

## **Curriculum Vitae**

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Full length version

Aaron J. Adams  
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### **Present Positions**

Senior Scientist and Program Manager, Fisheries Habitat Ecology Program, Center for Fisheries Enhancement, Mote Marine Laboratory, Charlotte Harbor Field Station. 2002 – present.

Executive Director, Bonefish & Tarpon Trust. 2009 – present.

### **Previous Positions/Appointments**

Director of Operations and Research, Bonefish & Tarpon Unlimited (now Bonefish & Tarpon Trust)

Courtesy Faculty, Department of Marine and Ecological Sciences, Florida Gulf Coast University. 2005.

### **Present Appointments**

Courtesy Faculty, Department of Fisheries and Aquatic Sciences, University of Florida. 2008 – present.

Affiliate Member, Coastal Watershed Institute, Florida Gulf Coast University.

Adjunct Graduate Faculty, College of Arts and Sciences, Florida Gulf Coast University.

### **Education**

Ph.D. 2001. Environmental Biology. University of Massachusetts Boston.

M.A. 1993. Marine Science. College of William and Mary, Virginia Institute of Marine Science.

B.A. 1987. St. Mary's College of Maryland

### **Previous Work Experience**

Postdoctoral Associate. 2001 - 2002. North Carolina State University and Mote Marine Lab.

Dissertation Research. 1997 - 2001. University of Massachusetts Boston.

Fish and Wildlife Biologist II and III. 1993 to 1997. U.S. Virgin Islands Division of Fish and Wildlife, St. Croix.

Master's Degree Research. 1990 - 1993. College of William and Mary, Virginia Institute of Marine Science.

Fisheries Technician. 1989-1990. California Department of Fish and Game. Monterey, CA.

### **Service**

Associate Editor, Gulf and Caribbean Research. 2007 – present.

### **Memberships**

American Fisheries Society

Coastal and Estuarine Research Federation

### **Professional (peer-reviewed) Publications**

Adams, A.J. and R.K. Wolfe. In Prep. Fish assemblages in mangrove creeks of southwest Florida (USA): implications of watershed freshwater flow alterations.

Adams, A.J., R.K. Wolfe, N. Barkowski, D. Overcash. In Press. Fidelity to spawning grounds by a catadromous fish, *Centropomus undecimalis*. Mar. Ecol. Prog. Ser.

Adams, A.J. and J.P. Ebersole. In Press. Mechanisms affecting recruitment patterns of fish and decapods in tropical marine ecosystems. Chapter 6 *In* I. Nagelkerken (ed) Ecological linkages among tropical coastal ecosystems. Springer. New York.

Adams, A.J., R.K. Wolfe, C.A. Layman. 2009. Preliminary examination of how human-driven freshwater flow alteration affects trophic ecology of juvenile snook (*Centropomus undecimalis*) in estuarine creeks. Estuaries and Coasts. 32(4):819-828.

Vásquez-Yeomans, L, E. Sosa-Cordero, M.R. Lara, A.J. Adams, and J.A. Cohuo. 2009. Patterns of distribution and abundance of larval *Albula* spp. (Albulidae) in the western Caribbean and adjacent areas. Ichthyological Research.

Danylchuk, A.J., A.J. Adams, S.J. Cooke, and C.D. Suski. 2008. An evaluation of the injury and short-term survival of bonefish (*Albula* spp) as influenced by a mechanical fish handling device used by recreational anglers. Fisheries Research. 93(1-2):248-252.

Adams, A.J. and R.K. Wolfe. 2007. Occurrence and persistence of non-native *Cichlasoma urophthalmus* (Family Cichlidae) in estuarine habitats of southwest Florida (USA): environmental controls and movement patterns. Marine and Freshwater Research. 58(10): 921-930.

Miller, R.J., A.J. Adams, J.P. Ebersole, E. Ruiz. 2007. Evidence for positive density-dependent effects in recovering *Diadema antillarum* populations. Journal of Experimental Marine Biology and Ecology. 349:215-222.

Adams, A.J., R.K. Wolfe, M.D. Tringali, E. Wallace, and G.T. Kellison. 2007. Rethinking the status of *Albula* spp. biology in the Caribbean and Western Atlantic. *In*: J.S. Ault (ed) Biology And Management of the World Tarpon And Bonefish Fisheries. CRC Press. Boca Raton, FL.

Adams, A.J. and R.K. Wolfe. 2006. Cannibalism of juveniles by adult *Centropomus undecimalis*. Gulf of Mexico Science. 24(1/2):11-13.

- Adams, A.J., C. Dahlgren, G.T. Kellison, M.S. Kendall, C.A. Layman, J.A. Ley, I. Nagelkerken, J.E. Serafy. 2006. Nursery function of tropical backreef systems. *Mar. Ecol. Prog. Ser.* 318:287-301.
- Adams, A.J., R.K. Wolfe, W.E. Pine III, B. Thornton. 2006. Efficacy of PIT tags and an autonomous antenna system to study the juvenile life stage of an estuarine-dependent fish. *Estuaries and Coasts.* 29(2):311-317.
- Dahlgren, C., G.T. Kellison, A.J. Adams, B.M. Gillanders, M.S. Kendall, C.A. Layman, J.A. Ley, I. Nagelkerken, J.E. Serafy. 2006. Marine nurseries and effective juvenile habitats: concepts and applications. *Mar. Ecol. Prog. Ser.* 312:291-295.
- Layman, C.A., C. Dahlgren, G.T. Kellison, A.J. Adams, B.M. Gillanders, M.S. Kendall, J.A. Ley, I. Nagelkerken, J.E. Serafy. 2006. Reply Comment: Marine nurseries and effective juvenile habitats. *Mar. Ecol. Prog. Ser.* 318:307-308.
- Adams, A.J., R.K. Wolfe, G.T. Kellison, B.C. Victor. 2006. Patterns of juvenile habitat use and seasonality of settlement by permit, *Trachinotus falcatus*. *Environ. Biol. Fish.* 75:209-217.
- Adams, A.J. 2005. Fish assemblages associated with an established (> 10 years old) artificial reef and an adjacent natural reef. *Proc. 47th Annual Gulf and Caribbean Fisheries Institute.* 441-457.
- Adams, A.J. and D.A. Blewett. 2004. Spatial patterns of estuarine habitat use and temporal patterns in abundance of juvenile permit, *Trachinotus falcatus* in Charlotte Harbor, Florida. *Gulf Carib. Res.* 16(2):129-139.
- Adams, A.J. and J.P. Ebersole. 2004. Resistance of coral reef fishes of back-reef and lagoon habitats to a hurricane. *Bull. Mar. Sci.* 75(1):101-113.
- Adams, A.J. and J.P. Ebersole. 2004. Processes influencing recruitment inferred from distributions of coral reef fishes. *Bull. Mar. Sci.* 75(2):153-174.
- Adams, A.J., R.J. Miller, and J.P. Ebersole. 2004. Tethers make juvenile surgeonfishes (Acanthuridae) vulnerable to attacks by benthic invertebrates. *Bull. Mar. Sci.* 74(1):207-211.
- Adams, A.J., J. V. Locascio, B.D. Robbins. 2004. Microhabitat use by a post-settlement stage estuarine fish: evidence from relative abundance and predation among habitats. *J. Exp. Mar. Biol. Ecol.* 299:17-33.
- Miller, R.J., A.J. Adams, N.B. Ogden, J.C. Ogden, and J.P. Ebersole. 2003. *Diadema antillarum* 17 years after mass mortality. *Coral Reefs.* 22:181-187.
- Adams, A.J. and J.P. Ebersole. 2002. Use of back-reef and lagoon habitats by coral reef fishes. *Mar. Ecol. Prog. Ser.* 228:213-226.
- Adams, A.J. 2001. Effects of a hurricane on two assemblages of coral reef fishes: multiple-year analysis reverses a false 'snapshot' interpretation. *Bull. Mar. Sci.* 69(2): 341-356.
- Adams, A.J. and W.J. Tobias. 1999. Red mangrove prop-root habitat as a finfish nursery area: a case study of Salt River Bay, St. Croix, USVI. *Proc. 46th Annual Gulf and Caribbean Fisheries Institute.* 22-46.
- Adams, A.J. 1996. Estimates of finfish community structure in a mangrove lagoon: traps versus visual transects. *Proc. 27th Meeting of the Association of Marine Laboratories of the Caribbean.* p.1-16.

Adams, A.J. 1995. Historical catch per unit effort of the recreational fishery for billfish in the U.S. Virgin Islands: St. Croix. International Commission for the Conservation of Atlantic Tuna Working Document SCRS/95/. 8pp.

**Recent Research Grants** (Agency, project title, year funded, amount)

NOAA, NMFS, Saltonstall-Kennedy program. The effect of bank-barrier reef lagoon habitat loss on post-settlement juvenile and sub-adult coral reef fishes. 1998 (\$85,790). Co-PI with John Ebersole, University of Massachusetts Boston.

Bonefish & Tarpon Unlimited: Survey and assessment of juvenile bonefish habitats of southeast Florida. 2003 (\$55,000). Sole PI.

National Fish and Wildlife Foundation: Identifying critical habitats for juvenile bonefish in southeast Florida. 2003 (\$67,245). Sole PI.

Charlotte Harbor National Estuary Program: Evaluating the effects of subtropical oligohaline marsh restoration on abundance and habitat use by juvenile snook. 2003 (\$19,360). Sole PI.

NOAA, NURC: Recovery of *Diadema antillarum* inside and outside MPAs at St. Croix, USVI. 2004 (\$71,675). Co-PI with John Ebersole and Robert Miller, University of Massachusetts Boston.

Mote Scientific Foundation: Identification and connectivity of nursery habitats for recreational fishes of Charlotte Harbor. 2005 (\$40,000), 2008 (\$87,657). Sole PI.

Charlotte Harbor National Estuary Program: Do altered coastal habitats promote non-native fish invasions into estuaries: *Cichlasoma urophthalmus* in Charlotte Harbor, FL. 2005 (\$20,000). Sole PI.

Reef plate: Examining the efficacy of *Diadema antillarum* enhancement for restoration of coral reefs in the Florida Keys. 2005 (\$25,000). Co-PI with Ken Leber, Kevan Main, David Vaughn, Mote Marine Laboratory).

National Science Foundation (BIO/DEB/Ecological Biology): Short-and longer-term effects of a hurricane on subtropical estuarine fishes. 2005 (\$26,000). Sole PI.

Southwest Florida Water Management District: Evaluating the effects of restoration on estuarine fishes. 2006 (\$62,500), 2008 (\$45,000). Sole PI.

The Nature Conservancy: Assessment of bonefish populations on Andros, Bahamas. 2006 (\$6,393)

Bonefish & Tarpon Unlimited: Director of Operations and Research. 2006 (\$242,000 – BTU pays 50% of salary annually). Sole PI.

Don Hawley Foundation: Identification of juvenile bonefish habitats. 2006 (\$5,000). Sole PI.

Charlotte Harbor National Estuary Program: Do coastal land alterations impact estuarine food webs? 2006 (\$19,220). Co-PI with Craig Layman, Florida International University.

Florida Fish and Wildlife Conservation Commission: Red tide impacts on fisheries and stock enhancement. (Component of Mote Extended Red Tide Monitoring and Research Program awarded to Richard Pierce). 2006 – 2009 (fish component \$247,860).

Charlotte Harbor National Estuary Program: Do upland drainage alterations contribute to degradation of estuarine creek habitats? Adding water quality analysis as an evaluation tool. 2007 (\$19,940). Co-PI with L. Kellie Dixon.

Florida Sea Grant: Predicting impacts of coastal habitat degradation on an economically important fish. 2008 (\$105,000). Sole PI.

Bonefish & Tarpon Trust: Identifying juvenile bonefish habitats. 2009 (\$30,000). Sole PI.

### **Graduate Advisees**

Andrew Barbour, Master's candidate. University of Florida

### **Graduate Committees**

James Locascio, Ph.D. candidate. University of South Florida.

John O'Connell, Master's candidate. Florida Institute of Technology (graduated)

Vanessa Haley, Master's candidate. Florida International University.

Renee Duffy, Master's candidate. University of South Florida

### **Undergraduate Interns**

2009

Katie Coyne (NSF REU), University of Florida

Liz Roberts (NSF REU),

Jessy Adams, Lawrence University

2008

Tanner Yess (NSF REU), Northern Kentucky University

Nicholas Barkowski (NSF REU), Carroll University

2007

Marielle Terbio (NSF REU intern), University of Guam

Dana Overcash (NSF REU intern), Villanova University

2006

Marianna Bradley (NSF REU intern), College of the Atlantic

2005

Bridget Thornton (NSF REU intern), Eckerd College

2004

Ryan Decker, Grand Valley State University

2003

Kristen Hunt, University of South Alabama

### **Fishing Publications**

Adams, A.J. 2008. Fly Fisherman's Guide to Saltwater Prey. Stackpole Books. Mechanicsburg, PA. 206pp.

Adams, A.J. 2004. Fisherman's coast: angler's guide to marine warm-water gamefish and their habitats. Stackpole Books. Mechanicsburgh, PA. 210 pp. An in-depth review of fish habitat ecology in laymen's terms.

Fernandez, Chico, and A.J. Adams. 2004. Fly Fishing for Bonefish. Stackpole Books. Mechanicsburgh, PA. 192pp.

Adams, A.J. 2008 – 2009. Shallow Water World. Regular conservation column for Shallow Water Angler magazine.

Adams, A.J. 2008. March-April issue. Eyeing the Future. Fly Fishing in Salt Waters.

Adams, A.J. 2001 – 2003. Science for fly fishers, examining the warmwater world. An eight-part series on the ecology and conservation of warm-temperate and tropical coastal habitats for a national fly fishing magazine. Saltwater Fly Fishing magazine.

Adams, A.J. 2004 – 2006. On The Line. An article series translating marine ecology into laymen's terms. *In* Mote Magazine.

This Is Fly online magazine ([www.thisisfly.com](http://www.thisisfly.com)): Issue 3 'Permit 101'; Issue 4 'The science of handling and releasing bonefish'

Florida Fishing Weekly, 2007: 'Who is BTU?'; 'A Few General Tips on Catch and Release'; 'The Bonefish Conundrum'

American Angler magazine. 'How bonefish use tides', February 2008; Fly fishing for redfish, July 2008.

### **Conference Committees, Speaking Invitations, Guest Lectures**

Conference Chair. Third International Bonefish & Tarpon Symposium. Dania, Florida. November 2008.

Invited Speaker. Back Reef Habitat: Ecological Analysis and Characterization Workshop. Lee Stocking Island, Bahamas. January 2002.  
Presentation Title - Processes influencing recruitment inferred from distributions of coral reef fishes.

Invited Speaker. American Fisheries Society, Florida Chapter. Annual meeting. 2003.  
Presentation Title - Examining Effects of Alterations of Freshwater Flow in Charlotte Harbor Florida: An Overview of Collaborative Efforts.

Invited Speaker. Ocean Reef Club, Key Largo, FL. 2003.  
Presentation Title - It's all about the habitat: the importance of habitat connections for sustaining marine recreational fisheries.

Invited Speaker. University of South Florida. St. Petersburg, FL. 2003.  
Presentation Title – Fitness in the context of ontogeny: examples from life history strategies of fishes.

Guest Lecturer. Ichthyology. Florida Gulf Coast University. 2003.  
Lecture Title – Ontogeny in the context of phylogeny.

Invited Speaker. Backbone Fishing Tournament. Key Largo, FL. 2004.  
Presentation Title – Do we know enough to manage the bonefish fishery?

Invited Speaker. Bonefish Tarpon Unlimited, Mini-symposium. Islamorada, FL. 2005.  
Presentation Title – Do we know enough to manage the bonefish fishery?

Invited Speaker. Bonefish Tarpon Unlimited, Tampa Chapter. 2005.  
Presentation Title - Tarpon Ecology: Implications for Fishing and the Fishery.

Planning Committee. Special Symposium, Invasive Species. Estuarine Research Federation Conference, October 2005.

Planning Committee, Backreef II Workshop. The importance of back reef habitats to the sustainability of coral reef ecosystems. Lee Stocking Island, Bahamas, January 2005.

Guest Lecturer. Ichthyology. Florida Gulf Coast University. 2005.  
Lecture Title – Multi-habitat ontogeny and the impacts of anthropogenic habitat

degradation.

Invited Speaker. Florida Association of Environmental Professionals. 2005.

Presentation Title – Measuring the response of Charlotte Harbor fishes to hurricane Charley.

Guest Lecturer. Ichthyology. Florida Gulf Coast University. 2007.

Lecture Title – Multi-habitat ontogeny and the impacts of anthropogenic habitat degradation.

Invited Speaker. Florida International University. Miami, FL. 2007.

Presentation Title – The bonefish conundrum: when phylogeny and ontogeny don't match.

Invited Speaker. University of Florida. Gainesville, FL. 2007

Presentation Title - Distinguishing the effects of anthropogenic and natural (hurricane) disturbances on mangrove creek fishes.

Guest Lecturer. Introductory Biology. Florida Gulf Coast University. 2008.

Presentation Title – Fish Habitat Ecology.

### **Selected Presentations**

International Artificial Reef Conference. 1991. Long Beach, CA.

Poster title - Measurements of initial colonization of a small open bottom artificial reef: comments on short term effects on community structure.

Poster title - Population structure of fishes associated with an offshore Virginia artificial reef: estimates of species composition, abundance, biomass and seasonal changes.

Benthic Ecology Conference. 1992. Newport, RI.

Presentation title - Community structure of fish assemblages associated with an artificial reef in the mid-Atlantic Bight

American Society of Ichthyologists and Herpetologists. 1992. Champaign-Urbana, IL.

Presentation title - Seasonality of fish assemblages associated with an artificial reef in the mid-Atlantic Bight

Gulf and Caribbean Fisheries Institute Annual Conference. 1994. Corpus Christi, TX.

Presentation title - Mangroves as nursery grounds for recreational fisheries.

Gulf and Caribbean Fisheries Institute Annual Conference. 1995. Margarita Island, Venezuela.

Presentation title - Characteristics of fish assemblages associated with artificial reefs and adjacent natural reefs.

Association of Marine Laboratories of the Caribbean, 27<sup>th</sup> meeting. 1995. St. Thomas, U.S. Virgin Islands.

Presentation title - Estimates of finfish community structure in a mangrove lagoon: traps versus visual transects.

National Coral Reef Institute Conference on Scientific Aspects of Coral Reef Monitoring. 1999. Ft. Lauderdale, FL.

Presentation title - Effects of a hurricane on two coral reef fish assemblages: long term monitoring through a natural disturbance.

Marine Benthic Ecology Meetings. 2001. University of New Hampshire, Durham, NH.

Presentation Title - Resistance of coral reef fishes of lagoon habitats and back-reef to a hurricane.

- Marine Conservation Biology Institute, Second Symposium on Marine Conservation Biology. 2001. San Francisco, CA.  
Presentation Title - The importance of lagoon and back-reef habitats as nurseries for coral reef fishes.
- Confronting Trade-offs in the Ecosystem Approach to Fisheries Management. Fourth William R. And Lenore Mote International Symposium. 2002. Sarasota, FL.  
Presentation Title - Benthic habitat connectivity in the context of system-level management.
- Tarpon Bonefish International Symposium. 2003. IGFA Fishing Hall of Fame and Museum. Dania Beach, FL.  
Presentation Title - Spatial and temporal patterns of estuarine habitat use by juvenile permit, *Trachinotus falcatus*, in Charlotte Harbor, FL.  
Presentation Title - Incorporating benthic habitat connectivity into research and management approaches for sustainable fisheries.
- Submerged Aquatic Habitat Restoration in Estuaries: Issues, Options and Priorities. 2003. Sarasota, FL.  
Presentation Title - Evaluating the effects of restoration of subtropical oligohaline marshes on abundance and habitat use by juvenile snook, *Centropomus undecimalis* and associated fish communities.
- Estuarine Research Federation, Seattle, WA. 2003.  
Presentation Title – Examining effects of freshwater flow alterations on seagrass-associated fishes in Charlotte Harbor, FL.
- Florida Gulf Coast University. Fort Myers, FL. 2003. Guest Lecture, Ichthyology.  
Lecture Title – Habitat use by fishes in the context of ontogeny.
- Mote Marine Lab, Summerland Key Public Lecture Series. March 2004.  
Presentation Title – Bonefish: what we know and what we need to learn.
- Charlotte Harbor Conference. Mote Marine Lab, Sarasota, FL. 2004.  
Presentation Title – Strategies for examining response of Charlotte Harbor fishes to hurricane Charley.
- National Conference on Ecosystem Restoration. Orlando, FL. 2004.  
Presentation Title – Developing an Ecological Context for Monitoring Restoration Effects on Fishes.
- Charlotte Harbor National Estuary Program, Charlotte Harbor Watershed Summit. Punta Gorda, L, 2005.  
Presentation Title - Developing an Ecological Context for Monitoring Restoration Effects on Fishes.
- Estuarine Research Federation Conference. Norfolk, VA. 2005.  
Presentation Title – Do altered coastal habitats promote non-native fish invasions into estuaries?  
Presentation Title – An autonomous PIT tag antenna system for studying estuarine-dependent fish.
- The Nature Conservancy, Andros Marine Protected Area Public Forum. Andros Town, Andros, Bahamas. 2006.  
Presentation Title – Summary of bonefish research and new research directions .
- Mangroves as Fish Habitat, First International Symposium. University of Miami. 2006.

- Presentation Title – Distinguishing the effects of anthropogenic and natural (hurricane) disturbances on mangrove creek fishes.
- Exotic Species Workshop for Southwest Florida. Naples, FL. 2006.  
Presentation Title – Understanding invasive cichlids in estuarine habitats.
- The Mark A. Benedict Symposium on Science, Conservation & Restoration of Southwestern Florida Ecosystems. Naples, FL. 2007  
Presentation Title - Distinguishing the effects of anthropogenic and natural (hurricane) disturbances on mangrove creek fishes.
- Florida Association for Water Quality Control, Annual Conference. Naples, FL. 2007  
Presentation Title – Impacts of freshwater flow alterations on mangrove creeks: important nursery habitats for snook.
- Charlotte Harbor National Estuary Program Watershed Summit. Punta Gorda, FL. 2008  
Presentation Title – Effects of Habitat on Juvenile Snook Diet: A Comparison of Mangrove Creeks of Different Quality  
Presentation Title – Spawning Patterns of Charlotte Harbor Snook: Information Essential for Management
- World Recreational Fisheries Conference. Dania, FL. November 2008.  
Presentation Title – A model for a proactive non-profit: research-based conservation and education

### **Fishing Ecology Lectures**

- Burnt Store Anglers Club (Punta Gorda, FL), March 2004, March 2005, December 2005, April 2009; Sanibel Fly Fishers Club, March 2004; Charlotte Harbor Fly Fishers Club (Port Charlotte, FL), March 2004, February 2005, February 2006, February 2008; Captain Ted's Tackle, North Port, June 2004; Mangrove Coast Fly Fishers (Sarasota, FL), July 2004, November 2006, March 2008; Ding Darling Wildlife Refuge (Sanibel, FL), October 2004, February 2005, March 2007, February 2008; Naples Fishing Club, November 2004; Backcountry Fly Fishers (Naples, FL), April 2005, October 2006, April 2007, March 2009; Matlacha Fly Fishing Festival, April 2005; Tampa Bay Fly Fishing Club (Tampa), January 2006, April 2007; Suncoast Fly Fishers (St. Petersburg, FL), June 2006; Florida Federation of Fly Fishers (Dania, FL), January 2007; Calusa Fly Fishers (Fort Myers, FL), February 2007; Venture Out Yacht Club, Cudjoe Key, FL, March 2007; National Fly Expo (Lakeland, FL) March 2008; Backcountry Fly Fishers (Melbourne, FL) February 2009.
- The Science of Backwater Fishing. A two-hour seminar based on *Fisherman's Coast*. Seminar given as a Science Instructor for Ultimate Backwater Fishing Schools, a three-day classroom and on-water school on fishing shallow coastal habitats. 2003 – 2007.