



Current and Recent Science at Flower Garden Banks NMS Updated November 2014



ON THE CORAL CAP

CORAL:

1. Coral Spawning – Mikhail Matz, University of Texas; Sarah Davies, University of Texas; Carly Kenkel, University of Texas; Marie Strader, University of Texas; Sarah Guermond, Oregon State
2. Investigating novel mechanisms in coral recruitment at Flower Garden Banks National Marine Sanctuary – Mikhail Matz, University of Texas
3. Mechanisms of coral larval behavior and symbiont uptake at the Flower Garden Banks National Marine Sanctuary – Mikhail Matz, University of Texas
4. Characterization of mesophotic corals through genetic connectivity assessment and a reciprocal transplant experiment
5. Coral Species Catalog of the FGBNMS – Tom Bright; FGBNMS
6. Coral Genetics – Mikhail Matz, University of Texas; Ernesto Weil, University of Texas; Luiz Rocha, California Academy of Science
7. Genetic Analysis of Thermal Tolerance and Acclimation Capacity in Reef-Building Corals – Eli Meyer
8. Symbiodinium communities associated with scleractinian corals in the Northwest Gulf of Mexico – Adrienne Correa, Rice University
9. Coral Recruitment – Sarah Davies, University of Texas

CRITTERS:

8. Invasion of Indo-Pacific Lionfish – FGBNMS and REEF
9. Stomach Content Analysis of Lionfish – FGBNMS
10. Genetics of Lionfish – University of Texas; Texas A&M University Corpus Christi
11. Chemistry of Otoliths of Lionfish – Derek Hogan, Texas A&M University Corpus Christi
12. Genetic Identification of Stomach Content Analysis of Lionfish – FGBNMS; Derek Hogan, Texas A&M University Corpus Christi
13. Occurrence of Elasmobranchs at FGBNMS – FGBNMS (continuation of work by Jeff Childs)
14. Movement and Oceanographic Preferences of Scalloped Hammerhead Sharks (*Sphyrna lewini*) in the Gulf of Mexico (David Wells, TAMUG)
15. Manta Ray Census and Individual Identification – FGBNMS (continuation of work by Jeff Childs); Rachel Graham, Wildlife Conservation Society
16. Whale sharks: Occurrence of Individuals Using Spot Patterns – FGBNMS and Rachel Graham, Wildlife Conservation Society
17. Satellite tagging of whale sharks – FGBNMS, Rachel Graham, Wildlife Conservation Society, and Eric Hoffmayer, NMFS
18. Biodiversity of Crustaceans of FGBNMS – Mary Wicksten, Texas A&M University
19. SEAMAP – Southeast Area Monitoring and Assessment Program: Assessment of fish populations on reefs and banks in the GoM – Kevin Rademacher, NMFS Pascagoula
20. Genetics of the Spiny Lobster, *Panulirus argus* – John Hunt, Florida Wildlife and Fisheries Service
21. Fish Recruits on the Reefs at FGBNMS – Lynn Wetmore and Jay Rooker, Texas A&M Galveston
22. Spawning Aggregations in the Northwestern Gulf of Mexico – FGBNMS

23. Population Structure of the Bearded Fireworm *Hermodice carunculata* in the Northern Gulf of Mexico – Anja Schulze, Texas A&M Galveston
24. Photosynthesis and Respiration on the Carbonate Sand Sediments within the FGBNMS – Gil Rowe and Tommy Heathman, Texas A&M Galveston
25. Determining the Presence of Placozoans in the Flower Garden Banks National Marine Sanctuary – Nathan Johnson – TAMUG
26. Connectivity of the Pulley Ridge - South Florida Coral Reef Ecosystem: Processes to Decision-Support Tools – Luiz Rocha – California Academy of Sciences

ALGAE:

27. Identification of Algae at FGBNMS – Suzanne Fredericq, University of Louisiana at Lafayette
28. Examination of Flower Garden Reef for Toxic Benthic Dinoflagellates – Tracy Villareal, University of Texas Marine Science Institute
29. Ecology of Ciguatera Dinoflagellates – Steve Kibler, NCCOS; Pat Tester, NCCOS; FDA; FGBNMS

MONITORING

30. Stetson Bank Long-Term Monitoring – FGBNMS
31. East and West Bank Long-Term Monitoring – FGBNMS; BOEM; Texas A&M University Galveston
32. Fish and Benthic Habitat Characterization of FGBNMS –NCCOS Center for Coastal Monitoring and Assessment; FGBNMS
33. National Coral Reef Monitoring Program – FGBNMS; NCCOS

BELOW THE CORAL CAP

34. Characterization and Assessment of Deepwater Habitat of FGBNMS – FGBNMS
35. Characterization and Assessment of Topographic Features of the Northwestern Gulf of Mexico – FGBNMS
36. Gorgonians and Antipatharians of FGBNMS and the Northwestern Gulf of Mexico – FGBNMS
37. Characterization of Antipatharians of the Northwestern Gulf of Mexico – Marissa Nuttall, FGBNMS/Texas A&M University Galveston; Dennis Opresko, Smithsonian Institute
38. Characterization of Deepwater Sponges of the Northwestern Gulf of Mexico – Christi Savarese, FGBNMS; Klaus Ruetzler, Smithsonian Institute
39. Deepwater Coral Reef Communities of the Northwestern Gulf of Mexico - FGBNMS
40. Genetics of Select Antipatharians – Carlos Umana and Juan Sanchez, Universidad de los Andes; Mercer Brugler, University of Louisiana at Lafayette
41. Mesophotic Coral Health and Genetic Connectivity Assessment in the Tropical Western Atlantic – Josh Voss, Harbor Branch Oceanographic Institute

GEOLOGY

42. High Resolution Multibeam Bathymetry of FGBNMS and the Northwestern Gulf of Mexico – FGBNMS; Jim Gardner, USGS/University of New Hampshire; NOAA; Niall Slowey and Julia O’Hern, Texas A&M University
43. Fossil Reef Studies – Bill Precht; FGBNMS

OCEANOGRAPHY

44. Dead Zone – Steve DiMarco, Texas A&M University
45. Current – Topography Interaction and its Influence on Water Quality and Contaminant Transport over Shelf-Edge Banks – William Teague, Naval Research Laboratory

46. High-Resolution Subsurface Physical and Optical Property Fields in the Gulf of Mexico: Establishing Baselines and Assessment Tools for Resources Managers - Jason Joliff, Navy Research Laboratory
http://www7331.nrlssc.navy.mil/view_project.php?project=joliff2
47. Ocean Acidification – Xingping Hu, Texas A&M – Corpus Christi
48. Coral Reef Ocean Acidification Sentinel Site in the Flower Garden Banks National Marine Sanctuary – Niall Slowey - TAMU
49. Flower Garden Banks TABS Monitoring System – TAMU - GERG

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