

DAVID ROBERT BRYAN

305 421-4736

dbryan@rsmas.miami.edu

EDUCATION:

- Masters of Science 2006 **Nova Southeastern University (NSU) Oceanographic Center**, Dania, FL
Marine Biology
- Bachelor of Arts 1999 **Colby College**, Waterville, ME
Major: Biology, with a Concentration in Environmental Science
- The School for Field Studies**, South Caicos Island, Turks and Caicos Islands, BWI
Spring Semester 1998, Interdisciplinary study of Marine Ecology, Fisheries Management, and Social Values.

WORK EXPERIENCE:

- March 2011 – present **Senior Research Associate**, University of Miami, Rosenstiel School of Marine Science. Development and refinement of a quantitative multispecies sampling design.
- November 2009 – February 2011 **Fisheries Biologist III** Frank Orth and Associates, Northwest Fisheries Science Center, Fishery Resource Analysis and Monitoring Division. Conduct groundfish surveys on chartered vessels along US west coast. Organize and maintain scientific equipment for surveys. Manage lab and conduct stomach content studies. Prepare manuscripts.
- July 2009 – August 2009 **Fisheries Biologist III** Aquatic Farms, Northwest Fisheries Science Center, Conservation Biology Division. Assisted with fish collection and habitat surveys on several rivers. Review, manage and update data for VRAP salmon model.
- October 2007 – October 2009 **Independent Biological Contractor:**
UBC Fisheries Center, assisted Ph.D. student with extensive gillnet sampling for rainbow trout and northern pike minnow in British Columbia.
Freshwater Fisheries Society of BC – wrote 2007 summary report for the Mountain Pine Beetle Inventory Project: Small Lakes Inventory - Managing road access and angler effort on small lakes.
Freshwater Fisheries Society of BC- 6-month contract to write an assessment plan concerning angler effort on small lakes in British Columbia
Ecometrics Research, Inc. – Day and night snorkel surveys on the Cheakamus River for steelhead trout and electro fishing for juvenile Salmonids
Kootenay Environmental – Environmental monitor for Plutonic Power’s hydroelectric power plant construction in Toba Inlet
British Columbia Conservation Fund – 5 month contract to research and write report on the vulnerability of rainbow trout in mixed species lakes, includes Ecopath/Ecosim model
- May 2007 - August 2007 **Sea-Sampler** International Pacific Halibut Commission
Collect catch per unit effort and biological data aboard chartered commercial longline vessels throughout southeastern Alaska.
- January 2007 - April 2007 **Fisheries Observer (Pacific Northwest)** Saltwater Inc., Kodiak, Alaska
Collect species composition samples onboard commercial fishing vessels (60-100ft length) along with various biological data including sex, length, weight, otoliths, scales, and tissue samples. Requires extensive knowledge of fish species, fishing gear, methods, and ability to spend multiple days at sea in adverse conditions.

- January 2003 - September 2006 **Graduate Assistant** NSU, Oceanographic Center, Ichthyology Lab
 Work with fellow graduate students on variety of research projects:
Larval Fish - collected larval fish with light traps to compare larval supply on two sides of Eleuthera, Bahamas.
Juvenile Recruitment – comparison of juvenile Haemulid recruitment to artificial structures in varying depths with predator exclusion cages
Nearshore Habitat – multi year study concerning beach renourishment impacts of nearshore hard-bottom fish community.
Cryptic Species - used rotenone and scuba to collect reef fish within the Buck Island National Park, St. Croix for a cryptic fish species inventory.
Artificial Reefs - coral recruitment and growth on reef balls, changes of fish assemblage with complexity added to reef balls, comparison of fish assemblages on vessel-reefs to natural substrate in 20m depth.
Deep Reefs (Masters Thesis) –designed and conducted an ROV study to characterize deep reef fish (50-120m) assemblages associated with artificial and natural habitat in Broward County.
- 2005 – September 2006 **Research Diver** National Coral Reef Institute
 Daily diver for a project monitoring the effects of beach renourishment on coral colonies. Photograph corals and measure sediment accumulation.
- 2006 **Mangrove Technician** NSU, Oceanographic Center
 Supervise red mangrove nursery, sales, and shipping.
- February – September 2003 **Aquaculture Technician** NSU, Aquaculture Research Center
 Constructed shrimp ponds and a mangrove holding facility. Maintained eight 70,000 gallon tanks and grew out Tilapia for sale.
- September 2000 – 2002 **Research Staff** Florida Marine Research Institute, Fisheries Independent Monitoring
 Studied the recruitment, distribution, abundance, and life history of economically important reef fish throughout the Florida Keys. Duties included: operating vessels < 26ft, boat trailering, trawling and seining, identifying juvenile fishes, using scuba to record fish size and number, hook and line fishing, spearfishing, aging otoliths, microscopically determining gonad maturity stages, entering data, and maintaining vessels and gear.
- November 2000- July 2002 **Contract Diver** Sandra Walters Environmental Consultants Inc
 Monitor seagrass community changes in the Key West Garrison Bight mooring field for a Monroe County environmental impact statement. Established 10 permanent monitoring stations prior to installation of mooring buoys and periodically recorded species density and abundance and took digital photos of selected sites.
- June – September 2000 **Research Staff** Florida Marine Research Institute, Marine Reserves Lobster Program
 Participated in an on-going project to assist the Florida Keys National Marine Sanctuary in their five year Sanctuary Monitoring plan. Main duties included: operation and trailering of 20 ft vessel, use of scuba to collect Caribbean spiny lobsters, data entry, maintenance of gear.
- June 1999 – June 2000 **Marine Ecology Technician (Intern)** The Nature Conservancy
 Assisted the Marine Ecologist with management of volunteer monitoring programs throughout the Florida Keys National Marine Sanctuary. Duties included: training volunteers to take water samples (salinity, nutrients, chlorophyll, and temperature), training volunteers how to use transects and quadrats under water to monitor damselfish and urchin populations, along with fish cleaning stations, data entry and analysis, and updating and maintaining the scientific library.

TEACHING EXPERIENCE:

- 2004 - 2006 **Teaching Assistant** NSU
Instructed undergraduate Biology I and II lab sections
- August 2003- 2005 **Teaching Assistant** NSU
Instruct undergraduate Anatomy and Physiology I lab dissection of *Felis domesticus*
- May 2005 **Teaching Assistant** NSU Oceanographic Center
Assisted professor on a graduate level Deep Sea Ecology of the Florida Straits class
- Summer 2004 & 2005 **Teaching Assistant** NSU Oceanographic Center
Instructed graduate students on Tropical Marine Fish Ecology
- 2004 **Science Instructor** Build a Field Trip, Ft Lauderdale Florida
Led middle and high school students on ecology tours throughout Florida.

PAPERS, POSTERS, and TECHNICAL REPORTS

- Bryan, D. R., K. Kilfoyle, R. G. Gilmore Jr., and R. E. Spieler (*in review: Journal of Applied Ichthyology*) Characterization of the mesophotic reef fish community in south Florida, USA.
- Bryan, D. R., K. C. Jacobson and J. C. Buchanan (2012) Recent increase in *Nybelinia surmenicola* prevalence and intensity in Pacific hake (*Merluccius productus*) off the United States West Coast. *Journal of Parasitology*. 98:85-92.
- Bryan, D. R. and E. A. Parkinson (2009). Reference points for angler effort directed at wild stocks of rainbow trout in mixed species lakes. *Fisheries Management Report* 120. 42 p.
- Bryan, D. R., E. A. Parkinson, and A. D. Clarke (2008). An Effort Assessment Plan for Small Lakes in British Columbia. *Fisheries Management Report* 122 42 p.
- Spieler, R., D. Bryan, and K. Kilfoyle (2007) Reef Fishes of Broward County Natural Substrate and Vessel-reefs in 50-120 Meter Water Depth: Final Report. FWC Grant FWC-05017. 88 p.
- Bryan, D. R. and S. M. Gill (2007) Seasonal occurrence of Atlantic cutlassfish, *Trichiurus lepturus*, in southeastern Florida with notes on reproduction and stomach contents. *Florida Scientist*. 70: 297-301.
- Spieler, R. E. and D. R. Bryan. (2006) Fishes of Broward County natural substrate and vessel-reefs in 50-120m water depth: Annual Report 2006. NOAA/NMFS Order # WC133F05SE7304. 60 p.
- Bryan, D. R. and B. W. Walker. (2005) Characterization of a reproductively active queen conch, *Strombus gigas*, aggregation in the nearshore waters of South Florida. (Poster) Proc. 58th Annual Gulf and Caribbean Fisheries Institute Meeting, San Andreas, Colombia.
- Spieler, R. E. and D. R. Bryan. (2005) Fishes of Broward County Coral-Reef Tracts and Vessel Reefs in 70-150 Meter Water Depth: Report 2005. NOAA/NMFS Order # GE133F04SE1448. 3 p.
- Bryan, D. R., P. T. Arena, R. E. Spieler. (2004) Preliminary comparisons between reef fish assemblages on vessel-reefs and Natural Substrate in Depths of 70–95m. (Poster) Proc. 57th Annual Gulf and Caribbean Fisheries Institute Meeting, St. Petersburg, Florida, USA.
- Patterson, R. B., L. K. B. Jordan, D. R. Bryan, R. E. Spieler. (2004) A comparison of reef fish assemblages on the east and west sides of central Eleuthera, Bahamas. (Poster) Proc. 57th Annual Gulf and Caribbean Fisheries Institute Meeting, St. Petersburg, Florida, USA.

Bryan, D. R., P. T. Arena, E. W. Neugaard, R. E. Spieler. (2004) Monitoring reef fish assemblages on vessel-reefs in depths greater than 60m with a remotely operated vehicle (ROV): A study in progress. (Poster) 2004 Florida Artificial Reef Summit, Sarasota Florida, USA.

AWARDS AND CERTIFICATIONS:

Marine Technology Society Student ROV Scholarship
TDI Advanced Trimix Certification; PADI Divemaster
Cold Water, Dry Suit Certified, PADI
Video Ray ROV certified operator
US Coast Guard OUPV Captains License (2003-2008) over 600 days on water
1800 scuba dives, 1100 AAUS scientific
14 credit hours towards a Marine Mechanic Certification at The Florida Keys
Community College
Fish Base Collaborator (27 species photos)