

Susan B. Adams, Ph.D.

Supervisory Research Aquatic Ecologist;
Team Leader, Aquatic Conservation and Ecology Team

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[Google scholar](#) and [ResearchGate](#) profiles

Education

The University of Montana	Ph.D. Organismal Biology and Ecology
University of Idaho	M.S. Fisheries Resources
Carleton College	B.A. Biology

Select Work Experience

Research Aquatic Ecologist	1999-present
US Forest Service, Southern Research Station	

Postdoctoral Scholar	1999
Flathead Lake Biological Station, University of Montana	

Graduate Research Assistant	1994-1999
The University of Montana, Division of Biological Sciences	

Graduate Research Assistant	1991-1994
University of Idaho, Department of Fish and Wildlife Resources	

Hydrological Technician	1989-1991
US Forest Service, Intermountain Research Station, Boise, ID	

Biological Aid, Fisheries	1989
US Forest Service, Payette National Forest, McCall, ID	

Other: Forest Service helitack firefighter; backcountry ranger; ski instructor; children's ski school director; lifeguard/water safety instructor.

Susan B Adams, Select Awards and Honors

- 2023 **Distinguished Alumni**, The University of Montana, Missoula. An honor conferred on alumni who have distinguished themselves in their field, "bringing honor to the University, the state, or the nation."
- 2018 **Jim Sedell Excellence in Research Award**, Rise to the Future, US Forest Service.
- 2018 **Outstanding Professional Presentation Award**, International Association of Astacology biennial meeting. Pittsburgh, PA.
- 2015 **Outstanding Scientific Accomplishment Award** as part of the Inspiring Women Awards. US Forest Service, Southern Research Station Director.

- 2010 **Sustainability Leadership Award** (City of Oxford and U of Mississippi) and **Forest Service Southern Research Station Civil Rights Committee Award** for establishing a community garden.
- 2006 **Rise to the Future, Professional Excellence in Research Award**, a national FS award recognizing outstanding accomplishments by a FS aquatic researcher.
- 1998/1999 **Pre-doctoral Honors Fellowship**, Division of Biological Sciences, The University of Montana.
- 1997 **Best Student Paper Award**, Montana Chapter American Fisheries Society
- 1995 **Graduate Student Scholarship**, Western Division American Fisheries Society

Select Workshops, Webinars, and Outreach

- Adams, SB. 2024. Crayfishes of the southeastern US: a workshop. Mississippi Museum of Natural Science, Jackson, MS. May 8. 33 attendees. **Invited.** (1-day)
- Adams, SB. 2022. Where the crawdads play: introduction to crayfish. [Public webinar](#) for Wolf River Conservancy, Memphis, TN. 27 October. **Invited.**
- Adams, SB. 2020. Crayfishes of the Southeastern USA: a workshop – 1 day. At USFWS North Mississippi Refuges Complex Office, Grenada, MS. 23 participants from 3 federal agencies, 1 state agency, 2 universities, and 1 retired biologist, representing 4 states (AL, AR, MS, and GA). **Invited.**
- Roghair, C and SB Adams. 2019. Climate Change and Warmwater Aquatic Fauna, 2nd Edition. Web page on USFS Climate Change Resource Center. (website removed in Jan. 2025). **Invited**
- Adams, SB 2013. Crawfish in the classroom. Mississippi Teacher Continuing Education Workshop. Grenada, MS. 11 June 2013. **Invited.**
- Bierwagen, B, SB Adams, et al. 2011. Climate change workshop - creating stream monitoring networks. Southeastern Water Pollution Biologists Association annual meeting. Burns, TN. 15-17 November. **Invited** panelist.
- Adams, SB 2010. Crayfish ecology and identification in the southern USA. Workshop, 1-day, South Central Chapter of the Society of Wetland Scientists Meeting. Oxford, MS. 21 October. **Invited** workshop.

Select Recent Professional Presentations

- Adams, SB. 2025. Montana crayfish -- native or non-native? USDA FS Region 1 and MT Fish, Wildlife and Parks, Aquatic Community of Practice. Virtual. **Invited** webinar.
- Adams, SB. 2024. A plague of invaders or native delights? Montana crayfish conundrums. Montana State University Ecology Seminar Series. Bozeman, MT. 7 November. **Invited**
- Adams, SB, MG Glon, and C Hyseni. 2024. Sea level rise, storm surge, and burrowing crayfish— a thought experiment. Southern Hardwoods Forest Research Group meeting. Stoneville, MS. Feb. 15. **Invited**
- Adams, SB, SA Schmidt, DA Schmetterling, and L Martín-Torrijos. 2023. A plague on both your lakes ... and other mysteries from the MT crAy team. The River Mile Crayfish Conference, Richland, WA. June 1. **Invited**

- Adams, SB. 2023. Working on the wild side: field stories from women biologists. USDA ARS Sedimentation Laboratory, Oxford, MS. March 31. Invited for Women's History Month.
- Adams, SB. 2022. Crayfish, disturbances, and why the US Forest Service cares. Dalton State College, Aquatic Ecology Class (Dr. J. Lugthart). Dalton, GA (virtual presentation). 17 October. Invited
- Adams, SB, SA Schmidt, DA Schmetterling. 2022. Legions of Lesions: Sick Crayfish in Montana, USA. 23rd Symposium of the International Association of Astacology. Virtual and in Hluboká nad Vltavou, Czech Republic. 20-25 June. Poster.
- Adams, SB and SG Hereford. 2018. Burning down the house: effects of prescribed burning and brush mulching on primary burrowing crayfish densities. International Association of Astacology biennial symposium. Pittsburgh, PA. 9-13 July. **Outstanding Professional Paper Award** (1 award given)
- Adams, SB and ZC Barnett. 2018. Fish as crayfish samplers in reservoirs and large rivers: preliminary results. Mississippi Chapter of the American Fisheries Society Annual Meeting. Oxford, MS. 7-9 February.
- Adams, SB. 2016. Overview of aquatic invasive species in the U.S.: from Nile crocodiles to *Mysis* shrimp. Workshop: Conservation Plans for Endangered Species Facing the Threat of Emerging Diseases and Invasive Species. Madrid, Spain. 4 September. Invited

Professional Affiliations

- International Union for the Conservation of Nature (IUCN), Freshwater Crab and Crayfish Species Specialist Group, 2009-present
- Adjunct faculty, U of Mississippi, Department of Biology, 2001-present
- Adjunct faculty, U of Southern Mississippi, Department of Biology, 2002-2015
- Member of Graduate School, U of Alabama, Department of Biological Sciences, 2012-2015 2018-2023
- Graduate School Affiliate, Louisiana State University, 2012-2016
- Advisory panel, Southeast Biodiversity Assessment, U of Georgia. 2012-2015.

Select Professional Society Service / Participation

*International Association of Astacology 2004-present

- Editorial Board, Freshwater Crayfish, 2011-present
- President, 2014-2016

*American Fisheries Society: 1991-present

- Symposium co-chair: "Ecology and Phylogeny of Freshwater and Diadromous Sculpins," American Fisheries Society annual meeting, Anchorage, Alaska, 13 Sept. 2005
- Associate Editor, Transactions of the American Fisheries Society, for special module on phylogenetics and ecology of freshwater sculpins.
- Mississippi Chapter: 2000-present
- Endangered Species Committee: 2001- 2004
- Montana Chapter: 1995-1999

- Idaho Chapter: 1991-1995

*Society for Freshwater Science: member

Graduate Student Committees

Bushey, L. Ph.D. student. TBD. Montana State University. 2026-present.

Bilodeau, S. Ph.D. student. Behavioral ecology of nudibranchs and aquatic caterpillars. Georgia Tech. 2025-present.

Schmidt, SA. M.S. student. Impacts of crayfish plague on Montana crayfishes. Montana State University. 2023-present.

Raburn, DM. M.S. student. Use of intermittent waterways by *Hobbseus* crayfishes. North Carolina State University. 2022-present.

Allison, P. Ph.D. student. Phylogenetics and ecology of the crayfish genera *Hobbseus* and *Creaserinus*. U of Mississippi. Committee member/collaborator. 2020-present.

Vaughn, S. 2024. Microbiome communities of aquatic invertebrates. PhD Dissertation. U of Mississippi. Committee member.

Arneson, E. 2021. Invasive crayfish in Alabama. Ph.D. student switched to M.S. Invasive crayfishes in Alabama. U of Alabama. Committee member.

Choice, Z.B. 2019. Effects of reservoirs on crayfishes in Alabama. PhD Dissertation. U of Mississippi. Committee member/collaborator/work supervisor.

Budnick, W.R. 2015. Metacommunity dynamics and the biogeography of central Louisiana crayfishes. M.S. Thesis. Louisiana State U, Baton Rouge. Committee member/ collaborator.

Hoffman, A. E. 2013. Life history and diel activity patterns of *Cambarus striatus* and *Orconectes perfectus* in the New River, Alabama. M.S. Thesis. U of Alabama. Committee member.

Mickle, P. F. 2010. Life history and habitat use of the juvenile Alabama shad (*Alosa alabamae*) in northern Gulf of Mexico rivers. PhD Dissertation. U of Southern Mississippi, Hattiesburg. Committee member/collaborator.

Mickle, P. F. 2006. Life history of the juvenile Alabama shad, *Alosa alabamae*, in the Pascagoula River. M.S. Thesis. U of Southern Mississippi. I initiated and obtained funding for the research and was co-advisor.

Select Teaching, Mentoring, and Outreach

College

*Teaching Assistant - Ecology and Conservation of Aquatic Vertebrates, Biology 495, U of MT, Flathead Lake Biological Station, Summer 1998. Instructor: Dr. Chris Frissell

*Guest lecturer

- Techniques in Advanced Limnology, U of MS, 2007
- Ecology and Conservation of Aquatic Vertebrates, Biology 495, U of MT, Flathead Lake Biological Station, Summer 1999.
- Fisheries Management, U of ID, 1994.

*Laboratory Teaching Assistant - Bioenergetics and Genetics, Biology 10

Carleton College, Winter 1986. Course instructor: Dr. Rick Staub

Other

- *Talked with public about live crayfish exhibits: Crawfest, Mississippi Museum of Natural Science, Jackson, MS; and Wonders of Water, Lafayette County Library, Oxford, MS. 2026.
- *Mentored or co-mentored American Fisheries Society Hutton Scholars (competitive, 8-week, paid, summer internship for high school students). 2004, 2017, 2018, 2022.
- * Led crayfish class/field trip at the U of MS Field Station for 8-10th graders and their leaders in Environmental Youth Leadership Program. 2019.
- *Science fair judge, Mississippi Regional Science fair 2011, 2012; Oxford Elementary School, MS, 2010; Oxford University School, MS, 2001-2, 2004-5.
- *Taught full day of field ecology camp to 19 elementary and middle school children. Strawberry Plains Audubon Center. Holly Springs, MS. 2009.
- *Mississippi crawfish: astounding diversity from bayous to burrows. Public presentation, Hummingbird Celebration, Strawberry Plains Audubon Center. Holly Springs, MS. 2007.
- ***Smithsonian Folklife Festival.** Invited participant in US Forest Service Exhibition. Developed and presented display of live, native Mississippi fishes and crayfishes, spoke to visitors about aquatic biodiversity, conservation, and Forest Service careers, and participated in two, moderated, on-stage discussions. 1.3 million visitors. 23 June-4 July 2005.
- *Native fishes, crayfishes, and mussels presentations, with live animals, to 300 2nd-4th grade students in 2006 and to 650 students in 2005; U.S. Army Corps of Engineers Earth Day celebrations, Oxford, MS.
- *Hummingbird Migration Celebration, Strawberry Plains Audubon Center. Spoke to public about live fish and crayfish displays for one day. (3,000 people attended the event) , Holly Springs, MS. Sept. 2004.
- *Hosted a home-schooled high school student for 8 days of field and laboratory work, teaching research approaches and techniques. Oxford, MS. 2005.
- *Science fair advisor, Oxford University School, MS, 2002, 2004-5, Oxford Middle School, 2006.
- *Fish diversity activity for 200 5th grade students at Aqua Fair, Sardis, MS. 2001.

Volunteering

Founder of WOMADS--Women's Outdoor Mischief and Discovery Society. Oxford, MS. 2018

Founding President, Oxford Community Garden Association. 2009. Led group in establishing the state's first community garden, which is still operating.