

Alexis L. White, PhD
University of Florida
Department of Geography
3128 Turlington Hall
Gainesville, FL 32611
+1-207-576-8356
alexis.white@ufl.edu

Postdoctoral Associate, University of Florida, Gainesville, Florida **2020-present**
Quantitative Disease Ecology & Conservation (QDEC) Lab
Department of Geography
Emerging Pathogens Institute
CDC Southeastern Center of Excellence in Vector-Borne Diseases

EDUCATION

Old Dominion University, Norfolk, Virginia **2019**
PhD in Ecological Sciences
Advisor: Dr. Holly D. Gaff
Dissertation: Tick control methods for *Amblyomma americanum* in Virginia: Applications and modeling

Old Dominion University, Norfolk, Virginia **2015**
Graduate Certificate in Modeling & Simulation for Business & Public Administration

Unity College, Unity, Maine **2013**
BS in Wildlife Biology
Advisor: Dr. Carrie Diaz-Eaton
Undergraduate thesis: Modeling effectiveness of tick control species that exhibit predator-prey role reversal

PREVIOUS POSITIONS

Graduate Research Assistant, ODU Tick Research Team Laboratory Manager, Old Dominion University, May 2017-December 2019
Graduate Teaching Assistant, Old Dominion University, Spring 2016, Fall 2016, Spring 2017, Spring 2018
Graduate Fellowship, Modeling & Simulation Fellowship, Old Dominion University, August 2013-August 2016
Field Assistant, ODU Tick Research Team, Old Dominion University, Summer 2012, Summer 2013
Math Education Assistant, Mathematics Department, Unity College, August 2010-May 2013
Peer Tutor, Learning Resource Center, Unity College, August 2009-May 2013

TEACHING

Old Dominion University

General Biology Lab I, BIOL 122N, Lab Instructor, Fall 2016
General Biology Lab II, BIOL 124N, Lab Instructor, Spring 2017, Spring 2018
Infectious Disease Epidemiology (Writing intensive), BIOL 436W, Teaching Assistant, Spring 2016, Fall 2016

Infectious Disease Epidemiology (Writing intensive), BIOL 436W, Guest Lecturer, Spring 2016, Spring 2018, Spring 2019
Marine Vertebrate Ecology, Management, and Conservation (Writing intensive), BIOL 471W, Teaching Assistant, Spring 2017

PUBLICATIONS – Peer-reviewed articles

1. **White, A**, R Minch, L Bidder, and H Gaff. 2020. A Simple, Inexpensive Method for Mark-Recapture of Ixodid Ticks. *Journal of Insect Science*. *In press*
2. **White, A**, E Schaefer, C Wright, and C Kribs. 2019. Dynamics of two pathogens in a single tick population. *Letters in Biomathematics* 6(1): 50-66.
3. **White, A** and H Gaff. 2018. Application of tick control technologies for blacklegged, lone star, and American dog ticks. *Journal of Integrated Pest Management* 9(1): 12.
4. Gaff, HD, **A White**, K Leas, P Kelman, JC Squire, DL Livingston, GA Sullivan, EW Baker, and DE Sonenshine. 2015. TickBot: a novel robotic device for controlling tick populations in the natural environment. *Ticks and Tick-Borne Diseases* 6(2): 146-51.
5. Florin, DA, RJ Brinkerhoff, H Gaff, J Jiang, RG Robbins, W Eickmeyer, J Butler, D Nielsen C Wright, **A White**, ME Gimpel, and AL Richards. 2014. Additional collections of the Gulf Coast tick, *Amblyomma maculatum* (Acari: Ixodidae), from the State of Delaware, the first reported field collections of adult specimens from the state of Maryland, and data regarding this tick species from surveillance of migratory songbirds in Maryland. *Systematic & Applied Acarology* 19(3): 257-262.

PUBLICATION- Refereed Conference Proceedings and Preprints

1. Lippi, CA, HD Gaff, **A White**, and SJ Ryan. online. Systematic review of distribution models for *Amblyomma* ticks and rickettsial group pathogens. medRxiv. *Preprint*
2. **White, A** and H Gaff. 2016. Ticky Business Simulation. Proceedings of VMASC Capstone Conference 2016.
3. **White, A**, R Nadolny, C Diaz Eaton, and H Gaff. 2014. Modeling effectiveness of tick control by a species that exhibits predator-prey role-reversal. Proceedings of VMASC Capstone Conference 2014.
4. **White, A**, R Nadolny, C Monroe, and C Diaz Eaton. 2012. SMB 2012 Perspectives. Society for Mathematical Biology Newsletter 25(3): 6-7.

GRANTS AWARDED

1. Old Dominion University, Harold G. Marshall and Vivian J. Marshall Scholarship, \$5034, September 2019
2. Old Dominion University, Biology Graduate Student Organization Conference Award, \$600, August 2018
3. Old Dominion University, Student Engagement & Enrollment Services, Graduate Student Research Travel Award, \$500, March 2018

4. Old Dominion University, Biology Graduate Student Organization Research Award, \$200, April 2017
5. Virginia Commonwealth University, BAMB! (Biology and Medicine through Mathematics Conference, Travel Award, \$75, March 2016

CREATIVE WORKS AND COMMUNITY-ENGAGED SCHOLARSHIP

1. Southeastern Center for Vector Borne Diseases website, Twitter, and Facebook are maintained to communicate center-based research to both the public and scientific community. Website: <http://cdcservoebd-flgateway.org/> (2020-present)
2. ODU Tick Research Team Facebook page is maintained to connect to the public on the findings of the lab, the progress of students in the lab, as well as research findings and news articles. Website: <https://www.facebook.com/odutickteam/> (2013-2019)
3. Tick Outreach
 - a. Formal presentation:
 - i. Tidewater Mosquito and Vector Control Council (March 13, 2019)
 - ii. Webinar Virginia Master Naturalists (February 28, 2019)
 - iii. Virginia Eastern Shore Master Naturalists (November 14, 2018)
 - iv. Virginia Association of Forest Health Professionals 26th Annual Conference (January 29, 2018)
 - v. Camp Director Crisis Management Workshop, Camp Bethel (October 16, 2017)
 - vi. Tidewater Mosquito and Vector Control Council (September 13, 2017)
 - vii. US Army Corp of Engineers Norfolk District Regulatory Branch (July 10, 2017).
 - viii. NASA Langley Child Development Center (June 26, 2017 and August 8, 2017).
 - ix. Zoetis Continuing Education Day for Veterinarians (April 8, 2017).
 - x. Tidewater Community College Camp Osprey (August 8 & 15, 2016)
 - xi. Tick-Borne Disease: Education, Prevention, and Early Detection (April 23, 2015)
 - xii. Hunt Club Farm Summer Camp (July 24, 2014)
 - b. Informal:
 - i. Lynnhaven River Now Fall Festival (October 6, 2018)
 - ii. LymeMIND's Lyme Disease in the Era of Precision Medicine conference (October 3, 2018)
 - iii. Hope Springs Veterinary at Great Bridge (April 24, 2018)
 - iv. Lynnhaven River New Winter Wildlife Festival (January 27, 2018)
 - v. Hoffler Creek Wildlife Foundation Fall Festival (October 29, 2017, October 30, 2016, October 25, 2015, October 26, 2014)
 - vi. Newport News Park BioBlitz (May 20, 2017)
 - vii. Matthews Middlesex Master Gardeners (August 17, 2017)
 - viii. Hunt Club Farms Fall Community Weekend (October 12, 2014)
 - ix. Hoffler Creek Watershed Weekend (May 17, 2014)
 - x. ODU Admitted Students Day (March 29, 2014)
 - c. Big Blue Camp: "Bug Camp 2018", organized week and presented on Tick Day.
 - d. Outreach materials created:
 - i. "Ticks and Tick-Borne Diseases of Virginia," Brochure distributed by ODU Tick Research Lab.

- ii. "Ticks of Virginia," Identification tick key cards by ODU Tick Research Lab.
 - iii. "Old Dominion University Tick Research Team," Virginia Forest Landowner e-Update Volume 32 (3), Sara Simmons, Alexis White, Laura Bitzer, and Holly Gaff
4. Media Coverage
 - a. Bettineschi, Deanna. "Bitten by a tick? Save it for later, ODU researchers say," WAVY 10, July 7, 2018.
 - b. Faulconer, Justin. "Students conduct tick research on Amherst County farm," Amherst New Era ~ Progress, July 4, 2018.
 - c. Rominiecki, Joe. "In Tick Management, Species Matters," Entomology Today, May 3, 2018.
 - d. Beal, Kari. "Tick-control experiment happening in Amherst County", WSET-13, June 14, 2018.
 - e. Sergiou, Florentina. "Killer 'TickBot' Takes the Bite out of Bugs," NASA Langley Research Center, May 29, 2018
 - f. Tice, Lindsay. "Face Time: Alexis White, tick hunter," Maine Sun Journal, March 26, 2017.
 - g. Knepler, Michael. "Students, professors team up to discover what's ticking," ODU Monarch Magazine, Fall 2016.
 - h. Kolnos, Jason. "Tick-killing robot called TickBot tested in Brewster," Cape Cod Times, May 13, 2015.
 - i. Middleton, Leslie. "VA seeing more ticks as species from North, South expand their range," Bay Journal, June 8, 2015.
 5. "TickBot: How to kill ticks and make friends," Journal of Visualized Experiments (JoVE) #FilmYourResearch Video. September 15, 2017.

PRESENTATIONS AT PROFESSIONAL MEETINGS

1. **White, A** and H Gaff. February 2020. Application and modeling of a tick-killing robot. Vector Week 2020 Conference, Fort Collins, CO. Poster.
2. **White, A** and H Gaff. February 2020. Application and modeling of a tick-killing robot. 13th Annual Emerging Pathogens Institute Research Day, University of Florida, Gainesville, FL. Poster.
3. **White, A.** March 2019. Ticks and Guinea Fowl: Who eats whom? Biology Graduate Student Organization Spring Symposium. Old Dominion University, Norfolk, VA.
4. **White, A.** March 2019. Old Dominion University Tick Research Team 2018 Highlights. Mid-Atlantic Tick Summit. Laurel, MD.
5. **White, A** and H Gaff. March 2018. Evaluation and modeling of TickBot: a tick-killing robot. 9th International Integrated Pest Management Symposium. Baltimore, MD. Poster.
6. **White, A** and H Gaff. February 2018. Evaluation and modeling of TickBot: a tick-killing robot. Mid-Atlantic Tick Summit. Laurel, MD. Poster.
7. **White, A,** A DeVleeschower, A Bahrani, H Gaff. October 2017. Implementation of the TickBot: Results and implications for modeling. International Symposium on Biomathematics and Ecology Education and Research. Normal, IL.

8. **White, A** and H Gaff. February 2017. TickBot efficacy in residential and wildlife habitats in Portsmouth, VA. Mid-Atlantic Tick Summit. Laurel, MD. Poster.
9. **White, A** and H Gaff. February 2017. TickBot efficacy in residential and wildlife habitats in Portsmouth, VA. Virginia Mosquito Control Association Annual Meeting Newport News, VA.
10. **White, A** and H Gaff. February 2017. TickBot efficacy in residential and wildlife habitats in Portsmouth, VA. Virginia Mosquito Control Association Annual Meeting. Newport News, VA. Poster.
11. **White, A**, E Schaefer, C Wright, CM Kribs-Zaleta, and H Gaff. May 2016. Biology and Medicine through Mathematics Conference. Dynamics of two pathogens in a single tick population. Biology and Medicine through Mathematics, Virginia Commonwealth University, Richmond, VA.
12. **White, A** and H Gaff. April 2016. Virginia Modeling, Analysis, Simulation Center Capstone Conference. Ticky business simulation. Virginia Modeling, Analysis, Simulation Center, Suffolk, VA.
13. **White, A**, E Schaefer, C Wright, CM Kribs-Zaleta, and H Gaff. March 2016. Dynamics of two pathogens in a single tick population. Biology Graduate Student Organization Spring Symposium. Old Dominion University, Norfolk, VA.
14. **White, A**. October 2015. Modeling biological control of tick populations in Netlogo. International Symposium on Biomathematics and Ecology Education and Research. Normal, IL.
15. **White, A**. June 2015. Biomathematics education from the viewpoint of graduate biology. Annual Meeting of the Society for Mathematical Biology. Atlanta, GA.
16. **White, A**, E Schaefer, C Wright, CM Kribs-Zaleta, and H Gaff. April 2015. Virginia Modeling, Analysis, Simulation Center Capstone Conference. Dynamics of two pathogens in a single tick population. Virginia Modeling, Analysis, Simulation Center, Suffolk, VA.
17. **White, A**, R Nadolny, C Eaton, and H Gaff. April 2014. Modeling the Effectiveness of a tick control species that exhibits predator-prey role reversal. Virginia Modeling, Analysis, and Simulation Center Capstone Conference. Suffolk, VA.
18. **White, A**, R Nadolny, C Eaton, and H Gaff. March 2014. Modeling Effectiveness of Tick Control Species that Exhibit Predator-prey Role Reversal. Biology Graduate Student Organization Spring Symposium. Old Dominion University, Norfolk, VA.
19. **White, A**. February 2014. Updated Survey of Ticks and Tick-Borne Pathogens in Hampton Roads: 2010-2013. Virginia Mosquito Control Association Annual Meeting Virginia Beach, VA.
20. **White, A**, R Nadolny, C Eaton, and H Gaff. October 2013. Modeling Effectiveness of Tick Control Species that Exhibit Predator-prey Role Reversal Introduction. International Symposium on Biomathematics and Ecology Education and Research. Marymount University, Arlington, VA.

21. **White, A**, H Gaff, and C Eaton. May 2013. Modeling Effectiveness of Tick Control Species that Exhibit Predator-prey Role Reversal. Unity College Student Conference. Unity College, Unity, ME.
22. **White, A**, H Gaff, and C Eaton. December 2012. Models of Predator-Prey Role Reversal in Ticks and Guineafowl. Unity College Student Conference. Unity College, Unity, ME.
23. **White, A**, H Gaff, and C Diaz Eaton. December 2012. Models of Predator-Prey Role Reversal in Ticks and Guineafowl. Unity College Student Conference. Unity College, Unity, ME. Poster.
24. **White, A** and H Gaff. October 2012. Measuring Effectiveness of Tick Control Species that Exhibit Predator-prey Role Reversal. Natural Areas Conference, Norfolk, VA. Poster.

SUPERVISED PRESENTATIONS AT PROFESSIONAL MEETINGS

1. DeVleeschower, A, **A White**, H Gaff. February 2018. Tracking potential hosts of *Amblyomma maculatum* through wildlife cameras. Virginia Mosquito Control Association Annual Meeting. Virginia Beach, VA. Poster.
2. DeVleeschower, A, **A White**, H Gaff. February 2019. Tracking potential hosts of *Amblyomma maculatum* through wildlife cameras. Old Dominion University Undergrad Research Symposium. Norfolk, VA.
3. DeVleeschower, A, **A White**, H Gaff. October 2018. Tracking potential hosts of *Amblyomma maculatum* through wildlife cameras. Virginia Natural History Society Meeting. Martinsville, VA. Poster.
4. DeVleeschower, A, **A White**, A Bahrani, and H Gaff. March 2018. Implementation of a tick-killing robot to protect children in Hampton, Virginia. Old Dominion University Undergrad Research Symposium. Norfolk, VA. Poster.
5. DeVleeschower, A, **A White**, A Bahrani, and H Gaff. January 2018. Implementation of a tick-killing robot to protect children in Hampton, Virginia. Virginia Mosquito Control Association Annual Meeting. Portsmouth, VA. Poster.
6. Bahrani, A, **A White**, L Bitzer, A Suarez and H Gaff. February 2017. Capture-mark-recapture of ticks in southeastern Virginia. Old Dominion University Undergrad Research Symposium. Norfolk, VA. Poster.
7. Bahrani, A, **A White**, L Bitzer, A Suarez and H Gaff. February 2017. Capture-mark-recapture of ticks in southeastern Virginia. Virginia Mosquito Control Association Annual Meeting Newport News, VA. Poster.
8. Kunzler D, **A White**, and H Gaff. February 2016. Survival Rate of *Amblyomma americanum* in Subzero Temperatures. Old Dominion University Undergrad Research Symposium. Norfolk, VA.
9. Lenahan, C, **A White**, and H Gaff. February 2016. The ratio of human hosts among species of ticks found in central mid-Atlantic. Old Dominion University Undergrad Research Symposium. Norfolk, VA. Poster.

10. Notto, L, **A White**, and H Gaff. February 2016. Identifying the Plant Communities Preferred by Tick Species in Hampton Roads, Virginia. Old Dominion University Undergrad Research Symposium. Norfolk, VA.
11. Lenahan, C, **A White**, and H Gaff. November 2015. The ratio of human hosts among species of ticks found in central mid-Atlantic. American Society for Microbiology: Virginia Annual Meeting. Richmond, VA. Poster.
12. Nilsson, A, L Bidder, **A White**, and H Gaff. February 2015. Population estimates for *Amblyomma americanum*, lone star tick, at two sites within the Hampton Roads area of Virginia. Old Dominion University Undergrad Research Symposium. Norfolk, VA. Poster.
13. Leas, K, **A White**, P Kelman, and H Gaff. October 2013. Mark Recapture Study on Tick Populations in Portsmouth, VA. International Symposium on Biomathematics and Ecology Education and Research. Marymount University, Arlington, VA. Poster.

AWARDS

1. The Harold G. Marshall and Vivian J. Marshall Scholarship in Biology, College of Sciences, Old Dominion University. September 2019.
2. Award for Graduate Student Community Engagement/Service, College of Sciences, Old Dominion University. April 2019.
3. Jorge Arias Student Poster Competition Winner, Virginia Mosquito Control Association Meeting, Virginia Beach, VA. February 2019.
4. Journal of Visualized Experiments (JoVE) #FilmYourResearch contest Top 15 videos. September 15, 2017.
5. Jorge Arias Student Poster Competition Winner, Virginia Mosquito Control Association Meeting, Newport News, VA. February 2017.
6. Jorge Arias Student Poster Competition Runner-up, Virginia Mosquito Control Association Meeting, Newport News, VA. February 2017.
7. Modeling and Simulation Graduate Fellowship, Old Dominion University, 2013-2016.
8. Unity Award (Top award given at conference by president), Unity College. December 2012.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Association for Women in Science
 Entomological Society of America
 Intercollegiate Biomathematics Alliance
 Society for Industrial and Applied Mathematics
 Society for Mathematical Biology
 Virginia Mosquito Control Association

UNIVERSITY SERVICE

- Member, ODU Biology Graduate Student Organization, 2013-2019
- Member, ODU Fellowship of Women in Science, 2014-2019
- Secretary, ODU Biology Graduate Student Organization, 2014-2015

PROFESSIONAL SERVICE

- Lecturer, Woodrow Wilson High School, Encouraging students to pursue advanced courses, Portsmouth, VA. (June 3, 2014).
- Lecturer, Woodrow Wilson High School, AP Biology Mathematics in Excel, Portsmouth, VA. (September 27, 2013).
- Lecturer, Woodrow Wilson High School, Understanding Ecosystems and Food webs at Paradise Creek Nature Park, Portsmouth, VA. (September 1, 2013).
- Lecturer, Woodrow Wilson High School, Biology assembly panel member, Portsmouth, VA. (June 7, 2013).