KATLYN AMOS CATRON

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Creative and compassionate scientist who relies on innovative approaches to solve complex problems

EDUCATION

Doctor of Philosophy, Entomology: March 2021. Virginia Tech, Blacksburg VA Dissertation: Biology of Chauliognathus spp. (Coleoptera: Cantharidae) in Virginia agroecosystems Master of Science, Biological Sciences: July 2014. Virginia Tech, Blacksburg VA

Thesis: Investigating Historical and Contemporary Land Cover Effects on Macroinvertebrate Communities and Water Quality of Virginia Piedmont Streams

Bachelor of Science, Biology: December 2010. Concord University, Athens WV Magna Cum Laude, GPA: 3.76/4.00

EMPLOYMENT HISTORY

Postdoctoral Research Assistant

Washington State University Tree Fruit Research and Extension Center, Wenatchee WA Collect and analyze pest insect population data for predictive phenology model. Author grant proposals, research papers, pop science articles, industry reports under tight deadlines. Communicate results to specialty crop groups, agricultural community members, academic audiences. Collaborate with growers, industry members, and fieldmen to achieve common goals.

Graduate Research and Teaching Assistant

Virginia Tech Department of Entomology, Blacksburg VA

Independently researched complex behavior and ecological questions in insect system. Authored manuscripts, reports, grant proposals, presentations. Led lab meetings, procurement of supplies and equipment, educational outreach efforts. Increased Virginia Tech Vegetable Entomology Facebook page post frequency by 115%, page likes by 33%, and page reach by over 700% from 2017-2019. Navigated significant barriers to dissertation (change in advisor, project) with grace and agility.

Research Technician/Laboratory Manager

Dodson Urban Pest Management Laboratory

Virginia Tech Department of Entomology, Blacksburg VA

Managed research laboratory operations. Authored funding proposals, project budgets, final reports, other deliverables. Collected, visualized, and analyzed data and presented research results to international, national, regional, local audiences. Increased total reach of Virginia Tech Bed Bug and Urban Pest Information Center Facebook page by 684% from 2015-2016. Adapted to unpredictable laboratory needs with flexibility and dexterity.

Geospatial Analyst

Virginia Department of Conservation and Recreation

Division of Dam Safety & Floodplain Management, Christiansburg VA

Extracted, validated, combined data from multiple sources into internal databases. Improved existing ArcGIS methods to be more streamlined, replicable, reliable. Meticulously documented protocols for future use. Presented methods and research results to internal and external audiences.

Graduate Research and Teaching Assistant

Virginia Tech Department of Biological Sciences, Blacksburg VA

Independently researched complex ecological questions using aquatic ecosystems, contemporary land use/land cover, historical data. Collected, formatted, vetted, and combined data from multiple sources. Relied heavily on multivariate statistical methods to model relationships through time and space.

March 2021 - Present

June 2017 - March 2021

May 2014 - June 2015

June 2011 – July 2014

June 2015 - May 2017

TEACHING EXPERIENCE

Total Teaching Assistantship Appointments - 9

Aquatic Entomology, T.A., Department of Entomology, Virginia Tech	Spring 2019	
Nominated for Virginia Tech College of Agriculture and Life Sciences GTA Excellence Award		
Insects and Human Society, T.A., Department of Entomology, Virginia Tech	Fall 2017	
Honors Introductory Biology, T.A., Department of Biological Sciences, Virginia Tech	Spring 2014	
Freshwater Ecology, T.A., Department of Biological Sciences, Virginia Tech	Spring 2013	
Principles of Biology, T.A., Department of Biological Sciences, Virginia Tech	Fall 2011, Fall 2013	
University 100, T.A., Concord University	Fall 2010	
Calculus-based Physics, T.A., Department of Science, Concord University	Fall 2009	
Animals as Organisms, T.A., Department of Science, Concord University	Spring 2009	

GRANTS AND SCHOLARSHIPS

Graduate Research and Development Program; Virginia Tech (\$850)	2019
Graduate Travel Fund Program Grant; Virginia Tech (\$380)	2019
Southern Sustainable Agriculture Research and Education Grant; USDA (\$15,324)	2018
Clarence and Gladys Hill Travel Scholarship; Virginia Tech (\$600)	2018
Graduate Travel Fund Program Grant; Virginia Tech (\$98)	2014
Graduate Research Development Program Grant; Virginia Tech (\$375)	2012

PUBLICATIONS Editor reviewed (3), Extension (3)

Catron, K.A. and T. P. Kuhar. 2021. Effects of Organic Insecticide Treatments on Soldier Beetle Adults, 2020. Arthropod Pest Management Tests (46):1 doi: 10.1093/amt/tsab031

- Catron, K. A. and T. P. Kuhar. 2020. Effects of Insecticide Treatments on Soldier Beetle Adults, 2019. Ed: M. Brown. Arthropod Management Tests (45):1 https://doi.org/10.1093/amt/tsz094
- **Catron, K. A**., T. P. Kuhar, and S. V. Taylor. 2019. Sugarcane Aphid in Virginia Sorghum. Virginia Cooperative Extension Publication ENTO-334NP.
- **Catron, K. A.**, C. Philips, E. Fread, and T. P. Kuhar. 2019. Soldier Beetles (Leatherwings). Virginia Cooperative Extension Publication ENTO-53NP.
- Kuhar, T., S. Romelxzyk, H. Doughty, J. Few, M. Sutphin, U. R. Deitch, K. Love, L. Maxey-Nay, J. Cooper, S. Pottorff,
 K. Catron, and L. Siegle. 2018. Corn earworm monitoring in commercial sweet corn fields in Virginia 2017.
 Virginia Cooperative Extension Publication ENTO-266NP.

Catron, K. A., M. S. Wilson, and D. M. Miller. 2017. Efficacy of thermal remediation for bed bug (Hemiptera: Cimicidae) control in apartments of different clutter levels. Eds: M. P. Davies, C. Pfeiffer, and W. H. Robinson. Proceedings of the Ninth International Conference on Urban Pests, Birmingham UK (61-65).

HONORS AND AWARDS

Grayson Ph.D. Student Award, runner-up (\$3125)	2020
Entomological Society of America Annual Meeting, Vancouver BC	2018
Student 3-minute "Lightning Bug" Talk Competition, 2 nd Place	
Entomological Society of America Annual Meeting, Denver CO	2017
Student 3-minute "Lightning Bug" Talk Competition, 2 nd Place	
Virginia Tech College of Science Outstanding MS Student	2014
Biological Sciences Department nominee	
West Virginia Science Technology and Research Symposium	2010
Undergraduate Researcher of the Year Competition, 3 rd place	

SELECTED INVITED SPEAKING ENGAGEMENTS Average pre-COVID contacts per year: 7000

- **Catron, K. A.** 2022. Insecticidal Control of Leafhoppers: 2022 Update. WSU Extension Little Cherry Disease Day 2022, Ellensburg WA. (140 attendees)
- **Catron, K. A.** 2022. Leafhoppers and X-disease in WA Cherries: 2022 Update. Northwest Wholesale Grower Meeting, Omak WA.
- **Catron, K. A.** 2020. Recognition and Identification Apps. Virginia Tech "Field Entomology Skills" course guest lecturer, Blacksburg VA. (5 attendees)
- **Catron, K. A.** 2020. The Art of Virtual Presentations. Virginia Tech "Agriculture, Global Food Security and Health" course guest lecturer, Blacksburg VA. (22 attendees)
- Catron, K. A. and K. Britt. 2019. Intro to Entomology. Virginia Master Naturalist Meeting, Emory VA. (35 attendees)
- **Catron, K. A.** 2019. Recognition and Identification Apps. Virginia Tech "Field Entomology Skills" course guest lecturer, Blacksburg VA. (6 attendees)
- **Catron, K. A.** 2019. Aquatic Coleoptera. Virginia Tech Aquatic Entomology course guest lecturer, Blacksburg VA. (30 attendees)
- **Catron, K. A.** 2017. Insects as pests of the home. Virginia Tech Insects and Human Society course guest lecturer, Blacksburg VA. (60 attendees)
- Amos, K. L., M. L. Stedfast, and D. M. Miller. 2016. Evaluating the efficacy of a whole-unit heat system for bed bug (*cimex lectularius* I.) Infestations in apartments of varying sizes and clutter levels. Virginia Tech Department of Entomology Weekly Seminar Series, Blacksburg VA. (30 attendees)
- **Amos, K. L.**, M. L. Stedfast, and D. M. Miller. 2016. Whole-unit heat treatments: a new study from Virginia Tech. Virginia Pest Management Association State Technical Meeting, Richmond VA. (250 attendees)
- Amos, K. L. 2016. Fleas, ticks, and pets: resurgence and resistance. Virginia Pest Management Association Master Technician Workshop: Bloodsuckers. Manassas, VA. (40 attendees)
- Amos, K. L. 2016. The Bug Stops Here: Whats, whens, and whys of managing common pests in the home. Hill City Master Gardener Association's Festival of Gardening, Lynchburg VA. (15 attendees)

SELECTED ACADEMIC PAPER AND POSTER⁺ PRESENTATIONS

Totals: contributed papers (18), invited posters (1), contributed posters (7)

- **Catron, K.A.**, L. Nottingham, and T. Northfield. 2022. Management of leafhopper pests of in Washington cherries. Entomological Society of America Annual Meeting, Vancouver BC.
- **Catron, K. A.**, D. Wilczek, and T. P. Kuhar. 2021. Phenology and behavior of *Chauliognathus marginatus* (Fabr.) (Coleoptera: Cantharidae) in Virginia agroecosystems. Entomological Society of America Annual Meeting, attended virtually.
- **Catron, K. A.**, D. Wilczek, and T. P. Kuhar. 2020. Diurnal host plant utilization by *Chauliognathus marginatus*. Entomological Society of America Annual Meeting, held virtually.
- *Catron, K. A. 2019. The BUZZ about pollinators: more than just honey bees! Entomological Society of America Annual Meeting, St. Louis MO. *Infographic poster presentation*
- **Catron, K. A.** and T. P. Kuhar. 2019. Host plant utilization by *Chauliognathus* spp. (Coleoptera: Cantharidae) in the Eastern United States. Entomological Society of America Eastern Branch Annual Meeting, Blacksburg VA.
- **Catron, K. A.** and T. P. Kuhar. 2018. Phenology and predatory behaviors of soldier beetles (*Chauliognathus* spp.) in agricultural systems. Entomological Society of America Annual Meeting, Vancouver BC.
- ⁺Britt, K., **K. Catron**, K. Brichler, J. Brown, P. Chalise, W. Hadden, D. Hennen, N. Quinn, M. Ragozzino, and M. Roth. 2018. Parasitoid Power! Putting pests in their place by invading their space. Entomological Society of America Annual Meeting, Vancouver BC. *Comic book/infographic poster presentation*
- **Catron, K. A.** and T. P. Kuhar. 2018. Do soldier beetles (*Chauliognathus* spp.) have a role in the battle against agricultural pests? Entomological Society of America Annual Meeting, Vancouver BC. *Delivered in verse*

- **Catron, K. A.** and T.P. Kuhar. 2018. Assessing the importance of soldier beetles (*Chauliognathus* spp.) as predators in southwest Virginia agricultural systems. Virginia Academy of Sciences Annual Meeting, Farmville VA.
- *Catron, K. A. and T.P. Kuhar. 2018. Evaluating the role of *Chauliognathus* spp. as predators in Virginia agricultural systems: a proposal. Entomological Society of America Eastern Branch Annual Meeting, Annapolis MD.
- *Catron, K. A., T. P. Kuhar, and S. V. Taylor. 2017. Update on the resistance of corn earworm (*Helicoverpa zea*: Boddie) to pyrethroid insecticides in Virginia. Entomological Society of America Annual Meeting, Denver CO.
- Catron, K. A., T. P. Kuhar, and S. V. Taylor. 2017. *Helicoverpa zea*: a pest by many names. Entomological Society of America Annual Meeting, Denver CO.

SELECTED EDUCATIONAL OUTREACH

- November 2020 Spoke about general entomology and insect pests with a diverse group of Simsbury Public Library patrons via Skype a Scientist program
- October 2020 Provided digital content for the Virtual Hokie BugFest Pollination Station, included information on non-bee pollinators and *Chauliognathus* adults
- October 2020 Directed, filmed, narrated, and edited series of eight video shorts highlighting specimens from the Virginia Tech Bug Zoo
- October 2020 Created the Kuhar Lab's Agricultural IPM booth for Virtual Hokie BugFest, including a research farm tour video, an at-home game, and insect coloring pages
- June 2020 Led 17 2nd grade students in a virtual exploration of pollinators via Skype a Scientist program
- October 2019 Organized the Kuhar Lab's Agricultural IPM booth for Hokie BugFest, >10,000 attendees
- May 2019 Led three classrooms of 20 1st grade students in a "naturalist walk" around the Price's Fork Elementary School courtyard to identify and discuss the arthropods present
- April 2019 Designed and led a custom, daylong curriculum for 10 5th grade students, including a behavioral ecology experiment, insect poems and illustrations, and an interactive outdoor game
- March 2019 Served as an "entomology expert" for several troops of Girl Scouts (25 2nd-3rd graders) learning about insects; spoke with the girls about careers in entomology, the importance of entomologists to protecting our food supply and health, and what entomologists actually do
- October 2018 Led the Kuhar Lab's Agricultural IPM exhibit for Hokie BugFest, >8,500 attendees
- November 2017 Planned and led both the VT Entomology Department student recruitment booth and the Alwood Society student booth at the Entomological Society of America meeting in Denver, CO
- October 2017– Led the Kuhar Lab's portion of the IPM room at Hokie BugFest, with >8,000 attendees
- May 2017 Led Alwood Society presentation on basic entomology to 70 first graders
- May 2015, 2017 Served as a judge at the Falling Branch Elementary School Science Fair
- March 2012, 2013, 2016, and 2020 Served as judge at the Blue Ridge Highlands Regional Science Fair

PROFESSIONAL DEVELOPMENT

Entomological Society of America	September 2022
Professional Advancement Career Training (PACT) Mentorship Program	
Washington State University Weather School	January 2022
Universität Innsbruck Molecular Analysis of Trophic Interactions (MATI) Short Course	September 2019
Virginia Tech Graduate Teaching Assistant Workshop	January 2019
Virginia Tech College of Agriculture and Life Sciences Scientific Writing Workshop	January 2019
Virginia Tech Networked Learning Initiatives Workshop: Active Learning Techniques	March 2018
Virginia Tech College of Agriculture and Life Sciences Scientific Writing Workshop	January 2017
Virginia Tech Graduate Teaching Assistant Workshop	August 2011

MEDIA APPEARANCES

October 2020– Featured on two local news segments promoting Hokie BugFest; handled insects and arthropods and explained basic entomology concepts to viewers (available here and here)

October 2020 - Interviewed for the "Weather Wise Guy" podcast about winter insect behavior (available here)

October 2019– Featured on a local news segment promoting Hokie BugFest; handled insects and arthropods and explained basic entomology concepts to viewers

October 2018 – Featured on a local news segment promoting Hokie BugFest; handled insects and arthropods and explained basic entomology concepts to viewers (available here)

March 2018 – Spoke about the challenges of urban pest management for a VT undergraduate documentary short July 2010 – Featured in WVU Today press release as visiting undergraduate researcher (available here)

SERVICE ROLES

W.B. Alwood Society Entomology Student Association President 2020 - 2021 Hokie BugFest Representative 2018 - 2020 Volunteer Social Media Manager for the Kuhar Lab 2017 - 2021 Volunteer Social Media Manager for the Virginia Tech Entomology Department Staff Advisor to Virginia Tech's Hill and Veil Middle Eastern Dance Society 2015-2017

PROFESSIONAL AFFILIATIONS

Entomological Society of America	2016 - present
American Society of Naturalists	2019 - 2021
The Coleopterists Society	2018 - 2021
Virginia Academy of Sciences	2018 - 2021
Ecological Society of America	2012-2014
Society for Freshwater Science	2012-2014

2018