

**RIKKI GROBER-DUNSMORE**

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**EDUCATION**

2000-present PhD candidate, Department of Fisheries and Aquatic Sciences, University of Florida  
1999 Program for Ecology, Evolution and Conservation Biology, University of Hawaii  
1992 Masters of Environmental Management, School of the Environment, Duke University  
1986 Bachelor of Science, International Relations and Environmental Science, Florida State University

**AREAS OF SPECIALIZATION**

Marine reserve design, reef fish ecology, reef fish management, community outreach

**PROFESSIONAL EXPERIENCE**

2000-present MARINE ECOLOGIST, Florida Integrated Science Center, Biological Resources Division, US Geological Survey, Gainesville, Florida. Researched the application of landscape ecology principles to the design and management of marine protected areas in coral reef ecosystems. Designed, coordinated, and conducted studies in three MPAs to examine the utility of large-scale benthic habitat maps to predict various reef fish assemblage structure parameters.

1999-2000 COASTAL RESOURCE SPECIALIST, Coastal Geology and Geophysics, University of Hawaii. Project manager of “Living with the Shores of Hawai’i”, a book that critically reviews current coastal resource management strategies in Hawaii and provides recommendations for future growth. Using case studies and contributions from scientists, resource managers and local citizens, the book proposed an integrated approach for solving the coastal challenges of the 21st century.

1998-1999 RESEARCH ASSOCIATE, Hawaii Coral Reef Initiative, University of Hawaii, Manoa, Hawai’i. Coordinated community groups and solicited concerns from stakeholders, conducted educational seminars and applied decision-analyses methods (e.g., optimization modeling) to develop a strategic, multi-objective framework to propose alternative marine reserve designs for Kane’ohe Bay, Oahu.

1999 VISITING FELLOW, East-West Center Program for Environment, Honolulu, Hawai’i. Edited the Proceedings of the Hawai’i Coral Reef Monitoring Workshop held in June 1998. Published manual of long-term coral reef monitoring methods for management purposes.

1997-1998 FISHERIES BIOLOGIST, OSU, Department of Fisheries and Wildlife, Corvallis, Oregon. Directed research on habitat use of larval and adult endangered suckers in the Lower Klamath River basin to examine effects of hydropower on population structure.

1993-1997 MARINE BIOLOGIST, Virgin Islands National Park and Biosphere Reserve. National Biological Service, St. John, US Virgin Islands. Conducted long-term monitoring of benthic community structure of coral reefs and seagrass communities, reef fish assemblages and water quality. Responsibilities included identifying major research questions, research design, strategic work plan development, proposal review, research diving, data collection and statistical analysis. Disseminated information through high quality written reports, publications and oral presentations. Coordinated biosphere reserve activities through community outreach projects.

1992 TECHNICAL CONSULTANT, CEDARENA/ OTS, Osa Peninsula, Costa Rica.  
1992 BIODIVERSITY PROJECT MANAGER, Island Resources Foundation, St. Kitts, West Indies.

## GRANTS AND FELLOWSHIPS

- 2002-2005. Canon Science Scholar, Fellowship from the AAAS, NPS and Canon Corps. Applying landscape ecology principles to the design and management of marine protected areas in coral reef ecosystems. \$78,000.
- 2003-2004. Disney Wildlife Conservation Fund. Mapping the spatial distribution of the potential recovery of elkhorn coral (*Acropora palmata*) around St. John, USVI. \$7,000.
- 2004. Graduate Student Council Award, University of Florida.
- 2003. Disney Wildlife Conservation Fund Recipient, Capacity-building funds for vehicle purchase of vehicle. \$5,000.
- 2001, 2002. Star Award, Biological Resources Division, US Geological Survey.
- 1999. East West Center Program on Environment Fellowship, \$10,000.
- 1995, 1996. National Park Service Achievement Award.
- 1992. Fellowship for Tropical Research, Organization for Tropical Studies.
- 1992. Tinker Foundation Field Research Grant and Duke-UNC Mellon Fellow for Latin American Studies.

## SELECT PUBLICATIONS

**Grober-Dunsmore, R.**, Beets, J., Frazer, T., Zwick, P., Lindberg, B., and Funicelli, N. (submitted) The relationship of seascape and reef fish assemblage structure parameters in coral reef ecosystems of the US Virgin Islands. For publication in special issue on marine applications of landscape ecology in the Journal of Landscape Ecology.

**Grober-Dunsmore, R.** and Bonito, V. (submitted) Potential inhibitors to recovery of *Acropora palmata* populations around the island of St. John, USVI. Marine Ecology Progress Series.

**Grober-Dunsmore, R.**, Frazer, T., Beets, J., Funicelli, N. (2004) The significance of adjacent habitats on reef fish assemblage structure: Are relationships detectable and quantifiable at a landscape scale? Proceedings of the 55<sup>th</sup> Gulf and Caribbean Fisheries Institute Meetings, pp. 713-734, Xel Ha, Mexico, November 2002.

Rogers, C., Gladfelter, W., Hubbard, D., Gladfelter, E., Bythell, J., **Dunsmore, R.**, Loomis, C., Devine, B., Hillis-Starr, Z., Phillips, B. (2003) *Acropora* in the US Virgin Islands: a wake or an awakening? A status report prepared for the NOAA. Bruckner AW (editor) Proceedings of the Caribbean *Acropora* workshop, April 2002.

**Grober-Dunsmore R.**, Hale, J., Beets, J., Frazer, T., Funicelli, N. and Zwick, P. (2001) Applying landscape ecology principles to the design and management of marine reserves. 54<sup>th</sup> Annual Meeting of the Gulf and Caribbean Fisheries Institute, Providenciales, Turks and Caicos Islands, British West Indies [Abstract]

Maragos, J.E., **Grober-Dunsmore, R.** (1999) (editors) Proceedings of the Hawaii Coral Reef Monitoring Workshop. Honolulu, Hawaii June 8-11, 1998.

Wolff, N., **Grober-Dunsmore, R.**, Rogers, C.S., and Beets, J. (1999) Management implications of fishtrap effectiveness in adjacent coral reef and gorgonian habitats. Environmental Biology of Fishes 55:81-90.

Rogers, C., Garrison, G., **Grober-Dunsmore, R.** (1997) A fishy story about hurricanes and herbivory: seven years of research on a reef in St. John, US Virgin Islands. In: Proceedings of the 8<sup>th</sup> International Coral reef Symposium 1, (ed.) HA Lessios and IG Macintyre, pp 555-560. Panama, Smithsonian Tropical Research Institute.

**Grober-Dunsmore, L.** (1997) Are MPAs in the Caribbean really protecting Caribbean marine resources? Proceedings of the George Wright Society Protected Areas Conference, Albuquerque, New Mexico, March 1997.

Rogers, C., Garrison, G., **Grober, R.**, Hillis, ZM., Franke, M.A. (1994) Coral Reef Monitoring Manual for the Caribbean and Western Atlantic. 100 pages including photographs. National Park Service Publication.

**Grober-Dunsmore, R.**, Frazer, T., and Bonito, V. (in prep) Testing the generality of reef fish – habitat relationships detected at a landscape-scale in the US Virgin Islands at reefs in the Florida Keys National Marine Sanctuary.

**Grober-Dunsmore, R.**, Frazer, T., and Beets, J. (in prep) Habitat connectivity at a landscape-scale in coral reef ecosystems: implications for marine protected areas design. To be submitted to Journal of Conservation Biology.

### **SELECT PRESENTATIONS**

**Grober-Dunsmore, R.**, Frazer, T.K., and Beets, J. (2004) Invited speaker to marine and coastal applications session at the International Association for Landscape Ecology - US Chapter. Using a landscape ecology approach to investigate habitat linkages in coral reef ecosystems: implications for MPA design. Las Vegas, NV March 2004.

**Grober-Dunsmore, R.**, Frazer, T.K. (2004) Habitat linkages in coral reef ecosystems: implications for the design of MPAs. Presentation at the 10<sup>th</sup> International Coral Reef Symposium, Okinawa, Japan, June 2004.

Brock, J., Kuffner, I., Wright, C.W., **Grober-Dunsmore, R.**, Bonito, V., Hickey, D., Harris, M., Thompson, P., and Riegl, B. (2004) NASA EAARL Airborne Lidar Sensing of Morphologic Habitat Complexity in the Northern Florida Reef Tract. Presentation at the 10<sup>th</sup> International Coral Reef Symposium, Okinawa, Japan, June 2004.

Kuffner, I.B., Brock, J., **Grober-Dunsmore, R.**, Bonito, V., Hickey, T.D., and Harris, M.S. (2004) Remotely-sensed rugosity and relationships with benthic indicators of coral reef condition. Presentation at the 10<sup>th</sup> International Coral Reef Symposium, Okinawa, Japan, June 2004.

**Grober-Dunsmore, R.**, Frazer, T., Beets, J., Funicelli, N. (2002) The Significance of Adjacent Habitats on Reef Fish Assemblage Structure: Are relationships detectable and quantifiable at a landscape scale? Proceedings of the 55<sup>th</sup> Gulf and Caribbean Fisheries Institute Meetings, Xel Ha, Mexico, November 2002.

**Grober-Dunsmore, R.** (2002) Invited speaker Rosenstiel School of Marine and Atmospheric Sciences, University of Miami. The application of landscape ecology principles to the design and management of marine reserves.

**Grober-Dunsmore, R.**, Ridgley, M. (2000) Uncertainty, conflict, and the design of fishery management areas: Measuring CPUE and Fishing preferences. Presented at 9<sup>th</sup> International Coral Reef Symposium, Bali, Indonesia.

**Grober-Dunsmore, R.** (1999) Panel Member for Hawaii Conservation Conference. Hawaii Coral Reef Initiative. Strategic decision-making for coral reef management. Hilton Hawaiian Village. Waikiki, Hawaii.

**Grober-Dunsmore, L.**, Rogers, C. (1997) Changing Pressures on Caribbean and Western Atlantic Coral Reefs and Associated Fisheries. Society for Conservation of Marine Biology Symposium, British Columbia, Canada.

### **RELEVANT EXPERIENCE**

Scientific Consultant, University of Florida Law School, Belize World Heritage Proposal, 2004.

Vieques Lessons Project, Vieques, Puerto Rico, Canon Science Scholars Program Retreat. 2003.

Reviewer, State of the Reefs report, The Ocean Conservancy, US Virgin Islands, 2002-2003.

Local school volunteer, Give slide presentations to elementary students on environmental issues.

Founder and coordinator. KLN Endowment supporting initiatives for a sustainable Latin America. 1993 - currently.

### **SKILLS**

Database management and statistical analyses using Excel, JMP, SAS, SYSTAT, SPSS and Access.

Spatial analyses using ArcView GIS. Microsoft, IBM and Macintosh applications, Adobe Photoshop.

NPS/NBS Research Diver, NAUI Dive Master, University of Florida Scientific Diver, USDOJ captain, CPR and DAN Oxygen, Nitrox, underwater video and photography.

Basic knowledge of Spanish, French, and Danish languages, Fluent English.

Fisher, Southeast Alaska and Bristol Bay purse seine/gillnet salmon fisheries.

### **REFERENCES**

Tom Frazer, University of Florida, Dept. of Fisheries and Aquatic Sciences, [frazer@ufl.edu](mailto:frazer@ufl.edu)

Dr. Nick Funicelli, Deputy Director BRD, USGS Miami, Florida, [Nick\\_funicelli@usgs.gov](mailto:Nick_funicelli@usgs.gov)

Dr. Jim Beets, University of Hawaii-Hilo, [beets@hawaii.edu](mailto:beets@hawaii.edu)

Dr. Bill Lindberg, University of Florida, [WJLindberg@mail.ifas.edu](mailto:WJLindberg@mail.ifas.edu)