

ANGELA COLLINS

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EDUCATION

UNIVERSITY OF SOUTH FLORIDA, TAMPA, FL
PhD Candidate, August 2007 – present
Major: Biology, Ichthyology emphasis

UNIVERSITY OF SOUTH FLORIDA, TAMPA, FL
Master of Science Degree, July 2005
Major: Biology, Ichthyology emphasis

FLORIDA ATLANTIC UNIVERSITY, BOCA RATON, FL
Bachelor of Science degree, December 1998
Honors Graduate & Environmental Studies Certificate, December 1998
Major: Marine Biology

Grants and Awards:

Best Professional Paper Award, Florida Chapter of the American Fisheries Society, 2009
Best Professional Paper Award, Florida Chapter of the American Fisheries Society, 2007
NOAA/NMFS MARFIN grant (NA10NMF4330115), 2010 [\$178,885]
NOAA/NMFS Cooperative Research Program (NA07NMF4540085), 2007 [\$206,096]
USF/Mote Marine Laboratory Summer Graduate Fellowship, 2005 [\$2,000]
PADI Project AWARE grant, 2003 [\$500.00] and 2004 [\$542]
PADI Foundation graduate student grant, 2003 [\$995.40] and 2004 [\$906]
Charlotte Harbor National Estuary Program Mini-grant, 2003 [\$3,000]

Certifications and Professional Organizations:

American Fisheries Society (AFS, National and Florida chapters)
American Society of Ichthyologists and Herpetologists (ASIH)
American Academy of Underwater Sciences (AAUS)
PADI Dive Master (certification #185994)
NAUI Nitrox certification
Current certifications in CPR, First Aid, and Oxygen Administration

EXPERIENCE

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
FISH AND WILDLIFE RESEARCH INSTITUTE
Assistant Research Scientist, May 2009 – present
Biological Scientist II, August 2005 – May 2009

Responsibilities:

Principal Investigator for Goliath grouper research project
Lead biologist and subsequent PI for Hogfish CRP
Data collection and analysis, grant and manuscript preparation
Life history laboratory work (gonad histology, ageing, fecundity analyses)
Field work (diving, habitat mapping, fish collection and tagging, small boat operations)

MOTE MARINE LABORATORY
Staff biologist, May 2003 – May 2005

Responsibilities:

Collecting and tagging elasmobranchs (gill netting, long-lining, small boat operations)
Data organization and analysis of acoustic telemetry data (ArcView, Access, Excel, Sigma Plot, Statistica)
Downloading and maintenance of acoustic hydrophone array (Vemco VR2 receivers)
Manuscript preparation, grant writing

UNIVERSITY OF SOUTH FLORIDA

Teaching assistant, August 2002 – June 2003

Responsibilities:

Taught two semesters of Biology Lab (I and II)

Test preparation, grading, explanation of laboratory assignments

LOUISIANA UNIVERSITIES MARINE CONSORTIUM (LUMCON)

Research Assistant, October 2000 - June 2002

Responsibilities:

Scientific diver for monitoring station in Gulf of Mexico

Maintenance of laboratory and field equipment (primarily YSI and Hydrolab; digital fluorometer)

Research assistance during monthly cruises (large research vessels as well as small boats)

Organization and analysis of data through Excel, Access, EcoWatch.

WALT DISNEY WORLD

Aquarist for Epcot Center's *The Living Seas*, January 1999 - October 2000

Responsibilities:

Animal care (feeding, necropsies, medical) and water chemistry

Maintenance of aquarium systems, including daily dives in 6 million gallon tank.

Collecting specimens from the Florida Keys (small boat experience, diving, fishing)

Quarantine and rehabilitation of marine animals

PUBLICATIONS

Collins, A.B. and McBride, R.S. 2011. Demographics by depth: Spatially-explicit life history dynamics of a protogynous reef fish. *Fishery Bulletin* 109: 232-242.

Collins, A.B. and Barbieri, L.R. 2010. Behavior, Habitat, and Abundance of the Goliath Grouper, *Epinephelus itajara*, in the Central Eastern Gulf of Mexico. NOAA/NMFS Final Report # NA07NMF4540085. 44 pp.

Heupel, M.R., Yeiser, B.G., Collins, A.B., Ortega, L. and Simpfendorfer, C.A. 2010. Long-term presence and movement patterns of juvenile bull sharks in an estuarine river system. *Marine and Freshwater Research*. 61: 1-10.

Collins, A.B. 2009. A preliminary assessment of the abundance and size distribution of goliath grouper *Epinephelus itajara* within a defined region of the central eastern Gulf of Mexico. *61st Gulf and Caribbean Fisheries Institute Proceedings*: 184-190.

Collins, A.B., Heupel, M.R. and Simpfendorfer, C.A. 2008. Spatial distribution and long-term movement patterns of cownose rays *Rhinoptera bonasus* within an estuarine river. *Estuaries and Coasts* 31: 1174-1183.

Collins, A.B. and McBride, R.S. 2008. Integrating life history, mating system, fishing effects, and habitat of hogfish, *Lachnolaimus maximus*, a harem spawning fish in the southeast U.S. NOAA/NMFS Final Report # NA05NMF4540040. 76 pp.

Simpfendorfer, C.A., M.R. Heupel and A.B. Collins. 2008. Variation in the efficiency of acoustic receivers and its implication for positioning algorithms in a riverine setting. *Canadian Journal of Fisheries and Aquatic Sciences* 65: 482-492.

Collins, A. B., M.R. Heupel and P.J. Motta. 2007. Residence and movement patterns of cownose rays *Rhinoptera bonasus* within a southwest Florida estuary. *Journal of Fish Biology* 71: 1159-1178.

Collins, A. B., M.R. Heupel, R.E. Hueter and P.J. Motta. 2007. Hard prey specialists or opportunistic generalists? An examination of the diet of the cownose ray *Rhinoptera bonasus*. *Journal of Marine and Freshwater Research*, 58: 135-144.

Heupel, M.R., C.A. Simpfendorfer, A.B. Collins and J.P. Tyminski. 2006. Residency and movement patterns of bonnethead sharks, *Sphyrna tiburo*, in a large Florida estuary. *Environmental Biology of Fishes*, 76: 47-67.

¹Barker, A. 2006. *Rhinoptera bonasus*. In: IUCN 2006. 2006 IUCN Red List of Threatened Species. www.iucnredlist.org.

Collins, A.B. 2005. An examination of the diet and movement patterns of the Atlantic cownose ray *Rhinoptera bonasus* within a southwest Florida estuary. Masters thesis, University of South Florida, Tampa, Florida.

In Prep:

Collins, A.B. and McBride, R.S. Spatially explicit spawning seasonality and fecundity of a protogynous reef fish.

Collins, A.B., Barbieri, L.R. and Motta, P.J. Goliath grouper abundance and distribution in the central eastern Gulf of Mexico.

PROFESSIONAL PRESENTATIONS AND PUBLISHED ABSTRACTS

Collins, A.B., Barbieri, L.R. and Motta, P.J. 2011. A big fish story: Goliath grouper distribution and movements in the eastern Gulf of Mexico. Southern Division of the American Fisheries Society annual meeting, Tampa, Florida.

McWhorter, K. and Collins, A.B. 2011. Using ArcGIS to establish optimal listening areas to monitor Goliath grouper at shipwrecks in the Gulf of Mexico. Southern Division of the American Fisheries Society annual meeting, Tampa, Florida.

Collins, A.B. 2010. A preliminary assessment: Do goliath grouper affect fish diversity on shipwrecks? The Gulf and Caribbean Fisheries Institute 63rd annual meeting, San Juan, Puerto Rico.

Collins, A.B. and McBride, R.S. 2010. Demographics by depth: Spatially-explicit densities and life history dynamics of hogfish (*Lachnolaimus maximus*) in the eastern Gulf of Mexico. NOAA National Stock Assessment Workshop, Tampa, Florida.

Collins, A.B. 2009. Goliath grouper in the Gulf: A goliath survey of reefs and wrecks off Florida's central west coast. Florida Chapter of the American Fisheries Society annual meeting, Altoona, Florida.

Collins, A.B. 2008. A preliminary assessment of the abundance and size distribution of goliath grouper *Epinephelus itajara* within a defined region of the central eastern Gulf of Mexico. The Gulf and Caribbean Fisheries Institute 61st annual meeting, Gosier, Guadeloupe.

Collins, A.B., Heupel, M.R. and Simpfendorfer, C.A. 2008. Rays upriver: Investigating the use of an estuarine river by cownose rays (*Rhinoptera bonasus*). The International Symposium for Advances in Fish Tagging and Marking Technology, Auckland, New Zealand.

Collins, A.B. and McBride, R.S. 2007. The Hogfish CRP: Science with Spearfishers. American Fisheries Society annual meeting, San Francisco, California.

Collins, A.B. and McBride, R.S. 2007. The Hogfish CRP: Science with Spearfishers. Florida Chapter of the American Fisheries Society annual meeting, Altoona, Florida.

McBride, R.S., Collins, A.B. and Richardson, A. K. 2006. Age, growth and mortality of hogfish (Labridae: *Lachnolaimus maximus*), an hermaphroditic reef fish. American Fisheries Society annual meeting, Lake Placid, New York.

McBride, R.S., J.M. Funk, and A.B. Collins. 2006. Classification schemes for monandric, protogynous fishes: A review and extension of Moe's (1969) model. Gonad Histology Workshop, New Orleans, Louisiana.

¹ Barker, A. and Collins, A.B. are the same individual.

Collins, A. B., M.R. Heupel, R.E. Hueter and P.J. Motta. 2005. Tracking the cownose ray within a southwest Florida estuary: Evidence for residence? American Society of Ichthyologists and Herpetologists Annual Meeting, Tampa, Florida.

Barker, A., M.R. Heupel, P.J. Motta, and R.H. Hueter. 2004. Movement patterns of the cownose ray within Charlotte Harbor, Florida: A preliminary assessment. American Society of Ichthyologists and Herpetologists Annual Meeting, Norman, Oklahoma.

Heupel, M.R., A. Barker, B.G. Yeiser, K. Pednault-Willet, and White, S. 2004. Do sharks roam the refuge? Examination of shark movement patterns within the J.N. 'Ding' Darling National Wildlife Refuge. Fourth annual Charlotte Harbor Symposium, Sarasota, Florida.

Barker, A. 2003. Using acoustic telemetry and gastric lavage to examine the feeding ecology of the cownose ray *Rhinoptera bonasus* within the Charlotte Harbor estuary: a proposal. F.I.S.H. Annual Meeting, Tampa, FL.

Barker, A. and M.R. Heupel. 2003. Spatial and temporal patterns of 2 ray species within Charlotte Harbor: A preliminary investigation. Third Annual Charlotte Harbor Symposium, Sarasota, FL.

Barker, A. and L.B. Whitenack. 2003. Kinematics and Force Production of the Agonistic Strike of the Dark Mantis (*Gonodactylus curacaoensis*). F.I.S.H Annual Meeting, Tampa, FL.

ADDITIONAL ACTIVITIES OF PROFESSIONAL RELEVANCE

I have served as an invited reviewer for the following peer-reviewed publications:

- AFS Publications:
 - Advances in Fish Tagging and Marking Technology
 - Red Snapper Ecology and Fisheries in the United States Gulf of Mexico
- Bulletin of Marine Science
- Environmental Biology of Fishes
- Estuaries and Coasts
- Fisheries Research
- Marine and Freshwater Research
- Marine Biology Research
- Transactions of the American Fisheries Society

I have contributed the following for publication in non peer-reviewed publications:

Collins, A. 2006. A Hog of a Story: Unmasking Florida's Hogfish. Onshore- Offshore: Florida's Complimentary Sportsman's Publication. June, 2006: p. 8-9.

The hogfish CRP is highlighted as a special feature within the DVD 'Oceans in Action II.' Produced by C. Gardinal and S. Bratic; Out of Focus Productions, Inc., St. Petersburg, FL, 33712 USA.

References

Dr. Richard McBride
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NOAA's National Marine Fisheries Service
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Dr. Philip Motta
USF Professor, Biology Department
University of South Florida
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