and Evolution
Northeast Naturalist
Pacific Science
PLoS One
Proceedings of the National Wild Turkey Symposium
Wildlife Society Bulletin

MEDIA

MSU AgBioResearch Annual Report, “Plotting a Solution: Developing Strategies to Prevent Chronic Wasting Disease in Michigan”, Interviewed October 2016.
Great Lakes Echo, “Killing deer helps protect the rest of herd from wasting disease”, (C. Tunney) Interviewed September 2016.
Jack Pine Warbler, Michigan Audubon Society: “MSU students research migratory birds at Burke Lake Banding Station”. Image credit. Jab/Feb 2014.
Spotlight, MSU Fisheries and Wildlife: “GIS mapping solutions for conservation” Image credit. Spring 2012.

Syracuse Post Standard: “Don’t Shoot” (Dave Figura). Interviewed November 2007.
The Daily Orange: “ESF | Goodwill hunting: Research group chases down deer to track movements, prevent spread of disease” (Carrie Jordan). Interviewed October 2007.
NewsChannel 9 WSYR television segment, Syracuse, NY. (Kelly McPherson). October 2007.
ESF: Improve your World television program segment, Syracuse, NY. February 2007.

CONFERENCES & SYMPOSIA

2016:

The Wildlife Society 23rd Annual Conference, Raleigh, NC (October 2016)

Christensen, SA, **DM Williams**, WF Porter, and B Rudolph. Comparison of N-mixture models and distance sampling for abundance estimation: application for a deer population.

Manning, SE, BS Stevens, and **DM Williams**. Evaluating fall harvests with practicable wild turkey management models: incorporating observation uncertainty and regulation cycle.

Smith, JB, **DM Williams**, MT Wegan, DR Etter, and WF Porter. Performance of a Spatial Capture-Recapture Model of Black Bears.

40th Annual Midwest Deer and Wild Turkey Study Group, Carrollton, KY (August 2016)

Cain, RL, **DM Williams**, and WF Porter. Record Book Buck Research Update and Deer Vulnerability. (Invited speakers)

4th Annual Joint Cervid Industry Meeting, Big Rapids, MI (August 2016)

Christensen, SA, **DM Williams**, WF Porter, and B Rudolph. Assessing population impacts of EHD on free-ranging white-tailed deer in Michigan.

Michigan Chapter of The Wildlife Society Annual Meeting, Gaylord, MI (April 2016)

Cain, RL, **DM Williams**, and WF Porter. Record Book Bucks: Assessing Spatially Explicit Trends in Antler Size and Landscape Characteristics that Influence Variation.

Manning, SE, BS Stevens, and **DM Williams**. Evaluating fall harvests with practicable wild turkey management models: incorporating observation uncertainty and regulation cycle.

Rush, KK, SA Christensen, and **DM Williams**. Assessing Habitat-Specific Detection Probabilities for White-Tailed Deer.

Dept. of Fisheries and Wildlife GSO Research Symposium, East Lansing, MI (February 2016)

Smith, JB and **DM Williams**. The Role of Density-Dependence on Movement and Resource Selection of Black Bears in the Northern Lower Peninsula of Michigan.

76th Midwest Fish and Wildlife Conference, Grand Rapids, MI (January 2016)

Cain, RL, **DM Williams**, WF Porter. Spatially Explicit Assessment of Landscape Characteristics Influencing Trophy White-Tailed Deer Harvests Through Time.

Christensen, SA, **DM Williams**, WF Porter, and B Rudolph. Assessing Local-Scale Population Abundance and Recovery of White-tailed Deer Following a Disease Event.

Special Symposium: State-Space Models for Fish and Wildlife Population Dynamics.
Organizers: B Stevens, R Riley, and **DM Williams**.

11th National Wild Turkey Symposium, Tucson, AZ (January 2016)

Bowling, AC, **DM Williams**, CJ Parent, WF Porter, MV Schiavone, and B Swift. Brooding over broods: Regional impacts of habitat quality and precipitation on turkeys in New York State.

2015:

The Wildlife Society 22nd Annual Conference, Winnipeg, Manitoba, CAN (October 2015)

Cain, RL, **DM Williams**, WF Porter. The Big Buck Dilemma: Assessing the Influence of Landscape Characteristics on Boone and Crockett Record White-Tailed Deer Antler Scores.

Crawford, JC, AC Quinn, **DM Williams**, BA Rudolph, KT Scribner, WF Porter. Spatial Genetic Structure of White-Tailed Deer in Urban Landscapes: Potential for Localized Management.

Frens, K, **DM Williams**, and WF Porter. Do Large Forested Areas Mitigate the Effects of Climate Change-Induced Range Shifts on Insectivorous Birds? (*Oral Presentation*)

Rush, KK, SA Christensen, and **DM Williams**. Assessing Habitat-Specific Detection Probabilities for White-Tailed Deer.

Michigan Dept. of Natural Resources Annual Meeting, Roscommon, MI (August 2015)

Rudolph, R, WF Porter, **DM Williams**, SA Christensen. A science-based response to Chronic Wasting Disease. (*Invited speaker*)

Michigan DNR 2015 Deer Management Forum, Roscommon, MI (April 2015)

Christensen, SA, **DM Williams**, WF Porter, B Rudolph, and AC Dechen Quinn. Assessing Local-Scale Population Abundance of White-tailed Deer Following a Disease Event.

MSU Undergraduate Research and Arts Forum, East Lansing (April 2015)

Manning, SE, BS Stevens, and **DM Williams**. Effects of observation uncertainty on harvesting risks for wild turkeys.

Michigan Chapter of The Wildlife Society Annual Meeting, Clare, MI (March 2015)

Christensen, SA, **DM Williams**, WF Porter, B Rudolph, and AC Dechen Quinn. Assessing local-scale population abundance of white-tailed deer following a disease event.

Dutcher, AE, **DM Williams**, DR Etter, MT Wegan, and WF Porter. Black bear movements in time and space with respect to hair-snare stations in the northern-Lower Peninsula of Michigan.

Dept. of Fisheries and Wildlife GSO Research Symposium, East Lansing, MI (February 2015)

Cain, RL, **DM Williams**, and WF Porter. Evaluating the spatial and temporal distributions of trophy white-tailed deer in the Midwestern United States.

Christensen, SA, **DM Williams**, WF Porter, B Rudolph, and AC Dechen Quinn. Assessing local-scale population recovery of white-tailed deer following an epizootic hemorrhagic disease event.

Rush, K, **DM Williams**, and Christensen, SA. Assessing habitat-specific detection probabilities for white-tailed deer.

75th Midwest Fish and Wildlife Conference, Indianapolis, IN (February 2015)

Rush, K, **DM Williams**, and Christensen, SA. Assessing habitat-specific detection probabilities for white-tailed deer.

2014:

The Wildlife Society 21st Annual Conference, Pittsburgh, PA (October 2014)

Christensen, SA, **DM Williams**, WF Porter, B Rudolph, and AC Dechen Quinn. Population abundance and disease occurrence in white-tailed deer: assessing fine-scale population recovery following an epizootic hemorrhagic disease event.

Dutcher, AE, **DM Williams**, MT Wegan, and DR Etter. Improving current population estimation methods for Michigan black bears.

Porter, WF, NP Snow, and **DM Williams**. The unreported: influence of underreporting in assessing risk of wildlife-vehicle collisions.

Snow, NP, WF Porter, AO Finley, BA Rudolph, and **DM Williams**. The suburb effect: Frequency of deer-vehicle collisions associated with suburban environments throughout the Midwest United States.

Williams, DM. A short primer on landscape ecology. (*Invited speaker*)

Williams, DM, DR Etter, AE Dutcher, and WF Porter. Spatially explicit capture-recapture estimation of black bear abundance in Michigan's northern lower peninsula.

Michigan Dept. of Natural Resources Annual Meeting, Roscommon, MI (August 2014)

Williams, DM. Partnering to address challenging trends in wildlife conservation. (*Invited speaker*)

7th International Congress on Environmental Modelling, San Diego, CA (June 2014)

Guber, AK, **DM Williams**, AC Dechen Quinn, SB Tamrakar, JB Rose, and WF Porter. SWAT-SIR model for predicting fate and transport of manure-borne pathogens in fragmented agriculture-forest ecosystems.

Dept. of Fisheries and Wildlife GSO Research Symposium, East Lansing, MI (February 2014)

Christensen, SA, **DM Williams**, WF Porter, B Rudolph, and AC Dechen Quinn. Population dynamics and disease occurrence in white-tailed deer: assessing fine-scale population recovery following a major mortality event.

2013:

Boone and Crockett Club Annual Meeting, Denver, CO (December 2013)

Williams DM, NP Snow, and WF Porter. Trophy records and conservation: factors influencing the distribution of trophy white-tailed deer. (*Invited speaker*)

The Wildlife Society 20th Annual Conference, Milwaukee, WI (November 2013)

Williams DM, KS Seewald, and WF Porter. To get to the other side: road crossing behaviors of white-tailed deer in central New York State. (*Oral Presentation*)

Wegan MT, DR Etter, and **DM Williams**. The impact of landscape features on black bear movements in an agricultural region: implications for range expansion in southern Michigan, USA. (*Oral Presentation*)

Soil Science Society Meeting, Tampa, FL (November 2013)

Guber A, JB Rose, WF Porter, **DM Williams**, SB Tamrakar and AC Dechen Quinn. Modeling pathogen transport in fragmented agriculture-forest ecosystems. (*Oral Presentation*)

Dept. of Fisheries and Wildlife GSO Research Symposium, East Lansing, MI (March 2013)

Snow NP, **DM Williams**, and WF Porter. A landscape-based approach for delineating hotspots of wildlife-vehicle collisions. (*Oral Presentation*)

2012:

American Geophysical Union, Fall Meeting, San Francisco, CA (December 2012)

Rose J, A Guber, WF Porter, **DM Williams**, S Tamrakar, and AC Dechen Quinn. Multimodeling framework for predicting water quality in fragmented agriculture-forest ecosystems. (*Poster Presentation*)

The Wildlife Society 19th Annual Conference, Portland, OR (November 2012)

Williams DM, DR Etter, G Nowak, A Bump, AC Dechen Quinn, and WF Porter. Reconciling hunters and managers with science: spatio-temporal dynamics of Michigan black bear harvest. (*Poster Presentation*)

Kohl MT, PR Krausman, K Kunkel, and **DM Williams**. Bison versus beef: Are they one and the same? (*Poster Presentation*)

Kreuser J, WF Porter, and **DM Williams**. Climate change, poleward range shifts, and differential guild responses of Michigan breeding birds. (*Oral Presentation*)

Seewald KS, **DM Williams**, and WF Porter. To get to the other side: The role of roads, landscape, and season in road crossing behaviors of deer. (*Awarded best undergraduate research-in-progress poster*).

Snow NP, **DM Williams**, and WF Porter. A landscape-based approach for delineating hotspots of wildlife-vehicle collisions. (*Oral presentation*)

North American Wildlife and Natural Resources Conference, Atlanta, GA (March 2012)

Dechen Quinn AC, MS Kirchgessner, BA Rudolph, **DM Williams**, and WF Porter. Applying new analytical tools to the wicked problem of wildlife disease management. (*Invited paper*)

2011:

The Wildlife Society 18th Annual Conference, Waikoloa, HI (November 2011)

Williams DM, AC Dechen Quinn, and WF Porter. The role of habitat on contact events among white-tailed deer in central New York. (*Poster Presentation*)

Dechen Quinn AC, **DM Williams**, and WF Porter. Extra-home range movements of white-tailed deer in a forest-agriculture matrix. (*Poster Presentation*)

Whitman B, WF Porter, AC Dechen Quinn, **DM Williams**, and JL Frair. Mortality patterns of white-tailed deer in central New York State. (*Oral Presentation*)

35th Annual Midwest Deer and Wild Turkey Study Group, Roscommon, MI (September 2011)

Dechen Quinn AC and **DM Williams**. Using Animal Movement Behavior to Assess the Risk of Disease Spread. (*Invited speakers*)

Association of American Geographers Annual Conference, Seattle, WA (April 2011)

Cinderich AB, S Zhong, Perdinan, L Luo, and **DM Williams**. An Assessment of Regional Climate Model Performance over the Great Lakes Region. (*Oral Presentation*)

2010:

Boone and Crockett Club Annual Meeting, Albuquerque, NM (December 2010)

Porter WF, AC Dechen Quinn, and **DM Williams**. New tools enhance policy and management: a case study of chronic wasting disease in New York. (*Invited speakers for plenary session*)

The Wildlife Society 17th Annual Conference, Snowbird, UT (October 2010)

Williams DM, AC Dechen Quinn, and WF Porter. Seasonal, demographic, and landscape effects on scales of movement by white-tailed deer in an agricultural-forest matrix. (*Poster Presentation*)

Dechen Quinn AC, **DM Williams**, and WF Porter. Differential space use of white-tailed deer in a forest-agriculture matrix: Influences of landscape composition and configuration. (*Poster Presentation*)

2009:

The Wildlife Society 16th Annual Conference, Monterey, CA (September 2009)

Williams DM, AC Dechen Quinn, WF Porter. Contact structure of white-tailed deer in New York: informing risk models and management decisions. (*Oral Presentation*)

Porter WF, AC Dechen Quinn, **DM Williams**. Identifying capture-related mortality using post-capture movement rates of white-tailed deer. (*Oral Presentation*)

Ecological Society of America 94th Annual Conference, Albuquerque, NM (August 2009)

Williams DM, AC Dechen Quinn, WF Porter. Contact structure of white-tailed deer in New York: informing risk models and management decisions. (*Oral Presentation*)

Dechen Quinn AC, **DM Williams**, WF Porter. White-tailed deer space use and resource selection: Implications for disease spread. (*Oral Presentation*)

3rd Annual Chronic Wasting Disease Symposium, Salt Lake City, UT (July 2009)

Williams DM, AC Dechen Quinn, WF Porter. Contact structure of white-tailed deer in New York: informing risk models and management decisions. (*Oral Presentation*)

American Society of Mammalogists 89th Annual Conference, Fairbanks, AK (June 2009)

Williams DM, AC Dechen Quinn, WF Porter. Contact structure of white-tailed deer in New York: informing risk models and management decisions. (*Oral Presentation*)

Dechen Quinn AC, **DM Williams**, and WF Porter. White-tailed deer space use and resource selection: Implications for disease spread. (*Oral Presentation*)

2008:

The Wildlife Society 15th Annual Conference, Miami, FL (November 2008)

Williams DM, AC Dechen Quinn, and WF Porter. Impact of GPS collar error on detected scales of animal movement. (*Oral Presentation*)

Dechen Quinn AC, **DM Williams**, and WF Porter. Evaluation of habitat use and availability among GPS-collared white-tailed deer in central New York: implications for disease spread. (*Oral Presentation*)

Wildlife Disease Association 57th Annual Conference, Edmonton, Alberta (August 2008)

Dechen AC, **DM Williams**, and WF Porter. Habitat use among white-tailed deer in central New York: implications for disease management. (*Oral Presentation - Honorable Mention*)

Northeast Natural History 10th Annual Conference, Albany, NY (April 2008)

Dechen, AC, **DM Williams**, and WF Porter. Habitat use among GPS-collared white-tailed deer: implications for disease spread. (*Oral Presentation*)

US - Int'l. Assoc. of Landscape Ecology 23rd Annual Symposium, Madison, WI (April 2008)

DM Williams, AC Dechen, and WF Porter. Impact of GPS location error on detected scales of animal movement. (*Invited speaker for "Animal Movements in Heterogeneous Landscapes" symposium*)

Dechen, AC, **DM Williams**, and WF Porter. Habitat use among GPS-collared white-tailed deer in central NY: Implications for disease management. (*Invited speaker for "Animal Movements in Heterogeneous Landscapes" symposium*)

2007:

The Wildlife Society 14th Annual Conference, Tucson, AZ (September 2007)

Williams, DM, AC Dechen, and WF Porter. Spatial scales of movement for white-tailed deer in response to the landscape: implications for chronic wasting disease risk assessment. (*Oral Presentation*)

Dechen, AC, **DM Williams**, and WF Porter. Habitat use among GPS-collared white-tailed deer in Central New York: evaluating the parameters that influence the spread of chronic wasting disease. (*Oral Presentation*)

Wildlife Disease Association 56th Annual Conference, Estes Park, CO (August 2007)

Dechen, AC, **DM Williams**, and WF Porter. Movement patterns among GPS-collared white-tailed deer in central New York: evaluating the parameters that influence the spread of chronic wasting disease. (*Oral Presentation*)

2006:

CNY MedTech Conference, Syracuse, NY (September 2006)

Dechen, AC, **DM Williams**, and WF Porter. Chronic wasting disease in New York: the role of animal behavior in disease spread. (*Poster Presentation*)

PROFESSIONAL DEVELOPMENT**Teaching and Leadership**

Promoting Student Success in the Classroom, Dr. Vincent Tinto, A STEM Teaching Essentials Workshop, MSU, March 2016

Model, Meet Classroom. Classroom, Meet Model: Introducing Models to the Classroom Using Technology, Dr. Stephen Thomas, A STEM Teaching Essentials Workshop, MSU, October 2015

Changing Classroom: Challenges and Best Practices for the Academic Success of International Students, MSU Lilly Teaching Seminar Series, April 2014

Active Violence Response Training, Captain Kelly Roudebush, MSU Police Department, April 2014

Teaching and Learning Through the Use of Controversies, Dr. Rique Campa, A STEM Teaching Essentials Workshop, MSU, March 2014

Potent Presentations: Message, Design, and Delivery, three webinars on effective presentations, Dr. Stephanie Evergreen, American Evaluation Association, September 2013

There's An App For That: iPads in the Higher Education Classroom, Drs. Terri Gustafson, and Jon Sticklen, Faculty Seminars in Research and Instructional Technology, MSU, May 2013

MSU Scholars - Finding Expertise, Collaborators and Research Opportunities, Dr. Estelle McGroarty, Faculty Seminars in Research and Instructional Technology, MSU, May 2013

New Tools for a New Era: Teaching with Technology, Dr. Stephen Thomas, A STEM Teaching Essentials Workshop, MSU, September 2012

Moving Forward Using Backward Course Design: Alignment of Goals, Instruction, and Assessment, Dr. Cori Fata-Hartley, A STEM Teaching Essentials Workshop, MSU, October 2011

Who's in Charge Here: Creating an Effective Classroom Environment, Drs. Jayne Schuiteman and Jan Collins-Eaglin, A STEM Teaching Essentials Workshop, MSU, September 2011

Fundamentals of Online Teaching, Faculty Seminars in Research and Instructional Technology, MSU, May 2011

Education certification courses:

Foundations of Teaching and Learning
Characteristics and Needs of Special Populations
Teaching of Reading in the Content Area

Technical Skills

Flexible programming with BUGS models: Using NIMBLE for MCMC and beyond, Drs. Perry de Valpine and Chris Paciorek—International Statistical Ecology Conference, June 2016

Records of North American Big Game Official Measurer Workshop, Jack Reneau and Justin Spring—Records Committee, Boone and Crockett Club. Missoula, MT, June 2015

Spatially-Explicit Capture-Recapture Models Workshop, Drs. Murray Efford and David Borchers—International Statistical Ecology Conference, June 2014

Wildlife Handling and Chemical Immobilization for Researchers and Managers, Dr. Mark Johnson—Demmer Training Center, Lansing, MI, May 2014

Spatial Capture-Recapture Workshop, Drs. Andy Royle, Beth Gardner, Rahel Sollmann, and Chris Sutherland—USGS Patuxent Wildlife Research Center, February 2014

Microsoft Access Level 1, Faculty Seminars in Research and Instructional Technology, MSU, May 2013

Microsoft Access Database Fundamentals, Faculty Seminars in Research and Instructional Technology, MSU, May 2013

Geospatial Skills Workshop, Hawthorne Beyer and Dr. Jacqui Frair—The Wildlife Society, November 2011

Modeling Patterns and Dynamics of Species Occurrence Workshop, Dr. Darryl MacKenzie—Michigan State University, August 2011

High Performance Computing Center Training—Michigan State University, June & July 2011

Adobe Presenter & Connect, Faculty Seminars in Research and Instructional Technology—Michigan State University, May 2011

Write Winning Grants workshop: Michigan Agricultural Experiment Station, January 2011

R Statistical Programming Software Workshop – SUNY-ESF, April 2009

Regression Modeling for Habitat Selection Using GPS Data, Ryan Nielson, Hall Sawyer, and Dr. Lyman McDonald—The Wildlife Society, November 2008

Modern Approaches to Resource Selection Modeling, Drs. James Forrester and Jacqueline Frair—US-International Association of Landscape Ecologists (US-IALE), April 2008

No More P-values? Model Based Inference in the Life Sciences, Dr. David Anderson—SUNY-ESF, March 2007

ESRI GIS course certifications

Learning ArcGIS Desktop

Learning ArcGIS Spatial Analyst

Geoprocessing with ArcGIS Desktop

Creating and Integrating Data for Natural Resource Applications

Exploring the VBA Environment

AFFILIATIONS

The American Woodcock Society

The Boone and Crockett Club – Associate Member and Official Measurer

Ducks Unlimited

Ecological Society of America

The Ruffed Grouse Society

US Regional Association of the International Association for Landscape Ecology

The Wildlife Society

Biometrics Working Group

Spatial Ecology and Telemetry Working Group

Wildlife Disease Working Group

Michigan Chapter – President