Brett Wells Bultemeier, PhD

7922 NW 71st Street, Gainesville, FL, 32653, Cellular 352-554-1998 bwbult@ufl.edu

Education

Doctor of Philosophy, Agronomy, University of Florida, Gainesville, FL, 2012

Dissertation title: Herbicide Release and Plant Uptake Dynamics of Selected Granular Aquatic Herbicides

Committee: William Haller, Greg MacDonald, Jason Ferrell, Michael Kane, Lynn Sollenberger

Master of Science, Agronomy, University of Florida, Gainesville, FL, 2008

Thesis Title: The Response of Three Cabomba Populations to Herbicides and Environmental Parameters: Implications for Taxonomy and Management.

Committee: Michael Netherland, William Haller, Jason Ferrell, John Erickson, David Wofford, Tyler Koschnick

<u>Bachelor of Science. Biology and Environmental Studies</u>, Manchester University (formerly Manchester College), North Manchester, IN, 2005

Experience

11/2019-Present

<u>Assistant Extension Professor, UF/IFAS Pesticide Information Office, Gainesville, FL.</u>

My 100% extension appointment is focused on pesticide safety, compliance, and licensed applicator certification. This position works closely with county extension faculty to develop statewide pesticide safety and test preparation curriculum, while also overseeing pesticide exam content, study materials, and test proctoring protocols and procedures. I regularly communicate with state authorities such as the Florida Department of Agriculture and Consumer Services and Florida Fish and Wildlife Conservation Commission on pesticide label compliance and training. I am also active in developing learning modules for guest lectures or for internal training among UF faculty utilizing pesticides.

02/2018-11/2019

Southeastern Regional Sales Manager. Applied Biochemists. Alachua. FL.

Responsible for overseeing sales responsibilities throughout the Southeastern United States with Applied Biochemists surface water products. This included maintaining relationships with distribution, professional applicators, individual homeowners, and retail sales as well. Technical support in the field and appropriate training on use of these products was a key portion of this

position. In addition to direct sales, several key research and development efforts are ongoing. Stakeholders included fish hatchery managers, large power companies, state resource management teams, drinking water authorities, University research personnel, the US Army Corps of Engineers, as well as large private companies. States managed include Florida, Georgia, South Carolina, North Carolina, Virginia, Tennessee, Arkansas, Alabama, Mississippi and Louisiana.

01/2012-02/2018 Water Resources Manager, Clarke, Alachua, FL.

My responsibilities in this position are to oversee and direct sales and operational activities that relate to the Aquatic Services division within Clarke. This includes training, field and technical support, development of marketing and educational pieces and planning with both sales and operational staff. My primary responsibility is to the state of Florida, but I am also tasked with supporting other offices across the country. This position involves a close working relationship with chemical companies, private home owners, local, state and national governmental agencies, and government and university research personnel. Communication of complex environmental management strategies both internally and externally has been a central part of this position. Regions outside of Florida include, the Coastal South (Virginia, South Carolina, North Carolina), Pennsylvania, Midwest (Minnesota, Wisconsin, Illinois, Indiana, Michigan).

2008-2012 Research Assistant under the supervision of Dr. William T. Haller. University of Florida (Center for Aquatic and Invasive Plants)-Gainesville. FL.

During the course of my research for the dissertation I utilized ELISA assays to determine herbicide residues from granular products released under a variety of conditions. In researching herbicide uptake by aquatic plants I also had to maintain several species of plant under both traditional and sterile culture. As a part of the C¹⁴ studies to track herbicide movement I utilized a novel culture technique that separated roots from shoot in an aqueous solution that still allowed for plant growth. Beyond my dissertation research I was involved in several other field projects (primarily developing new herbicides) and multiple training workshops targeting aquatic plant managers.

2005-2008 Research Assistant under the supervision of Dr. Michael D. Netherland. University of Florida (Center for Aquatic and Invasive Plants)-Gainesville. FL.

During the course of my research for the thesis I had to develop culture techniques for three populations of *Cabomba caroliniana* from multiple parts of the United States. I tested the change in oxygen production in response to herbicides in order to determine any differences among the populations and to find an appropriate chemical control for this plant. My research led to the determination of appropriate control methods for this exotic species. In addition to my research I was involved in screening

other experimental herbicides, maintaining a diversified culture of aquatic plants, and involved in multiple training workshops.

2002-2005 <u>Aquatic Technician</u> Weed Patrol Inc. Elkhart. IN.

While in my undergraduate program I interned with Weed Patrol each summer beginning in May. I started in the company posting signs around the lakes and ponds we were treating for invasive aquatic plants. After that first year I assumed the responsibility of Aquatic Technician and was tasked with determining herbicide treatment plans, filing permits for those treatments, performing the treatments, and following up with the customers. The last summer I worked at Weed Patrol we were also tasked with producing vegetation maps for the state of Indiana and formally developing long term treatment plan.

Publications

Peer Reviewed Publications

- 1. **Brett Bultemeier**, and Jason Ferrell(&). 2020. Are Homemade "Pesticides" Legal?. *EDIS*. Vol 2020 No. 5: https://edis.ifas.ufl.edu/pi288
- 2. **Brett Bultemeier**. 2020. Protective Eyewear for Pesticide Applicators. *EDIS*. Vol 2020 No 5: https://edis.ifas.ufl.edu/pi287
- 3. **Brett W. Bultemeier**, and Michelle Atkinson(&). 2020. Delivering Secure CEU Training Utilizing Zoom. *EDIS.* Vol 2020 No. 5: https://edis.ifas.ufl.edu/pi286
- 4. Fred Fishel, **Brett Bultemeier**, and Jay Ferrell. 2020. New Paraquat Requirements. *EDIS*. Vol 2020 No 1: https://edis.ifas.ufl.edu/pi279
- 5. **Bultemeier, B.W.**, and W.T. Haller. 2015. Endothall, Triclopyr and Fluridone Granular Release Profiles Under Static and Aerated Water Conditions. Journal of Aquatic Plant Management.
- 6. **Bultemeier, B.W.** 2014. Chapter 15.5: Fanwort and Cabomba, pp. 135-138. In: Biology and Control of Aquatic Plants: A Best Management Practices Handbook (Gettys L.A., W.T. Haller and M. Bellaud, eds.). Aquatic Ecosystems Restoration Foundation. Marietta, GA.
- 7. Mudge, C.R., **B.W. Bultemeier**, W.T. Haller. 2011. The Influence of pH and Light on Hydrilla (*Hydrilla verticillata*) Photosynthesis and Chlorophyll After Exposure to Flumioxazin. Weed Science. 60(1): 4-9.
- 8. **Bultemeier, B.W.**, A. Puri, W.T. Haller and V.V. Vandiver Jr. 2009. Residue Profile and Efficacy Comparisons Between Two Liquid Formulations of Fluridone. Journal of Aquatic Plant Management. 47: 63-65.
- 9. **Bultemeier, B.W.**, M.D Netherland, J.A Ferrell and W.T. Haller. 2009. Differential Herbicide Response Among Three Phenotypes of *Cabomba caroliniana*. Invasive Plant Science and Management. 2(4): 352-359.

Non-Peer Reviewed Publications

- Brett W. Bultemeier. 2020. Not All Roundup is Glyphosate. The Neighborhood Gardener. July: https://gardeningsolutions.ifas.ufl.edu/care/weeds-and-invasive-plants/not-all-roundup-is-glyphosate.html
- 2. <u>Brett W. Bultemeier</u>. 2020. Do Pesticides Cause Boat Corrosion. *Aquatics*. Summer 2020: 5-7.
- 3. <u>Brett W. Bultemeier</u>. 2020. Rust Wars: The Galvanic Force Awakens, Rise of the Anodes. *Aquatic Ecosystem Restoration Foundation*. White Paper: http://www.aquatics.org/pubs/boat%20corrosion.pdf

- 4. <u>Brett W. Bultemeier</u>. 2020. The Great CEU Hunt Simplified. *Aquatics*. 42 number 2: 28.
- 5. **Bultemeier**, **B.** and M.D. Netherland. 2007. Cabomba: A Taxonomic and Management Puzzle. Aquatics. 29(1): 12, 14-16.

Blogs

- Brett W. Bultemeier. Are My Sunglasses PPE? January 8, 2021. http://blogs.ifas.ufl.edu/pesticideinformation/2021/01/08/are-my-sunglasses-ppe/
- **2. Brett W. Bultemeier.** WPS Training. December 16, 2020. http://blogs.ifas.ufl.edu/pesticideinformation/2020/12/16/wps-training/
- Brett W. Bultemeier. Hats and Pesticides. December 11, 2020. http://blogs.ifas.ufl.edu/pesticideinformation/2020/12/11/hats-and-pesticides/
- **4. Brett W. Bultemeier.** Glyphosate Public Comments Open. December 4, 2020. http://blogs.ifas.ufl.edu/pesticideinformation/2020/12/04/glyphosate-public-comments-open/
- **5.** Jason Ferrell and **Brett W. Bultemeier**. Is Your Eyewash Safe. November 30, 2020. http://blogs.ifas.ufl.edu/pesticideinformation/2020/11/30/is-your-eyewash-safe/
- Brett W. Bultemeier. Making PPE More Comfortable: Gloves. November 13, 2020. http://blogs.ifas.ufl.edu/pesticideinformation/2020/11/13/making-ppe-more-comfortable-gloves/
- Brett W. Bultemeier. Triazine EPA Comment Period. November 6, 2020. http://blogs.ifas.ufl.edu/pesticideinformation/2020/11/06/triazine-epa-comment-period/
- **8. Brett W. Bultemeier.** Dicamba EPA Registration Update. October 29, 2020. http://blogs.ifas.ufl.edu/pesticideinformation/2020/10/29/dicamba-epa-registration-update/

Presentations

- 1. **Brett W. Bultemeier**. *Continuing Education*. Plant Wars, Rise of the Resources. UF/IFAS Aquatic Weed Control Short Course. Recorded and played during zoom webinar. Oct 30, 2020 Oct 30, 2020.
- 2. **Brett W. Bultemeier**. *Continuing Education*. What is a label? Why do we need it? Why we must go beyond the label. UF/IFAS Aquatic Weed Control Short Course. Recorded and played during Zoom Webinar. Oct 27, 2020 Oct 27, 2020.
- 3. **Brett W. Bultemeier.** *Continuing Education.* How to Read and Use Aquatic Herbicide Labels. The Great CEU Roundup, Florida Turfgrass Assocation and UF/IFAS annual training. July 29, 2020.
- 4. **Brett W. Bultemeier**. *Continuing Education*. A Roundup of Roundup: Why Professionalism Matters Now More Than Ever. Everglades Golf Course Superintendents Association. 28th Annual Turfgrass Symposium. Jul 14, 2020 Jul 14, 2020.
- 5. Stephen Enloe, James Leary, and Brett Bultemeier. Continuing Education. FDACS Inspector Training:

- How To Diagnose A Fish Kill. University of Florida, Center For Aquatic and Invasive Plants. Zoom Meeting. May 22, 2020 May 22, 2020.
- 6. **Brett W. Bultemeier**. *Continuing Education*. Understanding Pesticides: When and How to Use Them. University of Florida Master Gardner Program. Online Webinar. Apr 30, 2020 Apr 30, 2020. https://mediasite.video.ufl.edu/Mediasite/Play/a6e6fba2b0ff44819566baf990af9e631d
- 7. **Brett W. Bultemeier**. *Continuing Education*. "Safe" While Applying Herbicides. Sumter County IFAS extension. Wildwood Community Center, Wildwood, FL. Feb 24, 2020 Feb 24, 2020.
- 8. **Brett W. Bultemeier.** *Continuing Education.* The label is the law, but it's not the only sheriff in town. Northeast Florida Nursery, Growers and Landscape Association Annual Tradeshow, Jacksonville, FL. February 6th.
- 9. **Brett W. Bultemeier**. *Continuing Education*. The label is the law, but it's not the only sheriff in town. Osceola CISMA. Osceola County Extension Services Building. Jan 28, 2020 Jan 28, 2020.
- 10. **Brett W. Bultemeier**. *Continuing Education*. Glyphosate: Why so controversial and how did we get here. Osceola CISMA. Osceola County Extension Services. Jan 28, 2020 Jan 28, 2020.
- 11. **Bultemeier**, **B.W.** 2019 (May). Just Keep Swimming: How to Avoid a Fish Kill. Aquatic Weed Control Short Course. *Invited*.
- 12. **Bultemeier**, **B.W.** 2019 (May). Aquatic Herbicides: How to Read a Label, How to Stay Legit. Aquatic Weed Control Short Course. *Invited*
- 13. **Bultemeier**, **B.W.** 2018 (April). How To Avoid/Survive A Fish Kill. Annual Conference and Tradeshow of the Florida Vegetation Management Association. *Invited*.
- 14. Bultemeier, B.W. 2018 (April). The Label is The Law, But It Isn't The Only Sherriff In Town (Natural Areas). Annual Conference and Tradeshow of the Florida Vegetation Management Association. *Invited*.
- 15. **Bultemeier**, **B.W.** 2017. The Label Is The Law, But It Isn't The Only Sherriff In Town (Natural Areas). Annual Conference and Tradeshow of the Florida Vegetation Management Association. *Invited*.
- 16. Bultemeier, B.W. 2017. The Label Is The Law, But It Isn't The Only Sherriff In Town (Aquatics). Annual Conference and Tradeshow of the Florida Vegetation Management Association. *Invited*.
- *17.* **Bultemeier**, **B.W.** 2016. Retention Pond Maintenance. Annual Conference and Tradeshow of the Florida Vegetation Management Association. *Invited*.
- 18. Bultemeier, B.W. 2016. The True Cost of Resistance: Why Rotation Just Makes Cents. Annual Conference and Tradeshow of the Florida Vegetation Management Association. Invited.
- 19. **Bultemeier**, **B.W.** 2015. Calibration in Aquatic Plant Management. 39th Annual Meeting of the Florida Aquatic Plant Management Society. *Invited*.
- 20. **Bultemeier**, **B.W.** 2015. Aquatic Herbicide Mode of Action and Herbicide Resistance. Pinellas County Extension Training. *Invited*.
- 21. Bultemeier, B.W. 2015. Aquatic Plant Management. Dodd Mosquito Control Short Course.

Invited.

- 22. **Bultemeier**, **B.W.** 2014. Aquatic Herbicide Mode of Action. 38th Annual Meeting of the Florida Aquatic Plant Management Society. *Invited*.
- 23. **Bultemeier**, **B.W.** 2014. Resistance in Aquatic Plants. Annual Conference and Tradeshow of the Floirda Vegetation Management Association. *Invited*
- 24. **Bultemeier**, **B.W.** 2014. How to Read A Label and Why. Annual Conference and Tradeshow of the Florida Vegetation Management Association. *Invited*
- 25. **Bultemeier**, **B.W.** 2014. The True Cost of Resistance: Why Rotation Just Makes Cents. 29th Annual Meeting of the Illinois Lakes Management Association. *Invited*.
- 26. **Bultemeier**, **B.W.** 2013. Reading the Label and Calibration.Because Why Not. 37th Annual Meeting of the Florida Aquatic Plant Management Society. *Invited*.
- 27. **Bultemeier**, **B.W.** 2013. The True Cost of Resistance: Why Rotation Just Makes Cents. 37th Annual Meeting of the Florida Aquatic Plant Management Society. *Invited*.
- 28. **Bultemeier, B.W.** 2013. Confessions of an Applicator: How Our Industry Was Helped by NPDES and How We Continue to Grow. 53rd Annual Meeting of the Aquatic Plant Management Society.
- 29. **Bultemeier**, **B.W.** 2013. Factors Affecting the Release of Aquatic Herbicides from Pellets and Granules. Aquatic Weed Control Short Course. *Invited*.
- 30. **Bultemeier**, **B.W.** 2013. Herbicide Resistance in Aquatic Plant Management. Annual Conference and Tradeshow of the Florida Vegetation Management Association. *Invited*.
- 31. **Bultemeier**, **B.W.** 2013. Mode of Action: How Herbicides Work. Annual Conference and Tradeshow of the Florida Vegetation Management Association. *Invited*.
- 32. **Bultemeier**, **B.W.** 2013. Confessions of an Applicator: How to be Successful in a Post- NPDES World. 33rd Annual Meeting of the Midwest Aquatic Plant Management Society.
- 33. **Bultemeier, B.W.** 2012. Confessions of an Applicator: How to be Successful in a Post- NPDES World. 36th Annual Meeting of the Florida Aquatic Plant Management Society.
- 34. **Bultemeier**, **B.W.**, W.T. Haller. 2012. Bispyribac, Quinclorac, and Topramezone Absorption from Roots and Shoots of *Hydrilla verticillata*. 52nd Annual Meeting of the Aquatic Plant Management Society.
- 35. **Bultemeier**, **B.W.** 2012. Release and Plant Uptake Dynamics of Selected Granular Aquatic Herbicides. Annual Conference and Tradeshow of the Florida Vegetation Management Association.
- 36. **Bultemeier**, **B.W.** 2012. Release of Selected Aquatic Herbicides from Granules Under Static, Flowing Water and Organic Sediment Conditions. 32nd Annual Meeting of the Midwest Aquatic Plant Management Society.
- 37. **Bultemeier, B.W.** 2011. Who Needs to Calibrate Anyway? It's All Just Going in the Water, Right?. 35th Annual Meeting of the Florida Aquatic Plant Management Society. *Invited*.
- 38. **Bultemeier**, **B.W.**, and W.T. Haller. 2011. Dynamics of Granular Herbicides in an Aquatic Environment. 51st Annual Meeting of the Aquatic Plant Management Society.

- 39. **Bultemeier**, **B.W.** 2011. Factors Affecting the Release of Aquatic Herbicides from Granular Formulations. Aquatic Weed Control Short Course. *Invited*.
- 40. **Bultemeier, B.W.** 2011. Herbicide Resistance in ROW. Aquatic Weed Control Short Course. *Invited*.
- 41. **Bultemeier**, **B.W.** and G.E. MacDonald. 2011. Herbicide Mode of Action: Why Herbicides Kill Plants and Not You. Aquatic Weed Control Short Course. *Invited*.
- 42. **Bultemeier**, **B.W.** 2011. Everything you Ever Wanted to Know About Statistics, but Were Afraid to Ask. Aquagenix and DeAngelo Brothers Training Session. *Invited*.
- 43. **Bultemeier**, **B.W**. 2010. Everything you Ever Wanted to Know About Statistics, but Were Afraid to Ask. 34th Annual Meeting of the Florida Aquatic Plant Management Society. *Invited*.
- 44. **Bultemeier**, **B.W.** and W.T. Haller. 2010. Release Dynamics of Granular Herbicides in an Aquatic Environment. 50th Annual Meeting of the Aquatic Plant Management Society.
- 45. **Bultemeier**, **B.W.** and W.T. Haller. 2010. Everything you Wanted to Know About Granules but Were Afraid to Ask. Aquatic Weed Control Short Course. *Invited*.
- 46. **Bultemeier**, **B.W.** and W.T. Haller. 2010. Floating and Emergent Plant Weed Control. Aquatic Weed Control Short Course. *Invited*.
- 47. **Bultemeier**, **B.W.**, W.T. Haller, and K.A. Langeland. 2010. Why do We Control Invasive Plants. Aquatic Weed Control Short Course. *Invited*.
- 48. **Bultemeier, B.W.** and W.T. Haller. 2010. The Factors that Influence the Release of Herbicides from Granular Based Formulations in the Aquatic Environment. 33rd Annual Meeting of the Florida Weed Science Society.
- 49. **Bultemeier**, **B.W.** and W.T. Haller. 2010. The Factors that Influence the Release of Herbicides from Granular Based Formulations in the Aquatic Environment. 30th Annual Meeting of the Midwest Aquatic Plant Management Society.
- *50.* **Bultemeier, B.W.** 2009. Does Calibration Really Matter in Aquatics. 33rd Annual Meeting of the Florida Aquatic Plant Management Society. *Invited*.
- *51.* **Bultemeier**, **B.W.** and W.T. Haller. 2009. Herbicide Application Techniques for Aquatic Plant Management. Southeast Herbicide Applicator Short Course. *Invited*.
- *52.***Bultemeier, B.W.** 2009. The Control of Floating and Emergent Weeds. Southeast Herbicide Applicator Short Course. *Invited*.
- 53. **Bultemeier, B.W.**, W.S. Judd, and L.A. Gettys. 2009. The New Taxonomy: What Impact Does this Have on Aquatic Plants. 49th Annual Meeting of the Aquatic Plant Management Society.
- 54. **Bultemeier**, **B.W.** 2009. Differential Effect of Mesotrione and Topramezone on Pickerelweed and Sagittaria. 49th Annual Meeting of the Aquatic Plant Management Society.
- 55.**Bultemeier, B.W.** 2009. The Control of Floating and Emergent Weeds. Aquatic Weed Control Short Course. *Invited*.
- 56. Bultemeier, B.W., W.T. Haller, J.A. Ferrell, and G.E. Macdonald. 2009. A Closer Look at

- Herbicides: Why They Kill Plants and not You. 2009 Plant Camp for Teachers.
- 57. **Bultemeier, B.W.** 2009. Herbicide Resistance in Aquatic Invasive Plants. 32nd Annual Meeting of the Florida Weed Science Society.
- 58. Netherland, M.D., L.M. Glomski and **B.W. Bultemeier**. 2009. Intra-species Variation of Submerged Aquatic Plants to Herbicide Treatments. 49th Annual Meeting of the Weed Science Society of America.
- 59. **Bultemeier**, **B.W.** 2008. Challenges and Opportunities in Invasive Plant Research. Science Seminar Series at Manchester College. *Invited*.
- 60. **Bultemeier**, **B.W.** 2008. Does Calibration Really Matter in Aquatics? 32nd Annual Meeting of the Florida Aquatic Plant Management Society. *Invited*.
- 61. **Bultemeier**, **B.W.** and W.T. Haller. 2008. The Impact of Various Growth Solutions on the Photosynthesis of *Hydrilla verticillata*: Implications on the Importance of Nutrients and Carbon Availability for Aquatic Plants Grown Without Sediments. 48th Annual Meeting of the Aquatic Plant Management Society.
- 62. **Bultemeier**, **B.W.** 2008. Response of Three Populations of Cabomba to Herbicides and Environmental Parameters: Implications for Taxonomy and Management. 28th Annual Meeting of the Midwest Aquatic Plant Management Society.
- 63. **Bultemeier, B.W.** 2008. The Control of Floating and Emergent Weeds. Aquatic Weed Control Short Course. *Invited*.
- 64. **Bultemeier**, **B.W.** and T. Koschnick. 2007. Emergent and Ditchbank Weed Control. Right-of-Way and Aquatic Pesticide Applicator Training. *Invited*.
- 65. **Bultemeier**, **B.W.** and W.T. Haller. 2007. Floating Weed Control. Right-of-Way and Aquatic Pesticide Applicator Training. *Invited*.
- 66. **Bultemeier**, **B.W.**, M.D. Netherland and W.T. Haller. 2007. Response of Three Populations of Cabomba to Different Herbicides and Environmental Variables. 47th Annual Meeting of the Aquatic Plant Management Society.
- 67. **Bultemeier**, **B.W.** 2007. Control of Floating Weeds. Aquatic Weed Control Short Course. *Invited*.
- 68. **Bultemeier**, **B.W**. and M.D. Netherland 2007. Cabomba: A Taxonomic and Management Puzzle. 30th Annual Meeting of the Florida Weed Science Society.
- 69. **Bultemeier**, **B.W**. and M.D. Netherland. 2007. Herbicide Resistance and Aquatic Weed Management. Florida Mosquito Control Association Dodd Short Course. *Invited*.
- 70. Mudge, C.R. and **B.W. Bultemeier**. 2007. Control Methods for Invasive Plants. Manatee County Short Course. *Invited*.

- 71. **Bultemeier, B.**, W.T. Haller and M.D. Netherland. 2006. Biology and Management of Cabomba in the Northern U.S. 46th Annual Meeting of the Aquatic Plant Management Society.
- 72. **Bultemeier, B**. 2006. Biology and Control of Cabomba. Aquatic Weed Control Short Course. *Invited*
- 73. **Bultemeier**, **B.W**. and C.R. Mudge. 2006. Invasive Plant Identification and Control. Florida Mosquito Control Association Dodd Short Course. *Invited*.
- 74. **Bultemeier, B.W**. and C.R. Mudge. 2006. The Control of Aquatic Plants. Manatee County Short Course. *Invited*.
- 75. **Bultemeier**, **B.W**. and M.D. Netherland. 2006. Biology and Control(?) of Cabomba. 26th Annual Meeting of the Midwest Aquatic Plant Management Society.

Honors and awards

Strategic Planning Committee: American Association of Pesticide Safety Educators 2020-Present

Program Chair: Florida Aquatic Plant Management Society 2019-Present Co-Chair for the Student Affairs Committee: Aquatic Plant Management Society 2019-2020

Committee Chair for Resource and Demonstration: Florida Aquatic Plant Management Society 2012-2014

Winner of the Student Paper Contest: Aquatic Plant Management Society 2011 Student Representative to the Board of Directors: Aquatic Plant Management Society 2009-2010

Winner of the Student Paper Contest: Midwest Aquatic Plant Management Society 2008

Certifications

Licensed Applicator: Aquatics, Forestry, Natural Area, Research and Demonstration, Rights of Way, Turf and Ornamental, Public Health Florida Green Industries Best Management Practices Certification

Memberships

Aquatic Ecosystem Restoration Foundation Aquatic Plant Management Society Florida Aquatic Plant Management Society Florida Vegetation Management Association South Florida Aquatic Plant Management Society