

Corbin D. Hilling

Virginia Tech Department of Fish & Wildlife Conservation
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EDUCATION

Doctor of Philosophy (In Progress), Fish & Wildlife Sciences, **August 2015–Present**

Virginia Polytechnic Institute and State University, Blacksburg, Virginia

Dissertation: Development of a size-based population dynamics model and evaluation of management strategies for a non-native catfish in Chesapeake Bay

Advisers: Drs. Yan Jiao and Donald J. Orth

Master of Science, Wildlife & Fisheries Resources, **August 2015**

West Virginia University, Morgantown, West Virginia

Thesis: Evaluation of age, growth and diet of channel catfish (*Ictalurus punctatus*) in Cheat Lake, West Virginia

Adviser: Dr. Stuart A. Welsh

Bachelor of Science (*magna cum laude*), Biology (Department Honors), **May 2013**

West Virginia University, Morgantown, West Virginia

Thesis: Investigation of ADAM11 function in *Xenopus tropicalis* development

Research Adviser: Dr. Shuo Wei

EMPLOYMENT EXPERIENCE

Graduate Assistant, Virginia Tech Department of Fish & Wildlife Conservation, **August 2015–Present**

Supervisors: Drs. Yan Jiao and Donald J. Orth

Graduate Assistant, West Virginia University School of Natural Resources, **August 2013–2015**

Supervisor: Dr. Stuart A. Welsh

Fisheries Technician, West Virginia University School of Natural Resources, **July 2010–August 2013**

Supervisor: Dr. Stuart A. Welsh

PUBLICATIONS (* indicates undergraduate mentee co-author)

Books

1. Bugas Jr. PE, **CD Hilling**, V Kells, MJ Pinder, DA Wheaton, DJ Orth. 2019. Field Guide to Freshwater Fishes of Virginia. Johns Hopkins University Press, Baltimore, Maryland.

Peer-Reviewed Journal Articles

10. **Hilling CD**, Y Jiao, AJ Bunch, RS Greenlee, JD Schmitt, DJ Orth. *In review*. Growth dynamics of invasive Blue Catfish in four subestuaries of the Chesapeake Bay, USA. Submitted to: North American Journal of Fisheries Management.

9. Orth DJ, JD Schmitt, **CD Hilling**. *In review*. Hyperbole, simile, metaphor, and invasivore: messaging around the science of a Blue Catfish invasion. Submitted to North American Journal of Fisheries Management.
8. **Hilling CD**, Y Jiao, AJ Bunch, QE Phelps. *In press*. A simulation study to evaluate biases in population characteristics estimation associated with varying bin numbers in size-based age subsampling. Submitted to North American Journal of Fisheries Management.
7. **Hilling CD**, AJ Bunch, JA Emmel, JD Schmitt, DJ Orth. 2019. Growth and mortality of invasive flathead catfish in the tidal James River, Virginia. *Journal of Fish and Wildlife Management* 10(2):641–652.
6. Schmitt JD, JA Emmel, AJ Bunch, **CD Hilling**, DJ Orth. 2019. Feeding ecology and distribution of an invasive apex predator: flathead catfish (*Pylodictis olivaris*) in subestuaries of the Chesapeake Bay, Virginia, USA. *North American Journal of Fisheries Management* 39(2):390–402.
5. *Stang SA, **CD Hilling**, DJ Orth. 2019. Lessons learned from 35 years of students organizing the Mudbass Classic. *Fisheries* 44(3):115–117.
4. **Hilling CD**, ND Taylor, SA Welsh, DM Smith. 2018. Population characteristics of yellow perch in a central Appalachia hydropower reservoir. *Journal of Fish and Wildlife Management* 9(2):475–484.
3. **Hilling CD**, *SL Wolf, JR Copeland, DJ Orth, EM Hallerman. 2018. Occurrence of two non-indigenous catostomid fishes in the New River, Virginia. *Northeastern Naturalist* 25(2):215–221.
2. **Hilling CD**, AJ Bunch, RS Greenlee, DJ Orth, Y Jiao. 2018. Natural mortality and size structure of introduced blue catfish in Virginia tidal rivers. *Journal of the Southeastern Association of Fish and Wildlife Agencies* 5:30–38.
1. **Hilling CD**, SA Welsh, DM Smith. 2016. Age, growth and fall diet of channel catfish in Cheat Lake, West Virginia. *Journal of Fish and Wildlife Management* 7(2):304–314.

Technical Reports

2. Coleman S et al. 2018. Invasive Catfish in the Chesapeake Bay. Summary of the Invasive Catfish Symposium: Chesapeake Bay Program Sustainable Fisheries Goal Implementation Team. November 6–7, 2017. Rice Rivers Center, Charles City County, Virginia. [Full Text](#).
1. Orth DJ, Y Jiao, JD Schmitt, **CD Hilling**, JA Emmel, MC Fabrizio. 2017. Dynamics and role of non-native blue catfish *Ictalurus furcatus* in Virginia’s tidal rivers. Final Report to Virginia Department of Game and Inland Fisheries, Henrico, VA. Contract Number: 2012-13705. [Full Text](#).

PRESENTATIONS (*indicates undergraduate mentee co-author, speaker underlined if not CD Hilling)

33. **Hilling CD**. 2020. Wait for science: a call for responsible invasive species messaging. Virginia Sea Grant Graduate Symposium. Glen Allen, Virginia.

32. Orth DJ, Schmitt JD, **Hilling CD**. 2020. Hyperbole, simile, metaphor, and invasivore: messaging around the science of a Blue Catfish invasion. Catfish 2020: The Third International Catfish Symposium. Little Rock, Arkansas.
31. **Hilling CD**, Y Jiao, AJ Bunch, RS Greenlee, JD Schmitt, DJ Orth. 2020. Growth dynamics of invasive Blue Catfish in four subestuaries of the Chesapeake Bay. Catfish 2020: The Third International Catfish Symposium. Little Rock, Arkansas.
30. **Hilling CD** et al. 2020. Virginia Tech science on the Bay's Blue Catfish conundrum. Invasive Catfish Workgroup Meeting, Chesapeake Bay Program. Rice Rivers Center, Charles City, Virginia. *Invited*.
29. **Hilling CD**. 2019. Adding missing pieces to fishery management puzzles. United States Geological Survey Great Lakes Science Center, Ann Arbor, Michigan. *Invited*.
28. Hopkins CB, **CD Hilling**, DJ Orth. 2019. Egg size variation among walleye in Virginia. Joint Meeting of the Virginia, West Virginia and Virginia Tech Chapters of the American Fisheries Society, Blacksburg, Virginia.
27. **Hilling CD**, Y Jiao, AJ Bunch, QE Phelps. 2019. A simulation study to evaluate the influence of sub-sampling bin sizes on growth parameter estimation. Joint Meeting of the Virginia, West Virginia, and Virginia Tech Chapters of the American Fisheries Society, Blacksburg, Virginia.
26. **Hilling CD**, Y Jiao, AJ Bunch. 2019. A fish growth simulation study to evaluate bin width bias at varying levels of sub-sampling. Southern Division of the American Fisheries Society Meeting, Galveston, Texas.
25. Smith DM, SA Welsh, **CD Hilling**, ND Taylor, DI Wellman. 2019. Long-term recovery of a fish community in an acid impacted hydropower reservoir. Southern Division of the American Fisheries Society Meeting, Galveston, Texas.
24. Pinder MJ, PE Bugas Jr., DJ Orth, **CD Hilling**, VA Kells, DA Wheaton. 2018. A field guide to the freshwater fishes of Virginia. Southeastern Fishes Council 2018 Annual Meeting, McCormick, South Carolina.
24. Stang S*, **CD Hilling**, DJ Orth. 2018. The Mudbass Classic: a 35-year tradition of students engaging the public. 148th Annual Meeting of the American Fisheries Society, Atlantic City, New Jersey.
23. Smith DM, SA Welsh, **CD Hilling**. 2018. Population characteristics of a reestablished reservoir walleye population. Annual Meeting of the West Virginia Chapter of the American Fisheries Society, Morgantown, West Virginia.
22. **Hilling CD**. 2018. Growth and predation: two pieces of the Virginia blue catfish management puzzle. Southern Division American Fisheries Society Catfish Management Technical Committee Meeting. San Juan, Puerto Rico. *Invited*.
21. Bugas Jr, PE, MJ Pinder, VA Kells, **CD Hilling**, D Wheaton, DJ Orth. 2018. Field guide to the freshwater fishes of Virginia (Poster Presentation). Southern Division of the American Fisheries Society Meeting, San Juan, Puerto Rico.

20. Jenkins* HJ, R Wadsworth*, **CD Hilling**, L Castello, JR Copeland. 2018. Non-native quillback in a reservoir of the New River (Poster Presentation). Southern Division of the American Fisheries Society Meeting, San Juan, Puerto Rico.
19. **Hilling, CD**, AJ Bunch, RS Greenlee, MC Fabrizio, Y Jiao, DJ Orth. 2018. Blue catfish fishery and population characteristics in Virginia tidal rivers (Poster Presentation). 2018 Meeting of the Virginia and Virginia Tech Chapters of the American Fisheries Society, Fredericksburg, Virginia. *Awarded Best Student Poster.*
18. Bugas Jr. PE, MJ Pinder, VA Kells, **CD Hilling**, D Wheaton, DJ Orth. 2018. Field guide to the freshwater fishes of Virginia (Poster Presentation). 2018 Meeting of the Virginia and Virginia Tech Chapters of the American Fisheries Society, Fredericksburg, Virginia.
17. Jenkins* HJ, R Wadsworth, **CD Hilling**, L Castello, JR Copeland. 2018. Age and growth of quillback in a reservoir of the New River. 2018 Meeting of the Virginia and Virginia Tech Chapters of the American Fisheries Society, Fredericksburg, Virginia.
16. **Hilling CD**, JD Schmitt, Y Jiao, DJ Orth. 2017. Can we quantify invasive catfish impacts on the ecosystem? Invasive Catfish Symposium, Chesapeake Bay Program, Charles City, Virginia.
15. **Hilling CD**, Y Jiao, AJ Bunch, RS Greenlee, DJ Orth. 2017. Mortality and size-structure of an introduced catfish in Virginia tidal rivers. 71st Annual Conference of the Southeastern Association of Fish and Wildlife Agencies, Louisville, Kentucky.
14. Bunch AJ, JA Emmel, MC Fabrizio, RS Greenlee, **CD Hilling**, Y Jiao, JD Schmitt, DJ Orth. 2017. Recreational trophy, commercial fisheries savior or apex predator? blue catfish in Atlantic coastal rivers (Poster Presentation). 147th Annual Meeting of the American Fisheries Society, Tampa, Florida
13. **Hilling CD**, JD Schmitt, Y Jiao, DJ Orth. 2017. Estimation of population-level consumption of native species by introduced blue catfish in Virginia's tidal rivers. 147th Annual Meeting of the American Fisheries Society, Tampa, Florida
12. Bunch AJ, JA Emmel, MC Fabrizio, RS Greenlee, **CD Hilling**, Y Jiao, JD Schmitt, DJ Orth. 2017. Recreational trophy, commercial fisheries savior or apex predator? blue catfish in Atlantic coastal rivers (Poster Presentation). 8th World Recreational Fishing Conference, Victoria, British Columbia, Canada.
11. **Hilling CD**, SL Wolf*, JR Copeland, DJ Orth, EM Hallerman. 2017. Catostomidae: the importance of and challenges facing a forgotten family in the New River. New River Symposium, Radford, Virginia.
10. **Hilling CD**, Y Jiao, AJ Bunch, RS Greenlee, DJ Orth. 2017. Changes in non-native blue catfish growth during expansion in four Chesapeake Bay tributaries. 31st Annual Meeting of the Tidewater Chapter of the American Fisheries Society, Virginia Beach, Virginia.
9. Smith DM, SA Welsh, ND Taylor, **CD Hilling**. 2017. Recovery of a reservoir fish community from acidification. 2017 Technical Meeting of the Pennsylvania and West Virginia Chapters of the American Fisheries Society, California, Pennsylvania.

8. **Hilling CD**, Y Jiao, DJ Orth. 2016. Spatiotemporal variability in individual blue catfish growth during introduction and expansion in Virginia tidal rivers. 146th Annual Meeting of the American Fisheries Society, Kansas City, Missouri.
7. **Hilling CD**, Y Jiao, DJ Orth. 2016. Individual blue catfish growth variation during introduction and expansion in Virginia tidal rivers. Joint Annual Meeting of the American Fisheries Society Chapters of North Carolina and Virginia, Danville, Virginia.
6. **Hilling CD**, SA Welsh, DM Smith. 2016. Population characteristics of channel catfish in Cheat Lake, West Virginia. Southern Division of the American Fisheries Society Meeting, Wheeling, West Virginia.
5. Smith DM, SA Welsh, ND Taylor, **CD Hilling**. 2016. Environmental and biological correlates of seasonal movement patterns of walleyes in a hydropower reservoir. Southern Division of the American Fisheries Society Meeting, Wheeling, West Virginia.
4. **Hilling CD**, SA Welsh, DM Smith. 2015. Evaluation of age, growth and condition of channel catfish in Cheat Lake, West Virginia. 2015 Meeting of the Virginia, Virginia Tech, and West Virginia Chapters of the American Fisheries Society, Blacksburg, Virginia.
3. Smith DM, SA Welsh, ND Taylor, **CD Hilling**. 2015. Population dynamics and seasonal movement patterns of walleye in a hydropower reservoir. 2015 Meeting of the Virginia, Virginia Tech, and West Virginia Chapters of the American Fisheries Society, Blacksburg, Virginia. *Awarded Best Student Paper*.
2. Smith DM, SA Welsh, **CD Hilling**, ND Taylor. 2015. Seasonal movement patterns of walleye in a hydropower reservoir. Southern Division of the American Fisheries Society Annual Meeting, Savannah, Georgia.
1. Smith DM, SA Welsh, ND Taylor, **CD Hilling**. 2014. Use of acoustic telemetry to determine seasonal movements of walleye in a hydropower reservoir. Southern Division of the American Fisheries Society Annual Meeting, Charleston, South Carolina.

TEACHING EXPERIENCE

Teaching Assistant (Evaluation summaries available [here](#))

Ichthyology (GTA), FIW 4424, Virginia Tech, Spring 2016, 2017, and 2018

- Developed and implemented lab activities to help students learn and practice fish identification
- Led and organized field labs on collection and identification of stream and riverine fishes
- Developed tools for diverse learners to learn and distinguish species
- Supervised undergraduate teaching assistants

Fisheries Techniques (GTA), FIW 3514, Virginia Tech, Fall 2017

- Supervised field laboratories and assisted students in the effective and safe use of equipment
- Mentored students during development and execution of group research projects
- Prepared and delivered guest lecture on age and growth of fishes

West Virginia Natural Resources, FOR 140, West Virginia University, Fall 2012

- Recorded class notes, graded exams, and helped struggling during weekly office hours

Principles of Biology, BIOL 115, West Virginia University, **Fall 2010**

- Helped students with in-class assignments and graded student work for freshman-level course

Guest Lecturer**Fisheries Management**, FIW 4714, Virginia Tech, **Spring 2019**

- *Structured Decision Making* – Developed and delivered lecture and lab activity on applicability of structured decision making to aid management of a local fishery

Ichthyology, FIW 4424, Virginia Tech, **Spring 2019**

- *Siluriformes* – Developed and delivered lecture on diversity of catfishes worldwide

Fisheries Techniques, FIW 3514, Virginia Tech, **Fall 2016**

- *Age and Growth of Fishes* - Developed and delivered lecture on theory behind and techniques for estimation of age and growth of fishes

Wildlife/Fisheries Techniques, WMAN 300, West Virginia University, **Fall 2014**

- *Age and Growth of Fishes* - Developed and delivered lecture on estimation of age and growth of fishes; created lab activity to learn and assess skills of processing/ageing fish from hard parts

Volunteer Laboratory Teaching Experiences**Wildlife Field Biology**, FIW 2324, Virginia Tech, **Spring 2016, 2017, 2018, 2019**

- Led fish sampling and identification component of field lab focused on stream aquatic life

Fisheries Techniques, FIW 3514, Virginia Tech, **Fall 2015 & 2016**

- Guided students on fish sample processing techniques during lake fish sampling laboratory

Wildlife-Fisheries Camp, WMAN 205, West Virginia University, **Summer 2015**

- Taught students standard fish sampling techniques in large navigable river

Vertebrate Natural History, WMAN 224, West Virginia University, **Fall 2014**

- Co-led field sampling outing for stream fishes and taught students how to identify species

Workshops Led**Intro to Fisheries Analysis in R**, VA Tech Chapter American Fisheries Society, **November 2018**

- Developed and instructed workshop on basics of using R in the context of fisheries science

Introduction to R, Virginia Chapter of the Wildlife Society Annual Meeting, **February 2018**

- Developed and instructed workshop on basic uses of R for data management and simple analyses

Fisheries Analysis in R, Virginia Tech Chapter American Fisheries Society, **November 2017**

- Developed and instructed four 1-hour tutorials on using R for traditional fisheries analyses

Catfish Age Estimation Techniques, VA Chapter American Fisheries Society, **December 2015**

- Taught the extraction, processing, and reading of lapillar otoliths from catfishes

GRANTS, AWARDS & HONORS

Distinguished Service Award, Virginia Chapter of the American Fisheries Society, **2020**

Outstanding Doctoral Student, Virginia Tech Dept. of Fish & Wildlife Conservation, **2020**

Travel Award, Third International Catfish Symposium, Fisheries Management Section of the American Fisheries Society (\$200), **2020**

Graduate Research Fellowship, Virginia Sea Grant (\$80,000), **2018–2020**

Chamberlain Graduate Fellow, Virginia Tech Dept. of Fish & Wildlife Conservation (\$1250), **2018**

Department Nominee, Virginia Tech Graduate Student Teaching Excellence Award, **2018**

Best Student Poster, Annual Meeting of the Virginia and Virginia Tech Chapters of the American Fisheries Society (\$50), **2018**

Catfish Management Scholarship Award, Catfish Management Technical Committee of the Southern Division of the American Fisheries Society (\$300), **2018**

Robert D. Ross Scholarship, Virginia Chapter American Fisheries Society (\$500), **2017**

Outstanding Teaching Assistant, Virginia Tech Dept. of Fish & Wildlife Conservation, **2017**

McGinnes Graduate Fellowship, Virginia Tech Dept. of Fish & Wildlife Conservation (\$3000), **2017**

Virginia Wildlife eStore Grant, Virginia Dept. of Game & Inland Fisheries (Co-author, \$1000), **2016**

PROMISE Scholarship (Full Undergraduate Scholarship), State of West Virginia, **2009–2013**

The President's Volunteer Service Award (Bronze), The President of the United States, **2012**

Native American Studies Outstanding Achievement Award, West Virginia University Native American Studies Program, **2011**

Certificate of Achievement for Academic Excellence, West Virginia University Eberly College of Arts and Sciences, **2010 & 2011**

Achievement Award, West Virginia University (\$1000), **2009**

PEER-REVIEW SERVICE

North American Journal of Fisheries Management, February 2020

Transactions of the American Fisheries Society, September 2019

Transactions of the American Fisheries Society, May 2019

Journal of Fish and Wildlife Management, October 2018

Cahiers de Biologie Marine, July 2018

OUTREACH

Blog Manager, ChesapeakeCatfish.com, **August 2018–Present**

- Write stories for non-scientists summarizing scientific findings on invasive catfishes in the Chesapeake Bay watershed

Presenter, Virginia Master Naturalist Statewide Conference, Harrisonburg, Virginia, **September 2019**

- Presented on the diversity and identification of freshwater fish families in Virginia waters

Activity Leader, Virginia Soil & Water Conservation Districts, Youth Conservation Camp, **July 2019**

- Taught and led activity on identification of Virginia freshwater fishes for high school students

Volunteer, Hutton Pen Pal Program, American Fisheries Society, **July 2018 & 2019**

- Corresponded with high school students in the Hutton Junior Fish Biologist program to provide career and college advice

Presenter, Black College Institute at Virginia Tech, June 2019

- Discussed my personal experiences navigating the difficulties of finding my career path
- Shared local stream fishes and their biology with visiting students

Presenter, Floyd Elementary School 1st Grade, Virginia Tech CNRE Field Day, May 2019

- Taught students about the anatomical features of fishes and their diversity in Virginia

Activity Planner/Presenter, Montgomery County Junior 4-H Club, December 2018

- Presented introduction to fish anatomy and behavior
- Developed activity where elementary school students produced clay models of fishes and inferred life history based on anatomical traits

Speaker, Conservation Camp, Virginia Soil and Water Conservation Districts, July 2018

- Presented hands-on lecture of fish management/conservation practices in the New River Valley

Activity Planner, Black College Institute at Virginia Tech Natural Resource Visit, June 2018

- Presented on opportunities in fish and wildlife sciences with a hands-on fish activity

Volunteer, The Mayapple School, Preschool Stream Life Field Experience, June 2018

- Co-led field experience for pre-school students to learn about stream ecology

Presenter, “Virginia Watersheds & Fishes”, Harding Ave. Elementary, Blacksburg, May 2018

- Presented hands-on activity on watersheds, fishes, and zoogeography in the context of inter-basin species introductions in Virginia

Volunteer, Fish Field Trip, Virginia Master Naturalists, Roanoke Valley Chapter, May 2018

- Co-led field trip for Master Naturalists in training on stream fishes

Volunteer, Claytor Lake Mussel Salvage, Friends of Claytor Lake, November 2017

- Found, identified, and relocated stranded freshwater mussels during reservoir drawdown event

Activity Planner, Higher Achievement (Richmond)/Virginia Tech CNRE, July 2017

- Planned hands-on fish ecology lesson for middle school students

Activity Planner, ExploreVT Camp, June 2017

- Planned hands-on fish activity for students attending ExploreVT Camp at Virginia Tech

Guest Speaker, Harding Avenue Elementary, Blacksburg, VA, April 2017

- Taught 4th grade students about fish adaptations to diverse aquatic habitats they inhabit

Guest Blogger, Two Entries, chesapeakecatfish.com, 2016

- Authored blog posts on how to age catfishes and identify sex using external clues

Guest Speaker, Bellview Elementary Junior Master Naturalists, Christiansburg, VA, November 2016

- Taught Junior Master Naturalists about characteristics of fishes and local fish identification

Mentor, Group Research Project, *Fisheries Techniques*, Virginia Tech, October–November 2016

- Mentored two undergraduate students on study examining growth rates of a local non-native fish

Presenter, Blacksburg Middle School, **October 2016**

- Taught middle school students about ecological roles of stream fishes during local pond field trip

Volunteer, Achievable Dream Academy/Virginia Tech CNRE, **July 2016**

- Taught high school students about fishes and ecology of the New River and its tributaries

Volunteer, Virginia Department of Game & Inland Fisheries, **Fall 2015–Spring 2019** (*Sporadic*)

- Assisted biologists with collection of fishes using gill nets and electrofishing
- Collected biological samples (e.g. ageing structures, genetic samples) from sport fishes

Volunteer Assistant Coach, Morgantown High School Lacrosse, **February 2011–May 2015**

- Coached goalies and defense on technique and team strategies
- Organized and led film studies from college games to enforce teaching points

Volunteer Off-season Coordinator, Morgantown High School Lacrosse, **May 2013–November 2014**

- Organized and coached off-season practices
- Organized skills clinics for youth players and supervised high school-age coaches
- Scheduled and coached tournaments on weekends over the summer and in fall

Volunteer, American Cancer Society, Morgantown, West Virginia, **April 2010**

- Assembled a directory of West Virginia hospital, university research, nursing, and social work professionals and departments to facilitate distribution of funding announcements

PROFESSIONAL AFFILIATIONS

American Society of Ichthyologists and Herpetologists, 2017–Present

American Fisheries Society (Current member of West Virginia & Virginia Tech Chapters), 2013–Present

PROFESSIONAL SERVICE

Vice-President, Virginia Tech Chapter of the American Fisheries Society, **April 2019–Present**

Newsletter Editor, Southern Division of the American Fisheries Society, **September 2016–June 2019**

Member, Local Arrangements Committee, Joint Meeting of the Virginia, West Virginia and Virginia Tech Chapters of the American Fisheries Society, **Spring 2019**

Chair, Education Committee, Virginia Tech Chapter AFS, **August 2018–April 2019**

Member, Program Committee, Annual Meeting of Virginia & Virginia Tech Chapters AFS, **Spring 2018**

President, Virginia Tech Chapter of the American Fisheries Society, **May 2017–May 2018**

Webmaster, Virginia Chapter of the American Fisheries Society, **October 2017–March 2018**

Guest Speaker Chair, Fish & Wildlife Conservation GSA Virginia Tech, **April 2016–April 2017**

Webmaster, Beta Beta Beta (Biology Honorary), West Virginia University, **October 2011–May 2013**

TRAININGS & CERTIFICATIONS

Alda Method for Team Science, Alan Alda Center for Communicating Science, Virginia Sea Grant Graduate Symposium, **February 2020**

Associate Fisheries Professional, American Fisheries Society, **December 2019–2027**

Engagement Techniques to Improve Communication with Stakeholders and Policy Decisions

Southern Division American Fisheries Society Annual Meeting, Galveston, TX, **January 2019**

Introduction to Structured Decision Making, US Fish and Wildlife Service, National Conservation Training Center, Shepherdstown, WV, **August 2018**

Collaborative Modeling in Coastal & Marine Resource Management, Virginia Sea Grant & Maryland Sea Grant, Gloucester Point, VA, **July 2018**

Field Sampling Design and Statistical Power, Virginia Chapter of the American Fisheries Society, Fredericksburg, VA, **February 2018**

Emerging Topics and New Approaches to Old Issues in Pond Management, Southern Division American Fisheries Society Annual Meeting, Oklahoma City, OK, **February 2017**

Incorporating Human Dimensions Data into Fisheries Management Decisions, Southern Division American Fisheries Society Annual Meeting, Oklahoma City, OK, **February 2017**

Electrofishing Safety, Southern Division American Fisheries Society, Savannah, GA, **January 2015**

Bayesian Methods for Stock Assessment, Atlantic States Marine Fisheries Commission, Providence, RI, **October 2015**

Motorboat Operators Certification Course, Department of the Interior/ West Virginia Cooperative Fish and Wildlife Research Unit, Morgantown, WV, **May 2014**

Catfish Ageing Workshop, Catfish Management Technical Committee, Southern Division of the American Fisheries Society, Charleston, SC, **January 2014**

REFERENCES

Yan Jiao, PhD, Professor
Virginia Polytechnic Institute and State University
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