THOMAS K. POOL, PH.D

SCHOOL OF AQUATIC AND FISHERY SCIENCES
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EDUCATION

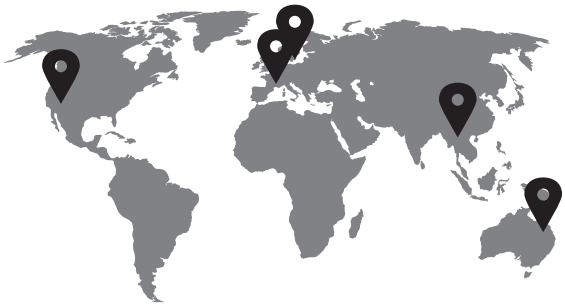
2012 UNIVERSITY OF WASHINGTON
Seattle, Washington, USA
Doctor of Philosophy
Thesis: "Biogeography of fishes in the Southwestern USA"

2002 JAMES COOK UNIVERSITY
Townsville, Australia
Master of Applied Science
Thesis: "Positive interactions between nonindigenous species facilitated by human vectors."

1999 KALAMAZOO COLLEGE
Kalamazoo, Michigan, USA
Bachelor of Arts
Biology with a Concentration in Education

1998 DANISH INTERNATIONAL STUDIES
Copenhagen, Denmark
Marine Biology and Ecology Study Abroad Program

INTERNATIONAL FIELD EXPERIENCE



John Day River fieldwork in Oregon

CURRENT EMPLOYMENT

POSTDOCTORAL FELLOW

University of Washington School of Aquatic and Fishery Sciences - *Seattle, Washington, USA* 2014-Present

- Currently performing research focused on Mekong River food web ecology, with a particular emphasis on studying migratory species ecology within the Tonle Sap Lake, Cambodia. Current research includes utilizing stable isotope analysis to explore fishes' food-web structure and the relative influence of flow alteration and climate change on fish community composition.

POSTDOCTORAL FELLOW

Seattle University Biology Department - *Seattle, Washington, USA* 2015-Present

- Currently teaching introductory and advanced ecology/biology courses. Key teaching methodologies implemented include project-based and active learning approaches within a semi-flipped classroom model. Additionally, consistent engagement of undergraduate students in local and international research projects is prioritized.

MESA INSTRUCTOR

Seattle Mathematics, Science, Engineering, and Achievement (MESA) - *Seattle, Washington, USA* 2014-Present

- Currently teaching and developing curriculum for monthly Saturday Academy Marine Ecology sessions for Seattle MESA. Seattle MESA is a program designed to engage underrepresented populations of students in STEM fields through hands-on learning and college readiness activities. Position involves working with students from high schools across Seattle, representing a diverse variety of backgrounds.

TEACHING EXPERIENCE

PRIMARY LECTURER

General Biology II - *Seattle University*	2018
Principals of Ecology - *Seattle University*	2018
The Science of Sustainability (UCOR) - *Seattle University*	2018
Marine Ecology - *Seattle University*	2017
Evolution and the Unity of Life - *University of Puget Sound*	2016
Fundamentals of Ecology - *Seattle University*	2015
Cell, Molecules, and Systems (Lab only) - *University of Puget Sound*	2015
Marine Biology - *University of Washington*	2005, 2006 & 2015
Oceanography Curriculum Development - *University of Washington*	2005
Field Investigations in Marine Biology - *University of Washington*	2004 & 2005

TEACHING ASSISTANT

Probability and Statistics - *University of Washington*	2012
Water and Society - *University of Washington*	2010 & 2011
Environmental Science - *James Cook University*	2001 & 2002
Evolution - *Kalamazoo College*	1999

GUEST LECTURER

Center for Teaching and Learning Presentation - *University of Washington*	2016
Doris Duke Conservation Scholars Invited Presentation - *University of Washington*	2015
Ecological Design and Planning - *University of Washington*	2015
Invited Seminar Presentation - *Portland State University*	2015
Invited Seminar Presentation - *University of Puget Sound*	2015
General Ecology - *University of Puget Sound*	2014
Invited Seminar Presentation - *Western Washington University*	2014
Invited Seminar Presentation - *Université Paul Sabatier*	2013
Introduction to Probability and Statistics - *University of Washington*	2012
Water and Society - *University of Washington*	2010 & 2011
Graduate Student Workshop - *University of Washington*	2010 & 2011
Annual Graduate Teaching Training Conference Invited Presentation - *University of Washington*	2010
Invasion Biology - *University of Washington*	2008 & 2009
Fisheries Ecology - *University of Washington*	2007 & 2008

MENTORING EXPERIENCE

Corinne Noufi (Undergraduate student, **publication in prep**), Seattle University - *Seattle, Washington, USA*	2016
Rita McCreesh (Undergraduate student, **publication in prep**), University of Puget Sound - *Tacoma, Washington, USA*	2016
Ben Miller (Graduate student), University of Washington - *Seattle, Washington, USA*	2015
Jessica Hale (Graduate student), University of Washington - *Seattle, Washington, USA*	2015
Chea Ratha (Graduate student, **published**), University of Battambong - *Battambong, Cambodia*	2015

Heng Kong (Graduate student), University of Battambong - *Battambong, Cambodia*	2014
Shaoqun Zhou (Graduate student, **published**), Université Paul Sabatier - *Toulouse, France*	2013
Florian Ruland (Graduate student), Ludwig Maximilian University - *Munich, Germany*	2012
Sean Luis (Undergraduate student, **published**), University of Washington - *Seattle, Washington, USA*	2011
Chris Biggs (Undergraduate student), University of Washington - *Seattle, Washington, USA*	2007
Meredith Smith (Undergraduate student), University of Washington - *Seattle, Washington, USA*	2006
Emily Beirne (Undergraduate student), University of Washington - *Seattle, Washington, USA*	2006
Eileen Canola (Undergraduate student), University of Washington - *Seattle, Washington, USA*	2005

RESEARCH PUBLICATIONS

(In prep) Holtgrieve, G., **T.K. Pool**, B. Miller and M. Vlah. The flood-pulse concept revisited: A review of river structure and functioning.

(In prep) Larson, E. and **T.K. Pool**. Homogenization of crayfish within North America.

(In review) Ratha, C. and **T.K. Pool**. Temporal dynamics of fish community structure in a flood-pulse tropical lake ecosystem.

(In review) Noufi, C., G. Holtgrieve, and **T.K. Pool**. Drivers of trophic position plasticity for fishes within flood-pulse systems.

2018 **Pool, T.K.**, *et al*. Fish assemblage composition and resource utilization across floodplain mesohabitates of a tropical flood-oulse lake (Tonle Sap, Cambodia) *(In press)*.

2017 **Pool, T.K.**, T. Phanara, C. Phen and G. Holtgrieve. Seasonal niche plasticity of fishes within a flood-pulse ecosystem (Tonle Sap Lake, Cambodia). *Ecosphere,* 8 (7), 1-15.

2016 **Pool, T.K.**, J. Cucherousset, S. Villeger, A.L. Strecker and G. Grenouillet. Increased taxonomic and functional similarity does not increase communities' trophic similarity. *Global Ecology and Biogeography,* 25, 1-9.

2015 **Pool, T.K.** and J.D. Olden. Fine-scale flow alteration impacts of a dam on native fishes of conservation concern in the Bill Williams River basin. *Ecology of Freshwater Fish*, 24, 56-66.

2015 Zhao, T., G. Grenouillet, **T.K. Pool**, L. Tudesque and J. Cucherousset. Environmental determinants of fish community structure in gravel pit lakes. *Ecology of Freshwater Fish,* 25, 1-10.

2014 **Pool, T.K.**, G. Grenouillet and S. Villeger. Species contribute differently to the taxonomic, functional, and phylogenetic alpha and beta diversity of freshwater fish communities. *Diversity and Distributions,* 20, 1235-1244.

2013 **Pool, T.K.**, S. Luis and J.D. Olden. Assessing the lethal dissolved oxygen tolerance for an invasive tunicate (Ciona Savignyi) to support eradication efforts in Puget Sound. *Northwest Science*, 87, 106-113.

2013 **Pool, T.K.**, A.L. Strecker and J.D. Olden. Identifying Preservation and Restoration Priority Areas for Desert Fishes in an Increasingly Invaded World. *Environmental Management*, 51, 631-641.

2012 **Pool, T.K.** and J.D. Olden. Taxonomic and functional homogenization of a globally endemic desert fish fauna. *Diversity and Distributions*, 18, 366-376.

2011 Lawrence, D.J., J.D. Olden, M.C. Mims, **T.K. Pool**, and E.R. Larson. National parks as protected areas for U.S. freshwater fish diversity. *Conservation Letters*, 4, 364-371.

2010 **Pool, T.K.**, J.D. Olden, J.B. Whittier, and C.P. Paukert. Environmental drivers of fish functional diversity and composition in the Lower Colorado River Basin. *Canadian Journal of Fisheries and Aquatic Sciences*, 67, 1791-1807.

2004 Floerl, O., **T.K. Pool**, and G.J. Inglis. Positive interactions between non-indigenous species facilitate transport by human vectors. *Ecological Applications*, 14, 1724-1736.

RESEARCH PRESENTATIONS

2016 **Pool, T.K.** and G. Holtgrieve. The changing biological and social landscape of the Tonle Sap, Cambodia. Invited speaker for the Luce Initiative on Asian Studies and the Environment at the University of Puget Sound, Tacoma, WA.

2015 **Pool, T.K.** Seasonal niche plasticity of fishes within a flood-pulse ecosystem. American Fisheries Society Annual Meeting, Portland, OR (Conference presentation).

2015 **Pool, T.K.** Fishing communities and natural systems in Cambodia. Invited Scholars' Studio Community Research Speaker, University of Washington, Seattle, WA.

2014 **Pool, T.K.**, and G. Holtgrieve. Stable Isotope analysis of food-web structure in the Tonle Sap. EcoLunch Seminar Series for the School of Aquatic and Fishery Sciences, University of Washington, Seattle, WA.

2014 **Pool, T.K.**, and G. Holtgrieve. An assessment of the changing biological and social landscape in the Tonlé Sap Lake basin. North American Society for Conservation Biology Annual Meeting, Missoula, MO (Conference presentation).

2013 **Pool, T.K.**, J. Cucherousset, and G. Grenouillet. Increased taxonomic and functional similarity does not increase communities' trophic similarity. American Fisheries Society Annual Meeting, Little Rock, AR (Conference presentation).

2012 **Pool, T.K.**, Homogenization of freshwater fishes of the Southwestern USA. Invited speaker at the Station d'Ecologie Expérimentale du Centre National de la Recherche Scientifique, Moulis, France.

2012 **Pool, T.K.**, Native and non-native fish interactions in aquatic ecosystems. Invited speaker at Université Paul Sabatier, Toulouse, France.

2011 **Pool, T.K.**, A. Strecker, and J.D. Olden. Conservation planning for native fishes of the Gila River basin. American Fisheries Society Annual Meeting, Seattle, WA (Conference presentation).

2010 **Pool, T.K.**, Teaching Strategies for Undergraduate Students. Invited speaker at the Annual Graduate Teaching Training Conference at the University of Washington, Seattle, WA.

2010 **Pool, T.K.** and J.D. Olden. Taxonomic and functional homogenization of fishes in the Lower Colorado River Basin. Annual General Meeting of the American Fisheries Society Western Division, Salt Lake City, UT (Conference presentation).

2010 **Pool, T.K.** and J.D. Olden. Conservation of native fish communities in the Lower Colorado River Basin. The Fisheries and Marine Ecosystems Network Annual Graduate Student Conference, Vancouver, British Columbia (Conference presentation).

2009 **Pool, T.K**. and J.D. Olden. Patterns of fish community functional diversity in the Lower Colorado River Basin. Washington Cooperative Fish & Wildlife Research Unit Annual Meeting, Olympia, WA.

RESEARCH EXPERIENCE

POSTDOCTORAL FELLOW

School of Aquatic and Fishery Sciences, University of Washington - *Seattle, Washington, USA* 2014-Present

- Project Title: "The biological and social landscape of the Tonlé Sap Lake basin."
- Colleague: G. Holtgrieve
- Conducted research as part of a collaborative international team, studying the management of freshwater fisheries in Cambodia. Researched food-web structure and the relative influence of flow alteration and climate change on fish community composition.

POSTDOCTORAL FELLOW

Laboratoire Evolution et Diversité Biologique, Université Paul Sabatier - *Toulouse, France* 2012-2014

- Project Title: "Native and non-native species interactions of French fishes."
- Colleagues: G. Grenouillet and J. Cucherousset
- Conducted research focused on the biogeography of French fishes using a combination of database analysis and field studies. Project involved collaboration with scientists from the French National Center for Scientific Research (Centre National de la Recherche Scientifique) and graduate students from the Université Paul Sabatier.

DOCTOR OF PHILOSOPHY GRADUATE STUDENT

School of Aquatic and Fishery Sciences, University of Washington - *Seattle, Washington, USA* 2007-2012

- Project Title: "Biogeography of fishes in the Southwestern USA."
- Advisor: J. Olden
- Performed research focused on the interaction between native and non-native fishes within the Lower Colorado River Basin. Studied population and community level patterns through the implementation of fieldwork, database analyses, and statistical methods.

LABORATORY COORDINATOR

School of Aquatic and Fishery Sciences, University of Washington - *Seattle, Washington, USA* 2003-2007

- Supervisor: G. Pedersen
- Managed undergraduate and graduate student activities associated with coursework as well as laboratory and field research. Coordinated and developed the curriculum for the Marine Biology Program at the University of Washington, including three flagship Marine Biology courses. Duties also included hiring and training teaching assistants and managing a 5-year $300,000 budget.

MASTERS OF APPLIED SCIENCE GRADUATE STUDENT

James Cook University - *Townsville, Australia* 2001-2002

- Project Title: "Positive interactions between non-native species facilitated by humans."
- Advisor: E. Gyrus
- Preformed research focused on the potential for non-native species to promote the spread of other non-native species on recreational vessel hulls. Responsibilities included securing research funding from a private company and collaborating closely with other graduate students to complete the project.

COMMUNITY ECOLOGY RESEARCH TECHNICIAN

Kellogg Biological Station - *Kalamazoo, Michigan, USA* 2000

- Project Title: "Wildflower succession: determining the influence of nutrient availability on community diversity."
- Supervisor: Dr. H. Reynolds
- Conducted field experiments to study how nutrient availability influenced meadow community flower structure.

JOURNAL REVIEWER EXPERIENCE

- Aquatic Living Resources
- Biological Conservation
- Canadian Journal of Fisheries & Aquatic Sciences
- Conservation Biology
- Diversity and Distributions
- Ecography
- Ecology of Freshwater Fish
- Global Ecology and Biogeography
- Hydrobiologia
- Journal of Biogeography
- Northwest Naturalist
- Transactions of the American Fisheries Society

PROFESSIONAL AFFILIATIONS

- American Fisheries Society (AFS)
- Ecological Society of America
- Society for Conservation

PUBLIC OUTREACH EXPERIENCE

Seattle Mathematics, Science, Engineering, and Achievement (MESA) - *Seattle, Washington, USA* 2014-Present

Inspiring Connections Outdoors (ICO) Leader, Sierra Club - *Seattle, Washington, USA* 2007-2012; 2014-Present

River Naturalist, Carkeek Park Environmental Education Center - *Seattle, Washington, USA* 2003-2005

Marine Educator, Salish Sea Expeditions - *Bainbridge Island, Washington, USA* 2002

Coral Reef Educator, Reef HQ - *Townsville, Australia* 2000-2001

REFERENCES

Julian Olden
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