

Jonathan H.N. van Senten, PhD

Curriculum Vitae

Virginia Seafood AREC & Department of Agricultural and Applied Economics

Virginia Polytechnic Institute and State University

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Summary of activities

Grants Funded	26
Value of grants funded (van Senten)	\$2,968,454
Reviewed Journal Publications	15 published / 0 submitted / 2 in preparation
Extension publications	53 published / 13 in preparation
Published abstracts	41
Presentations	128
Workshops / Conference Sessions Chaired	7 (1 cancellation due to COVID-19)

Education

Ph.D. Aquaculture/Fisheries, University of Arkansas at Pine Bluff (2016)

MPS, Marine Affairs & Policy: Aquaculture, University of Miami RSMAS (2012)

Bachelor of Science (BS), Marine Biology, Minor: Chemistry, Barry University (2010)

Professional Experience

Assistant Director, Virginia Seafood AREC, Virginia Polytechnic Institute and State University. Hampton, VA. (July 2020-present)

Assistant Professor, Extension Specialist, Virginia Seafood AREC & Department of Agricultural and Applied Economics, Virginia Polytechnic Institute and State University. Hampton, VA. (December 2018-present)

Research Scientist, Virginia Seafood AREC, Virginia Polytechnic Institute and State University. Hampton, VA. (May 2018-December 2018)

Postdoctoral Associate, Virginia Seafood AREC, Virginia Polytechnic Institute and State University. Hampton, VA. (August 2016-May 2018)

Graduate Research Assistant, Aquaculture/Fisheries Center, University of Arkansas at Pine Bluff. Pine Bluff, Arkansas. (August 2013-June 2016)

Research Intern, Fisheries and Aquaculture Department, Food and Agriculture Organization (FAO) of the United Nations. Rome, Italy. (August 2012 – November 2012)

Research Assistant, University of Miami Experimental Hatchery, University of Miami. Key Biscayne, Florida. (*July 2011 – August 2012*)

Research Assistant, National Resource for Aplysia, University of Miami. Key Biscayne, Florida. (*June 2011 – December 2011*)

Research Assistant, Dr. Allen Sanborn, Barry University. Miami Shores, Florida. (*January 2009 – January 2010*)

Dissertation

The costs and impacts of the regulatory environment on U.S. producers of baitfish and sportfish.

Journal Publications

1. Boldt, N.C., Engle, C.R., **van Senten, J.**, Cassiano, E.J., DiMaggio, M.A. 2022. A regulatory cost assessment of ornamental aquaculture farms in Florida. 2022. Journal of the World Aquaculture Society. <https://doi.org/10.1111/jwas.12881>
2. Hegde, S., Kumar, G., Engle, C., Hanson, T., Roy, L.A., Cheatham, M., Avery, J., Arattuthodiyil, S., **van Senten, J.**, Johnson, J., Wise, D., Dahl, S., Dorman, L., Peterman, M. 2022. Technological progress in the U.S. catfish industry. Journal of the World Aquaculture Society. <https://doi.org/10.1111/jwas.12877>
3. Hegde, S., Kumar, G., Engle, C., Avery, J., Arattuthodi, S., Johnson, J., **van Senten, J.** 2022. Production economic relationships in intensive U.S. catfish production systems. Aquaculture Economics and Management. <https://doi.org/10.1080/13657305.2022.2038720>
4. Hegde, S., Kumar, G., Engle, C., Hanson, H., Roy, L.A., **van Senten, J.**, Johnson, J., Avery, J., Arattuthodi, S., Dahl, S., Dorman, L., Peterman, M. 2021. Economic contribution of the U.S. catfish industry. Aquaculture Economics and Management. <https://doi.org/10.1080/13657305.2021.2008050>
5. Engle, C.R., **van Senten, J.**, Schwarz, M., Hartman, K., Gustafson, L., Johnson, K., Creekmore, L. Farm-level Cost Drivers of Salmonid Fish Health Inspections. 2021. Journal of Aquatic Animal Health. Featured Paper. <https://pubmed.ncbi.nlm.nih.gov/34687087/>
6. Engle, C.R., **van Senten, J.**, Parker, M., Webster, D., Clark, C. Economic tradeoffs and risk between traditional bottom culture of oysters on Maryland farms. 2021. Aquaculture Economics and Management. <https://www.tandfonline.com/doi/abs/10.1080/13657305.2021.1938295>
7. Engle, C.R., Kumar, G., **van Senten, J.** Resource-use efficiency in U.S. aquaculture: farm-level comparisons across fish species and production systems. 2021. Aquaculture Environment Interactions. <https://www.int-res.com/abstracts/aei/v13/p259-275/>

8. **van Senten, J.**, Engle, C.R., Smith, M.A. Effects of COVID-19 on U.S. aquaculture farms. 2020. *Journal of Applied Economic Perspectives & Policy*. <https://doi.org/10.1002/aapp.13140>
9. **van Senten, J.**, Engle, C.R., Hudson, B., and Conte, F.S. 2020. Regulatory costs on Pacific coast shellfish farms. *Aquaculture Economics & Management*. <https://doi.org/10.1080/13657305.2020.1781293>
10. Kumar, G., Engle, C., Hegde, S., **van Senten, J.** 2020. Economics of U.S. catfish farming practices: profitability, economies of size, and liquidity. *Journal of the World Aquaculture Society*. <https://doi.org/10.1111/jwas.12717>
11. Engle, C.R., Kumar, G., and **van Senten, J.** 2020. Cost drivers and profitability of U.S. pond, raceway, and RAS aquaculture. *Journal of the World Aquaculture Society*. <https://doi.org/10.1111/jwas/12706>
12. Engle, C.R., **van Senten, J.**, and Fornshell, G. 2019. Regulatory costs on U.S. salmonid farms. *Journal of the World Aquaculture Society*. <https://doi.org/10.1111/jwas.12604>
13. **van Senten, J.**, Dey, M., and Engle, C.R. 2018. Effects of regulations on technical efficiency of U.S. baitfish and sportfish producers. *Aquaculture Economics & Management*. <https://doi.org/10.1080/13657305.2018.1454539>.
14. **van Senten, J.**, Engle, C.R., Hartman, K., Johnson, K., and Gustafson, L. 2018. Is there an economic incentive for farmer participation in a uniform health standard for aquaculture farms? An empirical case study. *Preventive Veterinary Medicine*. <https://doi.org/10.1016/j.prevetmed.2018.05.007>.
15. **van Senten, J.** and Engle, C.R. 2017. The costs of regulations on U.S. baitfish and sportfish producers. *Journal of the World Aquaculture Society*. <https://doi.org/10.1111/jwas.12416>

Manuscripts submitted

Manuscripts in preparation (working titles)

1. van Senten, J., Engle, C.R., and Dey, M. The economic contribution of the baitfish and sportfish industry on the state of Arkansas. (*in preparation*)
2. van Senten, J. and Engle, C.R. Effects of regulatory delays on return on investment for Pacific coast shellfish aquaculture. (*in preparation*)

Extension Publications

1. van Senten, J., Smith, M.A., Engle, C., Clark, C., Fluharty, S., and Schwarz, M.H. Impacts of COVID-19 on U.S. aquaculture, aquaponics, and allied businesses: Quarter 2 Results. AAEC-228NP. VSG-20-10. Virginia Cooperative Extension: August 6, 2020. <https://www.pubs.ext.vt.edu/AAEC/AAEC-228/AAEC-228.html>
2. van Senten, J., Smith, M.A., Engle, C. Impacts of COVID-19 on U.S. aquaculture, aquaponics, and allied businesses: Quarter 1 Results. AAEC-218NP. Virginia Cooperative Extension: April 29, 2020. <https://www.pubs.ext.vt.edu/AAEC/AAEC-218/AAEC-218.html>
3. Christie, T., Dorr, B., Roy, L., Kelly, A.M., Engle, C., Davis, B., and van Senten, J. Cormorant Predation of Commercial Catfish Aquaculture in the Mississippi Delta. AAEC-231NP. Virginia Cooperative Extension. March 9, 2020. <https://www.pubs.ext.vt.edu/AAEC/AAEC-231/AAEC-231.html>
4. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: Western Region Findings. AAEC-206NP. Virginia Cooperative Extension. October 2, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-206/AAEC-206.html>
5. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: Michigan Findings. AAEC-197NP. Virginia Cooperative Extension. September 26, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-197/AAEC-197.html>
6. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: Utah Findings. AAEC-202NP. Virginia Cooperative Extension. September 26, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-202/AAEC-202.html>
7. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: Midwest States Findings. AAEC-194NP. Virginia Cooperative Extension. September 23, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-192/AAEC-192.html>
8. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: Idaho Findings. AAEC-196NP. Virginia Cooperative Extension. September 23, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-196/AAEC-196.html>
9. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: New York Findings. AAEC-198NP. Virginia Cooperative Extension. September 23, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-198/AAEC-198.html>
10. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: North Carolina Findings. AAEC-199NP. Virginia Cooperative

Extension. September 23, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-199/AAEC-199.html>

11. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: Ohio Findings. AAEC-200NP. Virginia Cooperative Extension. September 23, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-200/AAEC-200.html>
12. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: Pennsylvania Findings. AAEC-201NP. Virginia Cooperative Extension. September 23, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-201/AAEC-201.html>
13. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: Virginia Findings. AAEC-203NP. Virginia Cooperative Extension. September 23, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-203/AAEC-203.html>
14. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: West Virginia Findings. AAEC-204NP. Virginia Cooperative Extension. September 23, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-204/AAEC-204.html>
15. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: Wisconsin Findings. AAEC-205NP. Virginia Cooperative Extension. September 23, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-205/AAEC-205.html>
16. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: National Findings. AAEC-192NP. Virginia Cooperative Extension. September 19, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-192/AAEC-192.html>
17. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: Coastal States Findings. AAEC-193NP. Virginia Cooperative Extension. September 19, 2019. <https://pubs.ext.vt.edu/AAEC/AAEC-193/AAEC-193.html>
18. van Senten, J., Engle, C., Fornshell, G. Infographic: The Effects of Regulations on the U.S. Salmonid Industry: Colorado Findings. AAEC-195NP. Virginia Cooperative Extension. September 5, 2019. <https://www.pubs.ext.vt.edu/AAEC/AAEC-195/AAEC-195.html>
19. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: National Findings. WRAC Fact Sheet. University of Washington. 2019. http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/National.pdf

20. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: Coastal States Findings. WRAC Fact Sheet. University of Washington. 2019. http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/Coastal-states.pdf
21. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: Midwest States Findings. WRAC Fact Sheet. University of Washington. 2019. http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/Midwest-states.pdf
22. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: Western Region Findings. WRAC Fact Sheet. University of Washington. 2019. http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/Western-Region_Final.pdf
23. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: Colorado Findings. WRAC Fact Sheet. University of Washington. 2019. http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/Colorado.pdf
24. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: Idaho Findings. WRAC Fact Sheet. University of Washington. 2019. http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/Idaho.pdf
25. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: Michigan Findings. WRAC Fact Sheet. University of Washington. 2019. http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/Michigan.pdf
26. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: New York Findings. WRAC Fact Sheet. University of Washington. 2019. http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/NewYork.pdf
27. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: North Carolina Findings. WRAC Fact Sheet. University of Washington. 2019. http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/NorthCarolinat_Final.pdf
28. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: Ohio Findings. WRAC Fact Sheet. University of Washington. 2019. http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/Ohio_Final.pdf
29. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: Pennsylvania Findings. WRAC Fact Sheet. University of Washington. 2019. http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/Pennsylvania_Final.pdf

30. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: Utah Findings. WRAC Fact Sheet. University of Washington. 2019.
http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/Utah_Final.pdf
31. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: Virginia Findings. WRAC Fact Sheet. University of Washington. 2019.
http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/Virginia_Final.pdf
32. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: West Virginia Findings. WRAC Fact Sheet. University of Washington. 2019.
http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/WestVirginia_Final.pdf
33. Engle, C., van Senten, J., Fornshell, G. The Effects of Regulations on the U.S. Salmonid Industry: Wisconsin Findings. WRAC Fact Sheet. University of Washington. 2019.
http://depts.washington.edu/wracuw/front%20page/Regulations_fact-sheets/Wisconsin.pdf
34. Clements, S., Dorr, B., Engle, C., Roy, L., Kelly, A., van Senten, J., Davis, B. The Problems of Avian Predators on Fish Farms: Scaup on Baitfish (Golden Shiner) Farms. AAEC-191. Virginia Cooperative Extension. July 8, 2019.
https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/AAEC/aec-191/AAEC-191.pdf
35. Schwarz, M., van Senten, J., Jahncke M., Lazur, A. Overview of Good Aquaculture Practices. Virginia Cooperative Extension. 600-054 (CNRE-40P). December 20, 2018.
<https://www.pubs.ext.vt.edu/600/600-054/600-054.html>
36. DiMaggio, M.A., Groover, E.M., Schwarz, M., van Senten, J. Species Profile: Clownfish. Southern Regional Aquaculture Center Species Profile. October 1, 2017.
37. van Senten, J., Engle, C.R. Infographic: National Baitfish and Sportfish Regulatory Costs. AREC-219 (AREC-225). Virginia Cooperative Extension. July 25, 2017.
<http://pubs.ext.vt.edu/AREC/AREC-219/AREC-219.html>
38. van Senten, J., Engle, C.R. Infographic: South East Region Baitfish and Sportfish Regulatory Costs. AREC-222. Virginia Cooperative Extension. April 24, 2017.
<http://pubs.ext.vt.edu/AREC/AREC-220/AREC-222.html>
39. van Senten, J., Engle, C.R. Infographic: South Central Region Baitfish and Sportfish Regulatory Costs. AREC-221. Virginia Cooperative Extension. April 24, 2017.
<http://pubs.ext.vt.edu/AREC/AREC-220/AREC-221.html>

40. van Senten, J., Engle, C.R. Infographic: Great Lakes Region Baitfish and Sportfish Regulatory Costs. AREC-220. Virginia Cooperative Extension. April 24, 2017.
<http://pubs.ext.vt.edu/AREC/AREC-220/AREC-220.html>
41. van Senten, J., Engle, C.R. Infographic: Wisconsin Baitfish and Sportfish Regulatory Costs. AREC-218. Virginia Cooperative Extension. April 18, 2017.
<http://pubs.ext.vt.edu/AREC/AREC-220/AREC-218.html>
42. van Senten, J., Engle, C.R. Infographic: Pennsylvania Baitfish and Sportfish Regulatory Costs. AREC-217. Virginia Cooperative Extension. April 18, 2017.
<http://pubs.ext.vt.edu/AREC/AREC-220/AREC-217.html>
43. van Senten, J., Engle, C.R. Infographic: Ohio Baitfish and Sportfish Regulatory Costs. AREC-216. Virginia Cooperative Extension. April 18, 2017.
<http://pubs.ext.vt.edu/AREC/AREC-220/AREC-216.html>
44. van Senten, J., Engle, C.R. Infographic: North Carolina Baitfish and Sportfish Regulatory Costs. AREC-215. Virginia Cooperative Extension. April 18, 2017.
<http://pubs.ext.vt.edu/AREC/AREC-220/AREC-215.html>
45. van Senten, J., Engle, C.R. Infographic: New York Baitfish and Sportfish Regulatory Costs. AREC-214. Virginia Cooperative Extension. April 12, 2017.
<http://pubs.ext.vt.edu/AREC/AREC-220/AREC-214.html>
46. van Senten, J., Engle, C.R. Infographic: Florida, Illinois, Texas, and Kansas Baitfish and Sportfish Regulatory Costs. AREC-213. Virginia Cooperative Extension. April 12, 2017.
<http://pubs.ext.vt.edu/AREC/AREC-220/AREC-213.html>
47. van Senten, J., Engle, C.R. Infographic: Arkansas Baitfish and Sportfish Regulatory Costs. AREC-212. Virginia Cooperative Extension. April 12, 2017.
<http://pubs.ext.vt.edu/AREC/AREC-220/AREC-212.html>
48. van Senten, J., Engle, C.R. Infographic: Alabama Baitfish and Sportfish Regulatory Costs. AREC-211. Virginia Cooperative Extension. April 10, 2017.
<http://pubs.ext.vt.edu/AREC/AREC-220/AREC-211.html>
49. van Senten, J., Engle, C.R., Smith, M. Cost of regulations on producers of baitfish and sportfish in Ohio. Buckeye Aquafarming. Ohio State University Extension. Ohio State University South Centers. Vol. 2, No. 1. April, 2017.
50. van Senten, J., Engle, C.R., Dey, M.M., Roy, L.A., Kelly, A.M. Inefficiency factors and economic impact of baitfish and sportfish production. Arkansas Aquafarming. April, 2017. 34(1): 5-6.

51. Engle, C.R., van Senten, J. Costs of Regulations on Baitfish/Sportfish Farms: What will it be for trout? AREC-202. Virginia Cooperative Extension. January 30, 2017.
<https://www.pubs.ext.vt.edu/AREC/AREC-202/AREC-202.html>
52. van Senten, J., Engle, C.R., Kelly, A.M., Roy, L.A. Cost of regulations on producers of baitfish and sportfish in Arkansas. ETB 261, Cooperative Extension Program, University of Arkansas at Pine Bluff, Pine Bluff, Arkansas. December, 2016. ETB261-PD-12-2016N
53. van Senten, J., Engle, C.R., Roy, L.A., Kelly, A.M. The cost and impact of regulations on baitfish and sportfish aquaculture. Arkansas Aquafarming. October, 2016. 33(3):1-2.

Extension Publications in preparation (working titles)

1. Engle, C.R., van Senten, J., Smith, M.A., and Schwarz, M. Impacts of COVID-19 on U.S. aquaculture, aquaponics, and allied businesses located in the USDA Western Aquaculture Region: Quarter 1 Results. *(in preparation)*
2. van Senten, J., Smith, M.A., Engle, C.R., and Schwarz, M. Impacts of COVID-19 on U.S. aquaculture, aquaponics, and allied businesses located in the USDA Tropical and Subtropical Aquaculture Region: Quarter 1 Results. *(in preparation)*
3. van Senten, J., Smith, M.A., Engle, C.R., and Schwarz, M. Impacts of COVID-19 on U.S. aquaculture, aquaponics, and allied businesses located in the USDA Southern Aquaculture Region: Quarter 1 Results. *(in preparation)*
4. Smith, M.A., van Senten, J., Engle, C.R., and Schwarz, M. Impacts of COVID-19 on U.S. aquaculture, aquaponics, and allied businesses located in the USDA North Central Aquaculture Region: Quarter 1 Results. *(in preparation)*
5. Smith, M.A., van Senten, J., Engle, C.R., and Schwarz, M. Impacts of COVID-19 on U.S. aquaculture, aquaponics, and allied businesses located in the USDA Northeastern Aquaculture Region: Quarter 1 Results. *(in preparation)*
6. Engle, C.R., van Senten, J., Smith, M.A., and Schwarz, M. Impacts of COVID-19 on U.S. trout foodfish businesses: Quarter 1 Results. *(in preparation)*
7. Engle, C.R., van Senten, J., Smith, M.A., and Schwarz, M. Impacts of COVID-19 on U.S. ornamental fish farms: Quarter 1 Results. *(in preparation)*
8. Engle, C.R., van Senten, J., Smith, M.A., and Schwarz, M. Impacts of COVID-19 on U.S. tilapia farms: Quarter 1 Results. *(in preparation)*
9. Engle, C.R., van Senten, J., Smith, M.A., and Schwarz, M. Impacts of COVID-19 on U.S. sportfish farms: Quarter 1 Results. *(in preparation)*

10. Engle, C.R., van Senten, J., Smith, M.A., and Schwarz, M. Impacts of COVID-19 on U.S. ornamental fish farms: Quarter 1 Results. (*in preparation*)
11. van Senten, J., Smith, M.A., Engle, C.R., and Schwarz, M. Impacts of COVID-19 on U.S. mollusk businesses: Quarter 1 Results. (*in preparation*)
12. Engle, C.R., van Senten, J., Smith, M.A., and Schwarz, M. Impacts of COVID-19 on U.S. crustacean farms: Quarter 1 Results. (*in preparation*)
13. Engle, C.R., van Senten, J., Smith, M.A., and Schwarz, M. Impacts of COVID-19 on U.S. catfish businesses: Quarter 1 Results. (*in preparation*)

Technical & Stakeholder Reports

1. Engle, C.R., Kumar, G., and van Senten, J. Potential Economic Value of Growth of U.S. Aquaculture to U.S. Soybean Farmers. Soy Aquaculture Alliance. Technical Brief. June, 2020. <https://www.soyaquaalliance.com/research-reports>
2. van Senten, J., Engle, C.R., Parker, M., Webster, D. Analysis of the Economic Benefits of the Maryland Shellfish Aquaculture Industry. Chesapeake Bay Foundation. Project Report. December 31, 2019. <https://www.cbf.org/document-library/non-cbf-documents/analysis-of-the-economic-benefits-of-the-maryland-shellfish-aquaculture-industry-full-report.pdf>
3. van Senten, J. Economic Impact Analysis prepared on behalf of LD Amory & Co. May 29, 2019. (Private stakeholder report, not for public release)

Invited Editorials & Columns

1. van Senten, J., Smith, M.A., and Engle, C.R. Impacts of COVID-19 on U.S. aquaculture, aquaponics, and allied businesses. World Aquaculture Society. June 24, 2020. <https://doi.org/10.1111/jwas.12715>
2. van Senten, J., and Engle, C.R. The regulatory cost burden on U.S. baitfish/sportfish farms. Aquaculture Magazine. August 2, 2017. Volume 43(4):64-66.

Magazine and Newsletter Articles

1. Engle, C.R., Kumar, G., and van Senten, J. Are some production systems more profitable than others? Aquaculture Magazine. August – September 2020. Pg 74-76.
2. Engle, C., van Senten, J., Kumar, G., Cassiano, E., DiMaggio, M., Watson, C., and Asche, F. 2019. What do regulations cost your aquaculture farm business? Fish Farming News. Volume 26(4): 5.

3. Cassiano, E., M. DiMaggio, C. Watson, C. Engle, and J. van Senten. 2019. What Does it Cost Your Farm to Comply with the Regulations that You Must Contend With? Florida Tropical Fish Farmers Association.
4. Engle, C.R. and van Senten, J. 2018. Measuring the costs of regulations in aquaculture. *Fish Farming News*. August 2018. Volume 25(4):17-18.

Published Abstracts

1. van Senten, J, Engle, C.R., Schwarz, M.H., Agyeman, D.A., Boldt, N.C., Watkins, C. Marketing and economics of warmwater marine finfish aquaculture. *Aquaculture America 2022. (February 28, 2022)*
2. Agyeman, D.A., van Senten, J., Engle, C.R., Watkins, C., Schwarz, M. Warmwater marine finfish in the southern tier states: consumer preference survey results. *Aquaculture America 2022. (February 28, 2022)*
3. Boldt, N.C., Engle, C.R., Watkins, C., Schwarz, M., van Senten, J. A supply analysis of 20 emerging marine finfish species for commercial aquaculture production in the United States. *Aquaculture America 2022. (February 28, 2022)*
4. Hegde, S., Kumar, G., Engle, C., Hanson, T., Roy, L.A., Cheatham, M., Avery, J., Arattuthodi, S., van Senten, J., Johnson, J., Wise, D., Dahl, S., Dorman, L., Peterman, M. Technological progress in the U.S. catfish industry. *Aquaculture America 2022. (February 28, 2022)*
5. Hegde, S., Kumar, G., Engle, C., Avery, J., Arattuthodi, S., Johnson, J., van Senten, J. Production economic relationships in intensive U.S. catfish production systems.
6. Sun, L., Kumar, G., Engle, C., van Senten, J. Retail seafood market trends in the U.S., 2016 to 2021. *Aquaculture America 2022. (February 28, 2022)*
7. van Senten, J., Engle, C.R., Kumar, G., Dey, M. Market research to guide U.S. aquaculture recovery from the COVID-19 pandemic. *Aquaculture America 2022. (February 28, 2022)*
8. Clark, C., van Senten, J., Engle, C.R., Schwarz, M. Regulatory costs on Atlantic coast shellfish farms. *Aquaculture America 2022. (February 28, 2022)*
9. Hegde, S., Kumar, G., Engle, C., Hanson, T., Roy, L.A., van Senten, J., Johnson, J., Avery, J., Arattuthodi, S., Dahl, S., Dorman, L., Peterman, M. Economic contribution of the U.S. catfish industry. *Aquaculture America 2022. (February 28, 2022)*
10. van Senten, J., Smith, M.A., Engle, C.R., Kumar, G., Schwarz, M., Clark, C., Hegde, S., Fluharty, S. Impacts of COVID-19 on the U.S. catfish aquaculture industry. *Aquaculture America 2021. San Antonio, Texas. (August 14, 2021)*
11. van Senten, J., Engle, C.R. The effects of permitting delays on return on investment for Pacific coast shellfish aquaculture. National Shellfisheries Association Meeting. Virtual via Zoom. *(March 8, 2021)*
12. van Senten, J., Engle, C.R., Parker, M., Webster, D. The economic impact of shellfish aquaculture in Maryland. National Shellfisheries Association Meeting. Virtual via Zoom. *(March 8, 2021)*
13. van Senten, J., Engle, C.R. Infographics as tools for disseminating aquaculture research. *Aquaculture America 2020. Honolulu, Hawai'i. (February 10, 2020)*

14. van Senten, J., Engle, C.R. U.S. The economic effect of permitting delays on pacific coast shellfish aquaculture. Pacific Coast Shellfish Grower Conference 2019. Portland, Oregon. *(September 17, 2019)*
15. van Senten, J., Engle, C.R. Economic fundamentals of RAS. RASTech 2019. Washington, D.C. *(May 13, 2019)*
16. van Senten, J., Engle, C.R. U.S. Regulatory compliance costs on west coast shellfish farms. Aquaculture America 2019. New Orleans, Louisiana. *(March 11, 2019)*
17. van Senten, J., Engle, C.R. U.S. Interstate trade regulations for aquaculture: what is the cost to U.S. producers? Aquaculture America 2019. New Orleans, Louisiana. *(March 2019)*
18. van Senten, J., Engle, C.R. The effects of regulations on west coast shellfish farms. Pacific Coast Shellfish Growers Association Meeting 2018. Blaine, Washington. *(September 2018)*
19. van Senten, J., Engle, C.R. The cost of regulatory compliance on west coast shellfish farms. National Shellfish Association Meeting 2018. Seattle, Washington. *(March 2018)*
20. van Senten, J., Engle, C.R. The farm level effects of regulations on U.S. trout producers. Aquaculture America 2018. Las Vegas, Nevada. *(February 2018)*
21. van Senten, J., Engle, C.R. The cost of regulatory compliance on west coast shellfish farms: effects and impacts. Aquaculture America 2018. Las Vegas, Nevada. *(February 2018)*
22. van Senten, J., Engle, C.R. The effects of regulations on U.S. trout producers. Aquaculture America 2018. Las Vegas, Nevada. *(February 2018)*
23. van Senten, J., Engle, C.R., Hartman, K., Johnson, K., Gustafson, L. Improved profitability through better animal health? Potential impacts of a uniform code for commercial aquatic animal health. Aquaculture America 2018. Las Vegas, Nevada. *(February 2018)*
24. van Senten, J., Engle, C.R., Hartman, K., Johnson, K., Gustafson, L. Is there an incentive for participation in a uniform health standard for aquaculture farms? Aquaculture America 2018. Las Vegas, Nevada. *(February 2018)*
25. van Senten, J., Engle, C.R., Hartman, K., Johnson, K., Gustafson, L. Increasing profitability through better animal health: potential impacts of a uniform code for commercial aquatic animal health. 147th American Fisheries Society Meeting. Tampa, Florida. *(August 2017)*
26. van Senten, J., Engle, C.R. The regulatory burden: types of economic effects on west coast shellfish farms. National Shellfish Association. Memphis, Tennessee. *(March 2017)*
27. van Senten, J., Dey, M., and Engle, C.R. The effects of regulations on efficiency of U.S. baitfish and sportfish farms. Aquaculture America 2017. San Antonio, Texas. *(February 2017)*
28. van Senten, J. and Engle, C.R. The economic contribution of the baitfish and sportfish industry to the state of Arkansas. Aquaculture America 2017. San Antonio, Texas. *(February 2017)*
29. van Senten, J. and Engle, C.R. Quantifying the costs of regulations on U.S. baitfish and sportfish Growers. 60th Rural Life Conference. Pine Bluff, Arkansas. *(March 2016)*

30. van Senten, J. and Engle, C.R. The potential impacts of a uniform commercial aquatic animal health code. Aquaculture America 2016. Las Vegas, Nevada. *(February 2016)*
31. van Senten J. Opportunities for graduate students to maximize their resume. Aquaculture America 2016. Las Vegas, Nevada. *(February 2016)*
32. van Senten, J. and Engle, C.R. The Costs of fish health testing regulations on U.S. producers of baitfish and sportfish. Aquaculture America 2016. Las Vegas, Nevada. *(February 2016)*
33. van Senten, J. and Engle, C.R. Costs of the U.S. regulatory environment on baitfish and sportfish aquaculture. Aquaculture America 2016. Las Vegas, Nevada. *(February 2016)*
34. van Senten, J. and Engle, C.R. Costs of the U.S. regulatory environment on baitfish and sportfish aquaculture. Southern Division American Fisheries Society Meeting. Wheeling, West Virginia. *(February 2016)*
35. van Senten, J. and Engle, C.R. The potential impacts of a uniform commercial aquatic animal health code. Arkansas Bait and Ornamental Fish Farmers Meeting. Lonoke, Arkansas. *(February 2016)*
36. van Senten, J. and Engle, C.R. Costs of the U.S. regulatory environment on baitfish and sportfish aquaculture. Mid-Continent Warmwater Fish Culture Workshop. Ashland, Nebraska. *(February 2016)*
37. van Senten, J. and Engle, C.R. The costs and impacts of regulations. University of Arkansas at Pine Bluff Chamber of Commerce Tour. Pine Bluff, Arkansas. *(June 2015)*
38. van Senten, J. and Engle, C.R. Quantifying the impacts of the regulatory environment on United States baitfish and sportfish aquaculture. Aquaculture America 2015. New Orleans, Louisiana. *(February 2015)*
39. van Senten, J. and Engle, C.R. The costs and impacts of regulations. Arkansas Bait and Ornamental Fish Farmers Meeting. Lonoke, Arkansas. *(February 2015)*
40. van Senten J. Contributing to the development of a new FAO code of conduct for responsible fisheries (CCRF) aquaculture questionnaire. Aquaculture America 2014. Seattle, Washington. *(February 2014)*
41. van Senten, J. and Engle, C.R. Estimating costs and impacts of regulations on U.S. baitfish and sportfish growers. Aquaculture Fisheries Center Field Day. *(October 2014)*

Conference Posters

1. Fluharty, S., van Senten, J., Moeltner, K., Bosch, D. Opportunity between the turbines: a willingness to pay experiment regarding co-location activities with offshore wind. Aquaculture America 2022. *(February 28, 2022)*
2. van Senten, J. and Engle, C.R. Quantifying the costs of regulations on U.S. baitfish and sportfish Growers. 60th Rural Life Conference. Pine Bluff, Arkansas. *(March 4, 2016)*

Grants and Contracts (Funded)

1. van Senten, J. Sustainable Aquaculture Systems Supporting Atlantic Salmon. University of Maryland (USDA SAS). **\$179,587 (\$10 million)**. *(Co-P.I. status)*
2. van Senten, J., Hartley, T., Rudders, D., Hudson, K., Lawrence, L., Schwarz, M., Lane, R., Villalba, A., Andrews, E., Montrose, G., Yusuf, W. Virginia Sea Grant 2021 COVID-19 Impacts to Seafood Resources. Virginia Sea Grant. **\$87,264 (\$163,632)**. *(P.I. status)*
3. van Senten, J., Engle, C.R., Smith, M.A., Quagraine, K., Arnot, C., Fitzpatrick, M. Developing social license for trout aquaculture in the North Central Region. North Central Regional Aquaculture Center. **\$99,192 (\$280,163)**. *(P.I. status)*
4. van Senten, J., Engle, C.R., Cuevas-Urbe, R., Fong, Q. Characterization of Aquaculture in the Western U.S. Western Regional Aquaculture Center. **\$162,323 (\$237,218)**. *(P.I. status)*
5. van Senten, J. Targeted Marketing Research and Outreach for Improving the Position of Southern Aquaculture Products in the Grocery Marketplace. Southern Regional Aquaculture Center. **\$16,576 (\$?)**. *(Co-P.I. status)*
6. van Senten, J. Economic Status and Contribution of U.S. Aquaculture: Analyzing Viability Structures, Economic Impact, and Management Measures for Future Success. NOAA Sea Grant. **\$279,239 (\$965,000)**. *(Co-P.I. status)*
7. van Senten, J. Assessing preferences for co-location of activities in conjunction with offshore renewable wind energy in Virginia. Virginia Sea Grant. **\$1,191**. *(P.I. status)*
8. van Senten, J., Engle, C.R., Kumar, G., Dey, M.M., and Schwarz, M. Market research to guide U.S. aquaculture recovery from the COVID-19 pandemic and shutdowns. USDA NIFA. **\$191,542 (\$315,000)**. *(P.I. status)*
9. van Senten, J., Engle, C.R., and Schwarz, M. Assessing markets and preferences for warmwater marine finfish in the Southern tier states. USDA ARS. **\$193,789**. *(P.I. status)*
10. van Senten, J., and Schwarz, M. Virginia Tech COVID-19 impact assessment aquaculture, aquaponics, and allied businesses. Virginia Sea Grant & NOAA. **\$42,575**. *(P.I. status)*
11. van Senten, J. Economic Benefits of the Virginia Seafood Industry. Virginia Marine Products Board. **\$155,482**. *(P.I. status)*

12. van Senten, J., Engle, C.R., Rode, R. Quagraine, K., and Smith, M.A. Assessing the effectiveness of NCRAC funded research in aquaculture within the North Central region. North Central Regional Aquaculture Center. **\$72,222 (\$74,722)**. *(P.I. status)*
13. van Senten, J. Investigating the Epidemiology of *Edwardsiella piscicida* -Septicemia in Hybrid Catfish and Other Commercially Important Fish Species in the Southern United States. Southern Regional Aquaculture Center. **\$10,000 (\$?)**. *(Co-P.I. status)*
14. van Senten, J., Fluharty, S. Aquaculture Graduate Research Fellowship – Shannon Fluharty. Virginia Sea Grant. **\$40,000**. *(P.I. status)*
15. Yu, M., Tao, Y.A., van Senten, J., Hudson, B.O., Liu, C.H., Jin., Y.U., Aloimonos, J.O., Chopra, N.I., Parker, M.A., Webster, D.O., Callam, B.R., Gray, M.A. Transforming Shellfish Farming with Smart Technology and Management Practices for Sustainable Production. USDA NIFA. **\$749,149 (\$10 million)**. *(Co-P.I. status)*
16. Hill, J., Tuckett, Q., Green, C., Alford, B., Engle, C., van Senten, J. Policy analysis of the implications of changes in the federal authority under the Lacey Act to prohibit interstate movement of injurious wildlife. Southern Regional Aquaculture Center. **\$20,000 (\$124,948)**. *(Co-P.I. status)*
17. Schwarz, M., Shiroodi, S., Kuhn, D., Ovissipour, R., van Senten, J. Baseline application of recirculating aquaculture systems technologies to enhance survival of oyster larvae in early hatchery stages Phase 2. Virginia Institute of Marine Science. **\$6,782**. *(Co-P.I. status)*
18. Schwarz, M., Shiroodi, S., Kuhn, D., Ovissipour, R., van Senten, J. Baseline application of recirculating aquaculture systems technologies to enhance survival of oyster larvae in early hatchery stages Phase 1. Virginia Institute of Marine Science. **\$19,112**. *(Co-P.I. status)*
19. Kumar, G., Engle, C., van Senten, J. Economic Impact Assessment and Monitoring Progress of Technology Adoption in the U.S. Catfish Industry. Southern Regional Aquaculture Center. **\$3,400 (\$250,000)**. *(Co-P.I. status)*
20. van Senten, J., Engle, C., M. Schwarz, M. Parker, D. Webster. 2019 - 2020. Analysis of the Economic Benefits of the Maryland Shellfish Aquaculture Industry. Chesapeake Bay Foundation. **\$35,000 (\$55,000)**. *(P.I. status)*
21. Engle, C., Schwarz, M.H., van Senten, J., Karunakaran, G., DiMaggio, M. 2018 – 2020. Pathways for revitalizing U.S. Aquaculture: Reducing Regulatory Inefficiencies While Ensuring Sustainability and Social Responsibility. USDA NIFA. **\$170,460 (\$309,516)**. *(Co-P.I. status)*

22. Schwarz, M., van Senten, J., Engle, C.R. 2018-2020. Maine aquaculture economics benchmarking study. Maine Aquaculture Association. **\$52,111 (\$84,473)**. *(Co-P.I. status)*
23. Villalba A., van Senten, J., Haugen, I., Nerrie, B., Liu, C. 2018-2020. Assessing consumer perceptions, attitudes, knowledge, and barriers towards consumption of captured and cultured seafood in Virginia and Maryland. DELMARVA. **\$12,650 (\$26,890)**. *(Co-P.I. status)*
24. Schwarz, M., Lane, R., Villalba, A., van Senten, J. 2018-2020. Virginia Seafood Agricultural Research and Extension Center and Virginia Seafood Extension Program. Virginia Sea Grant. **\$200,000**. *(Co-P.I. status)*
25. Blaylock, R., Saillant, E., Schwarz, M., DiMaggio M., Henry, E., Engle, C., van Senten, J. Commercializing intensive copepod culture: a transformational foundation essential for increasing domestic high-value marine finfish. NOAA, National Sea Grant. **\$221,643 (\$999,000)**. *(Co-P.I. status)*
26. Kuhn, D., Ellis, R., Gatlin, D., Engle, C., Schwarz, M.H., van Senten, J., Browdy, C., Sun, M. Evaluation of protein and lipid concentrations in commercially available tilapia feeds and their effect in intensive production systems. Southern Regional Aquaculture Center. 2017-2018. **\$44,055 (\$200,000)**. *(Co-P.I. status)*

Workshops / Conference Sessions Organized

1. van Senten, J., Engle, C.R., Schwarz, M., Watkins, C. Warmwater Marine Finfish Workshop. Virtual via Zoom. *(August 31, 2021)*
2. van Senten, J. Special NAA Session: Farming in the time of a pandemic: impacts, response, and planning. Aquaculture America 2021. San Antonio, Texas. *(August 13, 2021)*
3. Parker, M. and van Senten, J. Special Session: Shellfish Aquaculture Business and Economics. 112th National Shellfisheries Association Meeting. Baltimore, Maryland. *(March 30, 2020 – Cancelled due to COVID-19)*
4. Karunakaran, G. and van Senten, J. Special NAA Session: Planning Strategically for Marketing and Financial Success. Aquaculture America 2019. New Orleans, Louisiana *(March 11, 2019)*
5. Engle, C.R. and van Senten, J. Aquaculture Economics & Marketing Workshop: Aquaculture and Aquaponics. Ohio State University South Centers. Columbus, Ohio. *(July 2017)*
6. Engle, C.R., Kumar, G., van Senten, J. Business Planning. Aquaculture America 2016. Las Vegas, Nevada. *(February 2016)*
7. van Senten, J and Engle, C.R. with collaboration from USDA APHIS. A Summary of Regulatory Costs on United States Baitfish and Sportfish Aquaculture. University of Arkansas at Pine Bluff. Lonoke, Arkansas *(September 2015)*

Presentations

Invited presentations

1. van Senten, J. Effects of COVID-19 on U.S. aquaculture. USDA NIFA National Program Leaders Meeting. Given via Microsoft Teams. (*April 27, 2022*)
2. van Senten, J. Regulatory costs across 56% of US aquaculture: commonalities and differences. Aquaculture America 2022. San Diego, California. (*March 3, 2022*)
3. van Senten, J., Smith, M. A., and Engle C. R. COVID-19 Impacts: Overview, Update, and Discussion. Missouri Aquaculture Association Annual Conference. Given via Zoom. (*February 20, 2021*)
4. van Senten, J., Smith, M. A., and Engle C. R. 2021. Aquaculture during COVID-19. Midwest Fish and Wildlife Conference. The Future of Aquaculture in the Midwest Region: Barriers and Opportunities Symposium (Part 1). Given via Zoom. (*February 3, 2021*)
5. van Senten, J., Smith, M. A., and Engle C. R. 2020. Aquaculture during COVID-19. Great Lakes Aquaculture Day. Given via Zoom. (*October 10, 2020*)
6. van Senten, J., Smith, M. A., and Engle C. R. 2020. Impacts of COVID-19 pandemic on the U.S. aquaculture industry. United States Aquaculture Society Webinar Series. Given via Zoom. (*October 1, 2020*)
7. van Senten, J., Engle C.R. Marketing and economics of aquaponics. North Carolina Aquaculture Development Conference. New Bern, North Carolina. Given via Zoom. (*March 13, 2020*)
8. van Senten, J., Engle, C.R. Regulatory cost analysis of United States aquaculture. Aquaculture America 2020. Honolulu, Hawai'i. (*February 10, 2020*)
9. van Senten, J., Engle, C.R. Measuring the effects of regulations at the farm level for U.S. aquaculture. Virginia Institute of Marine Science Eastern Shore Lab Seminar Series. Wachapreague, VA. (*December 4, 2019*)
10. van Senten, J, Engle, C.R. The on-farm regulatory cost burden on U.S. aquaculture. US EPA. Washington, D.C. (*June 25, 2019*)
11. van Senten, J., Engle, C.R. Costs and effects of the regulatory environment on U.S. trout aquaculture. Colorado Aquaculture Association Meeting. Nathrop, Colorado. (*February 1, 2019*)
12. van Senten, J., Engle, C.R. Regulatory effects on the value of shellfish aquaculture. 45th East Coast Commercial Fisherman's & Aquaculture Trade Exposition. Ocean City, Maryland. (*January 19, 2019*)
13. van Senten, J., Engle, C.R. Quantifying regulatory costs for the shellfish industry. Harold Haskin Fisherman's Forum Series. Cape May, New Jersey. (*December 13, 2018*)
14. van Senten, J, Engle, C.R. The effects of the regulatory environment on U.S. aquaculture producers. USDA ERS. Washington, D.C. (*April 19, 2018*)
15. Engle, C.R., van Senten, J. Why are U.S. aquaculture producers so concerned about regulations? Interagency Working Group on Aquaculture. Washington D.C. (*April 19, 2018*)

16. Engle, C.R., van Senten, J. Farm financial health. Wisconsin Aquaculture Conference. Marshfield, Wisconsin. *(March 3, 2018)*
17. Engle, C.R., van Senten, J. Strategic marketing: Finding your key markets & choosing products for those markets. Wisconsin Aquaculture Conference. Marshfield, Wisconsin. *(March 3, 2018)*
18. Engle, C.R., van Senten, J. Adapting to ever-changing market demands. Wisconsin Aquaculture Conference. Marshfield, Wisconsin. *(March 3, 2018)*
19. van Senten, J., Engle, C.R. What is the regulatory cost burden on Wisconsin baitfish/sportfish farms? Wisconsin Aquaculture Conference. Marshfield, Wisconsin. *(March 2, 2018)*
20. van Senten, J., Engle, C.R. The farm level effects of regulations on U.S. trout producers. Aquaculture America 2018. Las Vegas, Nevada. *(February 22, 2018)*
21. van Senten, J. Engle, C.R., Hartman, K., Johnson, K., Gustafson, L. Is there an incentive for participation in a uniform health standard for aquaculture farms? Aquaculture America 2018. Las Vegas, Nevada. *(February 22, 2018)*
22. van Senten, J. Engle, C.R., Hartman, K., Johnson, K., Gustafson, L. Improved profitability through better animal health? Potential impacts of a uniform code for commercial aquatic animal health. Aquaculture America 2018. Las Vegas, Nevada. *(February 20, 2018)*
23. van Senten, J., Engle, C.R. What is the regulatory cost burden on Ohio baitfish/sportfish farms? Ohio Aquaculture Association Conference. *(January 27, 2018)*
24. Engle, C.R., van Senten, J. Adapting to everchanging market demands. Ohio Aquaculture Association Conference. *(January 26, 2018)*
25. van Senten, J., Engle, C.R. How much does government cost the shellfish industry? 44th East Coast Commercial Fisherman's & Aquaculture Trade Exposition. Ocean City, Maryland. *(January 13, 2018)*
26. van Senten, J., Engle, C.R., Schwarz, M.H., Mullins, C. Commercial Aquaponics. Putting Down Roots Aquaponics Conference. Portland, Oregon. *(November 4, 2017)*
27. van Senten, J. Engle, C.R., Hartman, K., Johnson, K., Gustafson, L. Increasing profitability through better animal health: potential impacts of a uniform code for commercial aquatic animal health. 147th American Fisheries Society Meeting. Tampa, Florida. *(August 21, 2017)*
28. van Senten, J. Engle, C.R. What is the regulatory cost burden on Ohio baitfish/sportfish farms? Aquaculture Economics & Marketing Workshop. Columbus, Ohio. *(July 15, 2017)*
29. van Senten, J., Engle, C.R. The regulatory burden: types of economic effects on west coast shellfish farms. National Shellfish Association Meeting. Memphis, Tennessee. *(March 28, 2017)*
30. van Senten, J. How to mix water and electricity: musings by a millennial. Plenary speaker. Aquaculture America 2017. San Antonio, Texas. *(February 20, 2017)*
31. van Senten, J., Johnson, K., Gustafson, L., Hartman, K. Cost-benefit analysis of commercial aquaculture health program standards (CAHPS) pilot projects. Aquaculture America 2017. *(February 20, 2017)*

32. Engle, C.R., van Senten, J. Update on regulatory cost studies. National Aquaculture Association Board Meeting. San Antonio, Texas. *(February 19, 2017)*
33. Engle, C.R., van Senten, J. Economic Contributions of the Arkansas Bait and Sportfish Industry. Arkansas Bait and Ornamental Fish Growers Association. Lonoke, Arkansas. *(February, 2017)*
34. Engle, C.R., van Senten, J. Regulatory Effects on the Economic Efficiency of Bait and Sportfish Farming. Arkansas Bait and Ornamental Fish Growers Association. Lonoke, Arkansas. *(February, 2017)*
35. van Senten, J., Engle, C.R. The cost of regulations affecting U.S. trout aquaculture. Colorado Aquaculture Association Meeting. Nathrop, Colorado. *(February 3, 2017)*
36. van Senten, J., Engle, C.R., Fornshell, G., Conte, F., Hanshumaker, B., Hudson, B., Schwarz, M. The cost and impact of regulations on shellfish aquaculture. 70th Annual Shellfish Growers Conference and Tradeshow. Lake Chelan, Washington. *(October 12, 2016)*
37. Engle, C.R. and van Senten, J. Fish farming costs: how much is due to regulations? Fall Meeting of the United States Trout Farmers Association and Penn Aqua. Bethlehem, Pennsylvania. *(September 7, 2016)*
38. Engle, C.R., and van Senten, J. Fish farming costs: how much is due to regulations? Idaho Aquaculture Association Annual Meeting. Twin Falls, Idaho. *(June 11, 2016)*
39. van Senten, J. and Engle, C.R. The potential impacts of a uniform commercial aquatic animal health code. Aquaculture America 2016. Las Vegas, Nevada. *(February 26, 2016)*

Technical presentations

40. van Senten, J., Engle, C.R., Kumar, G., Hegde, S., Dey, M., Ojha, R. Market research to guide U.S. aquaculture recovery from the COVID-19 pandemic. Mid-Atlantic Sea Grant Meeting. Given via Zoom. *(April 7, 2022)*
41. Pattillo, A., Yu, M., Parker, M., Webster, D., Lui, C., Tao, Y., Aloimonos, Y., Chopra, N., Gray, M., Callam, B., Hudson, B., van Senten, J. Smart, sustainable shellfish aquaculture management program. Aquaculture America 2022. San Diego, California. *(March 4, 2022)*
42. van Senten, J., Kumar, G. Economic status and contribution of U.S. aquaculture. Aquaculture America 2022. San Diego, California. *(March 3, 2022)*
43. van Senten, J., Engle, C.R., Schwarz, M.H., Agyeman, D.A., Boldt, N., Watkins, C. Marketing and economics of warmwater marine finfish aquaculture. Aquaculture America 2022. San Diego, California. *(March 3, 2022)*
44. Agyeman, D.A., van Senten, J., Engle, C.R., Watkins, C., Schwarz, M.H. Warmwater marine finfish in the southern tier states: consumer preference survey results. Aquaculture America 2022. San Diego, California. *(March 3, 2022)*
45. Boldt, N.C., Engle, C., Watkins, C., Schwarz, M., van Senten, J. A supply analysis of 20 emerging marine finfish species for commercial aquaculture production. Aquaculture America 2022. San Diego, California. *(March 3, 2022)*

46. Hegde, S., Kumar, G., Engle, C., Avery, J., Arattuthodi, S., Johnson, J., van Senten, J. Production economic relationships in intensive U.S. catfish production systems. Aquaculture America 2022. San Diego, California. (*March 1, 2022*)
47. Sun, L., Kumar, G., Engle, C., van Senten, J. Retail seafood market trends in the U.S., 2016-2021. Aquaculture America 2022. San Diego, California. (*March 1, 2022*)
48. van Senten, J., Engle, C.R., Schwarz, M., Dey, M. Market research to guide U.S. aquaculture recovery from the COVID-19 pandemic. Aquaculture America 2022. San Diego, California. (*March 1, 2022*)
49. Clark, C., van Senten, J., Engle, C., Schwarz, M. Regulatory costs on Atlantic coast shellfish farms. Aquaculture America 2022. San Diego, California. (*March 1, 2022*)
50. Hegde, S., Kumar, G., Engle, C., Hanson, T., Roy, L.A., van Senten, J., Johnson, J., Avery, J., Aarattuthodi, S., Dahl, S., Dorman, L., Peterman, M. Economic contribution of the U.S. catfish industry. Aquaculture America 2022. San Diego, California. (*March 1, 2022*)
51. Hegde, S., Kumar, G., Engle, C., Hanson, T., Roy, L.A., Cheatham, M., Avery, J., Aarattuthodi, S., van Senten, J., Johnson, J., Wise, D., Dahl, S., Dorman, L., Peterman, M. Technological progress in the U.S. catfish industry. Aquaculture America 2022. San Diego, California. (*March 1, 2022*)
52. van Senten, J. Marketing Considerations. Virginia Cooperative Extension Winter Conference: Aquaponics Session. Given via Zoom. (*February 2, 2022*)
53. van Senten, J., Schwarz, M.H., Clark, C., Goncalves, F., Agyeman, D.A., Boldt, N.C., Engle, C.R. VSAREC – SEAMaR, seafood economic analysis and marketing research. Virginia Aquaculture Conference. Newport News, Virginia. (*January 8, 2022*)
54. van Senten, J. From Hatch funding to a supported research program. Virginia Tech new faculty cohort session. Given via Zoom. (*December 10, 2021*)
55. van Senten, J., Engle, C., Watkins, C., Schwarz, M. Warmwater Marine Finfish Workshop: Supply Analysis, Consumer Preferences, and Distributor Preferences. Warmwater Marine Finfish Workshop. Virginia Tech. (*August 31, 2021*)
56. Engle, C.R. Kumar, G., van Senten, J. Cost drivers and profitability of U.S. pond, raceway, and RAS aquaculture. Aquaculture America 2021. San Antonio, Texas. (*August 13, 2021*)
57. Kumar, G., Engle, C.R., Hegde, S., van Senten, J. Economics of U.S. catfish farming practices: profitability, economies of size, and liquidity. Aquaculture America 2021. San Antonio, Texas. (*August 13, 2021*)
58. Engle, C.R., Kumar, G., van Senten, J. Resource use efficiency in U.S. aquaculture: farm-level comparisons across fish species and production systems. Aquaculture America 2021. San Antonio, Texas. (*August 13, 2021*)
59. Brayden, C., Engle, C.R., van Senten, J., Belle, S., Science Crunchers. Maine aquaculture financial benchmarking and risk management reports – using infographics to expand reach and engagement. Aquaculture America 2021. San Antonio, Texas. (*August 13, 2021*)
60. Goncalves, F., van Senten, J., Schwarz, M. Characterization of the Virginia seafood supply chain. Aquaculture America 2021. San Antonio, Texas. (*August 13, 2021*)

61. Engle, C.R., Kumar, G., van Senten, J. New enterprise budgets for U.S. aquaculture and how to use them. Aquaculture America 2020. Honolulu, Hawai'i. *(February 11, 2020)*
62. van Senten, J. Economics of Aquaponics. Virginia Cooperative Extension Winter Conference. Roanoke, Virginia. *(January 30, 2020)*
63. van Senten, J., Engle, C.R. Economic fundamentals of RAS. RASTech 2019. Washington, D.C. *(May 13, 2019)*
64. van Senten, J., Engle, C.R. U.S. Regulatory compliance costs on west coast shellfish farms. Aquaculture America 2019. New Orleans, Louisiana. *(March 11, 2019)*
65. van Senten, J., Engle, C.R. U.S. Interstate trade regulations for aquaculture: what is the cost to U.S. producers? Aquaculture America 2019. New Orleans, Louisiana. *(March 11, 2019)*
66. van Senten, J., Engle, C.R. Quantifying the farm level effects of regulations on the U.S. aquaculture industry. Department of Agricultural and Applied Economics, Virginia Tech. Blacksburg, Virginia. *(October 19, 2018)*
67. van Senten, J., Engle, C.R. The cost of regulatory compliance on west coast shellfish farms: effects and impacts. Aquaculture America 2018. Las Vegas, Nevada. *(February 22, 2018)*
68. van Senten, J., Engle, C.R. The effects of regulations on U.S. trout producers. Aquaculture America 2018. Las Vegas, Nevada. *(February 20, 2018)*
69. van Senten, J., Dey, M., and Engle, C.R. The effects of regulations on efficiency of U.S. baitfish and sportfish farms. Aquaculture America 2017. San Antonio, Texas. *(February 21, 2017)*
70. van Senten, J. and Engle, C.R. The economic contribution of the baitfish and sportfish industry to the state of Arkansas. Aquaculture America 2017. San Antonio, Texas. *(February 21, 2017)*
71. van Senten J. Opportunities for graduate students to maximize their resume. Aquaculture America 2016. Las Vegas, Nevada. *(February 25, 2016)*
72. van Senten, J. and Engle, C.R. The Costs of fish health testing regulations on U.S. producers of baitfish and sportfish. Aquaculture America 2016. Las Vegas, Nevada. *(February 24, 2016)*
73. van Senten, J. and Engle, C.R. Costs of the U.S. regulatory environment on baitfish and sportfish aquaculture. Aquaculture America 2016. Las Vegas, Nevada. *(February 24, 2016)*
74. van Senten, J. and Engle, C.R. Costs of the U.S. regulatory environment on baitfish and sportfish aquaculture. Southern Division American Fisheries Society Meeting. Wheeling, West Virginia. *(February 20, 2016)*
75. van Senten, J. and Engle, C.R. Costs of the U.S. regulatory environment on baitfish and sportfish aquaculture. Mid-Continent Warmwater Fish Culture Workshop. Ashland, Nebraska. *(February 2, 2016)*
76. van Senten, J. and Engle, C.R. Quantifying the impacts of the regulatory environment on United States baitfish and sportfish aquaculture. Aquaculture America 2015. New Orleans, Louisiana. *(February 22, 2015)*

77. van Senten J. Contributing to the development of a new FAO code of conduct for responsible fisheries (CCRF) aquaculture questionnaire. Aquaculture America 2014. Seattle, Washington. *(February 12, 2014)*
78. van Senten, J. and Engle, C.R. Estimating costs and impacts of regulations on U.S. baitfish and sportfish Growers. Aquaculture Fisheries Center Field Day. Pine Bluff, Arkansas. *(October 2, 2014)*

Industry and stakeholder presentations

79. van Senten, J. Plan to make a profit; don't leave it to chance. Aquaculture America 2022. San Diego, California. *(March 4, 2022)*
80. van Senten, J. Marketing strategies for financial shocks. Ohio Aquaculture Conference. Given via Zoom. *(January 29, 2022)*
81. van Senten, J., Engle, C.R., Kumar, G., Ojha, R. Marketing for the future. East Coast Commercial Fisherman and Aquaculture Trade Expo. Ocean City, Maryland. *(January 15, 2022)*
82. van Senten, J., Engle, C.R., Kumar, G., Ojha, R. Assessing consumer behaviors: are pandemic trends temporary? Virginia Aquaculture Conference. Newport News, Virginia. *(January 7, 2022)*
83. Engle, C.R., van Senten, J. Managing your farm during uncertain times. Virginia Aquaculture Conference. Newport News, Virginia. *(January 7, 2022)*
84. van Senten, J., Engle, C.R., Kumar, G. The COVID-19 pandemic and how it's changing the industry. United States Trout Farmer Association Conference 2021. Branson, Missouri. *(September 9, 2021)*
85. van Senten, J., Engle, C.R., Smith, M.A., Kumar, G., Hegde, S., Schwarz, M. Impacts of the COVID-19 pandemic on United States catfish farms. Aquaculture America 2021. San Antonio, Texas. *(August 14, 2021)*
86. Engle, C.R., van Senten, J., Parker, M., Webster, D., Clark, C. Economic trade-offs and risk between traditional bottom and container culture of oysters on Maryland farms. Aquaculture America 2021. San Antonio, Texas. *(August 14, 2021)*
87. Bolt, N.C., Engle, C.R., van Senten, J., Cassiano, E.J., DiMaggio, M.A. A regulatory impact assessment of ornamental aquaculture farms in Florida. Aquaculture America 2021. San Antonio, Texas. *(August 14, 2021)*
88. Cheatham, M., Hegde, S., Kumar, G., Engle, C.R., Roy, L., Hanson, T., van Senten, J. Adoption of productivity-enhancing technologies in the U.S. catfish industry. Aquaculture America 2021. San Antonio, Texas. *(August 14, 2021)*
89. Hegde, S., Kumar, G., Engle, C., Hanson, T., van Senten, J., Roy, L. Economic impact assessment of the U.S. catfish industry. Aquaculture America 2021. San Antonio, Texas. *(August 14, 2021)*
90. Schwarz, M., Bentley, C., Snyder, R., Ovissipour, R., Urlick, S., van Senten, J., Congrove, M., Bond, K. Development of a recirculating aquaculture system for bivalve larval culture. Aquaculture America 2021. San Antonio, Texas. *(August 13, 2021)*

91. Bolt, N.C., Engle, C.R., van Senten, J., Cassiano, E.J., DiMaggio, M.A. Quantifying regulatory costs – an overview of the Florida ornamental industry. Aquaculture America 2021. San Antonio, Texas. *(August 13, 2021)*
92. Clark, C., van Senten, J., Smith, M.A. Engle, C., Fluharty, S., Schwarz, M., Kumar, G., Hegde, S. Impacts of COVID-19 on U.S. mollusk aquaculture. Aquaculture America 2021. San Antonio, Texas. *(August 13, 2021)*
93. van Senten, J. Marketing strategies for financial shocks. Aquaculture America 2021. San Antonio, Texas. *(August 13, 2021)*
94. van Senten, J. Impacts of the COVID-19 pandemic on the U.S. seafood industry. Atlantic and Gulf Coast Seafood Technology Conference. Virtual via Zoom. *(June 24, 2021)*
95. van Senten, J., Engle, C.R., Parker, M., Webster, D. The Economic Impact of Shellfish Aquaculture in Maryland, USA. Recorded and presented via Zoom. *(March 8th, 2021)*
96. van Senten, J. & Engle, C.R. The Effects of Permitting Delays on Return on Investment for Pacific Coast Shellfish Aquaculture. Recorded and presented via Zoom. *(March 8th, 2021)*
97. van Senten, J., Smith, M.A., and Engle, C.R. Impacts of COVID-19 pandemic on U.S. Aquaculture and Aquaponics. Aquaponics Association Conference. Given via Zoom. *(October 18th, 2020)*
98. van Senten, J., and Engle, C.R. Marketing and Sales of Aquaculture Products. Virginia Cooperative Extension. Online Webinar. *(August 25th, 2020)*
99. van Senten, J., Smith, M.A., and Engle, C.R. Impacts of COVID-19 on United States Aquaculture & Aquaponics Q1. Virginia Cooperative Extension. Online webinar. *(July 28, 2020)*
100. van Senten, J. Engle, C.R., Parker, M., Webster, D. The Value of the Maryland shellfish aquaculture industry. Online Webinar. Chesapeake Bay Foundation. *(April 9, 2020)*
101. van Senten, J., Engle, C.R. Infographics as tools for disseminating aquaculture research. Aquaculture America 2020. Honolulu, Hawai'i. *(February 10, 2020)*
102. van Senten, J., Schwarz, M., Ovissi, R., Villalba, A., Lane, R. Virginia Seafood AREC programmatic expansion. Aquaculture America. Honolulu, Hawai'i. *(February 11, 2020)*
103. van Senten, J. Engle, C. Parker, M., Webster, D. The value of the Maryland shellfish aquaculture industry. 46th East Coast Commercial Fisherman's & Aquaculture Trade Exposition. Ocean City, Maryland. *(January 18, 2020)*
104. Clark, C., van Senten, J., Engle, C. Measuring the Cost of Regulations on U.S. Aquaculture Producers. Virginia Aquaculture Conference. Newport News, Virginia. *(November 16, 2019)*
105. Schwarz, M., van Senten, J., Ovissi, R., Kuhn, D. Virginia Tech Research and Extension Updates. Virginia Aquaculture Conference 2019. Newport News, Virginia. *(November 15, 2019)*
106. van Senten, J., Engle, C.R. U.S. The economic effect of permitting delays on pacific coast shellfish aquaculture. Pacific Coast Shellfish Grower Conference 2019. Portland, Oregon. *(September 17, 2019)*

107. van Senten, J., Engle, C.R. The on-farm regulatory cost burden on U.S. aquaculture. University of Florida Tropical Aquaculture Laboratory. Ruskin, Florida. *(July 11, 2019)*
108. van Senten, J. Aquaponics marketing and economics. Urban Agriculture Summit. Virginia Beach, Virginia. *(April 25, 2019)*
109. van Senten, J., Engle, C.R. The effects of regulations on West Coast shellfish producers. Pacific Shellfish Growers Association Meeting. Blaine, Washington. *(September 19, 2018)*
110. Engle, C.R., van Senten, J. The effects of regulations on U.S. trout producers. United States Trout Farmer Association Meeting 2018. Shepherdstown, West Virginia. *(September 6, 2018)*
111. van Senten, J., Engle, C.R. The farm level effects of regulations on U.S. trout producers. Idaho Aquaculture Association 2018. Twin Falls, Idaho. *(June 2, 2018)*
112. van Senten, J., Engle, C.R. The cost of regulatory compliance on west coast shellfish farms. National Shellfish Association 2018. Seattle, Washington. *(March 22, 2018)*
113. van Senten, J., Engle, C.R., Schwarz, M.H., Mullins, C. Aquaponics economics. Virginia Aquaculture Conference. Newport News, Virginia. *(November 18, 2017)*
114. van Senten, J., Engle, C.R. Regulations from a producer perspective. Virginia Aquaculture Conference. Newport News, Virginia. *(November 18, 2017)*
115. Kuhn, D., Schwarz, M.H., Urick, S., van Senten, J., Engle, C., Nerrie, B., Crosby, D., Mullins, C. Virginia Aquaculture Research and Extension Updated 2016-2017. Virginia Aquaculture Conference. Newport News, Virginia. *(November 18, 2017)*
116. Engle, C.R., Fornshell, G., Conte, F., Hanshumaker, B., Hudson, B., Schwarz M.H., van Senten, J. The economic impact of regulations on shellfish and trout aquaculture growth in the western United States. Western Regional Aquaculture Center Meeting. Spokane, Washington. *(October 4, 2017)*
117. van Senten, J., Engle, C.R. West coast shellfish cost of regulatory compliance project update. Western Regional Aquaculture Center Meeting. Spokane, Washington. *(October 3, 2017)*
118. Engle, C.R. and van Senten, J. On the road to measuring the regulatory burden on U.S. trout farms. United States Trout Farmers Association Meeting. Twin Falls, Idaho. *(September 22, 2017)*
119. van Senten, J. and Engle, C.R. The potential impacts of a uniform commercial aquatic animal health code. Arkansas Bait and Ornamental Fish Farmers Meeting. Lonoke, Arkansas. *(February 11, 2016)*
120. van Senten, J. and Engle, C.R. The costs and impacts of regulations. University of Arkansas at Pine Bluff Chamber of Commerce Tour. Pine Bluff, Arkansas. *(June 2, 2015)*
121. van Senten, J. and Engle, C.R. The costs and impacts of regulations. Arkansas Bait and Ornamental Fish Farmers Meeting. Lonoke, Arkansas. *(February, 5, 2015)*
122. van Senten, J. and Engle, C.R. The costs and impacts of regulations. Kansas Aquaculture Association Meeting. McPherson, Kansas. *(January 24, 2015)*

123. van Senten, J. and Engle, C.R. The costs and impacts of regulations. Texas Aquaculture Association Meeting. Fredericksburg, Texas. *(January 22, 2015)*

Panel presentations

124. Virginia Cooperative Extension Ag Policy & Market Outlook Forum. Changing Consumer Demand for Seafood. Given via Zoom. *(March 14, 2022)*
125. Marketing and Economics of Aquaponics. Mid-Atlantic Urban Agriculture Summit 2021. Given via Zoom. *(October 14, 2021)*
126. Chesapeake Bay Program Scientific and Technical Advisory Committee (STAC). Impacts of COVID-19 on Fisheries. Given via Zoom. *(June 7th, 2021)*
127. Dean's Forum on Living with a Pandemic. Panel members: William Becker, John Bovay, Jonathan van Senten, Anna Zeide. Given via Zoom. *(March 15th, 2021)*
128. van Senten, J. Adding economics to the mix. Collaborative Ecosystems Summit. Christopher Newport University. *(March 14, 2019)*

Guest Lecturer

1. van Senten, J. In person lecture. Aquaculture Economics. Virginia Tech – Francesco Ferretti. *(April 14, 2022)*
2. van Senten, J. Online webinar. Aquaculture Economics. University of Miami - John Stiglitz. *(October 20, 2021)*
3. van Senten, J. Online webinar. Economics as a decision tool to support conservation and sustainability. Virginia Tech - Holly Kindsvater. *(March 3, 2021)*
4. van Senten, J. Online webinar. Aquaculture Economics. Virginia Tech - Francesco Ferretti. Fisheries Management and Conservation. *(April 23, 2020)*
5. van Senten, J. Online webinar. Aquaponics economics and marketing. Virginia Cooperative Extension - James Hilleary. Potomac Aquaponics Association. *(April 25, 2019)*
6. van Senten, J. Online webinar. The economics of recirculating aquaculture systems. University of Southern Maine - Theodore Willis. *(April 3, 2019)*
7. van Senten, J. Online webinar. Aquaponics marketing and economics. Virginia Cooperative Extension Winter Conference. *(February 8, 2019)*
8. van Senten, J. Graduate Seminar. The costs of regulations on producers of baitfish and sportfish in the United States. University of Arkansas at Pine Bluff. *(February 6, 2016)*

Journal Article Reviewer

Aquaculture (1)

Journal of Applied Economics (1)

Applied Economic Perspectives & Policy (1)

Environmental and Resource Economics (1)
Journal of the World Aquaculture Society (4)
Aquaculture Economics and Management (9)
Fisheries and Aquatic Sciences (1)

Involvement with professional associations

United States Aquaculture Society. Website Sub-unit Committee. Committee member.
(February 2020 – February 2021)

United States Aquaculture Society. Finance Committee. Committee member.
(February 2018 – February 2021)

World Aquaculture Society. Student Activities Committee. Committee member.
(February 2018 – February 2020)

United States Aquaculture Society. Student Sub-unit Committee. Committee member.
(February 2016 – February 2019)

United States Aquaculture Society. Student Liaison. (February 2015 - February 2016)
2016 Student Session: Aquaculture career development and advice. 11 speakers.

United States Aquaculture Society. Assistant Student Liaison. (February 2014 - February 2015)
2015 Student Session: Careers in aquaculture. 6 speakers.

Student Advising and Teaching

Graduate Student Committee Member: D. Arancibia. PhD. Virginia Institute of Marine Science,
College of William & Mary. (April 2022 – Present)

Graduate Student Committee Chair: R. Ojha. PhD. Department of Agricultural and Applied
Economics at Virginia Polytechnic Institute and State University. (August 2021 – Present)

Virginia Sea Grant Student Mentor: J. Baldisimo. PhD. Department of Biological Sciences at
Old Dominion University. (November 2020 – Present)

Graduate Student Committee Chair: S. Fluharty. MS. Department of Agricultural and Applied
Economics at Virginia Polytechnic Institute and State University. (August 2019 – July 2021)

Graduate Student Committee Member: S. Hegde. PhD. Mississippi State University. (March
2019 – December 2021)

Graduate Student Committee Member: K. Stump. MS. Department of Agricultural and Applied
Economics at Virginia Polytechnic Institute and State University. (April 2018 – May 2019)

Biology Laboratory - Undergraduate. Department of Biology. University of Arkansas at Pine
Bluff. (Fall Semester 2014)

Affiliations

Virginia Tech – Center for Advanced Innovation in Agriculture (2021 – *present*)

Virginia Tech - Center for Coastal Studies (2020 – *present*)

Agricultural & Applied Economics Association (2018-*present*)

National Aquaculture Association (2016-*present*)

International Association of Aquaculture Economics and Management (2013-*present*)

World Aquaculture Society (2013-*present*)

United States Aquaculture Society (2013-*present*)

American Fisheries Society (2016-*present*)

Professional and volunteer service

Department of Agricultural and Applied Economics Diversity Committee Member. Virginia Polytechnic Institute and State University. (2021 - *Present*)

College of Agriculture and Life Sciences Strategic Planning Committee Member: Virginia Polytechnic Institute and State University. (*October 2019*)

Department of Agricultural and Applied Economics IT Committee Member. Virginia Polytechnic Institute and State University. (*August 2019 - Present*)

College of Agriculture and Life Sciences Diversity Council Committee Member. Virginia Polytechnic Institute and State University. (*August 2018 - Present*)

Graduate Student Association President. University of Arkansas at Pine Bluff. (*January 2014-October 2015*)

Aquaculture/Fisheries Center Website Committee Member. University of Arkansas at Pine Bluff. (*2013-2014*)

Aquaculture Fisheries Club. University of Arkansas at Pine Bluff. (*2013-2016*)

Certifications and Training

Ensemble: Working with Media. Virginia Polytechnic Institute and State University. (*September 14, 2017*)

Ensemble: Essentials. Virginia Polytechnic Institute and State University. (*September 12, 2017*)

Motorboat Operator Certification. United States Department of the Interior. (*January 13, 2013*)

Awards, Honors, and Recognitions

Distinguished Early Career Award in U.S. Aquaculture. United States Aquaculture Society
(February 2020)

International Association of Aquaculture Economics and Marketing Ph.D. Best Dissertation
Award (February 2017)

World Aquaculture Society Certificate of Appreciation. Aquaculture America 2016. Las Vegas,
Nevada. (February 2016)

Gamma Sigma Delta, Agriculture Honor Society. University of Arkansas at Pine Bluff. (2015)

Gamma Sigma Epsilon Chemistry Honor Society, Beta Delta Chapter. Barry University. (2010)

Delta Epsilon Iota Academic Honor Society. Barry University. (2009)

Languages

English – *native proficiency*

Dutch – *native proficiency*

Papiamentu – *native proficiency*

Spanish – *speaking, reading, and writing proficiency*