

Marine Protected Areas

St. Croix, U.S. Virgin Islands
Prepared by: Edward Schuster

Items presented:

1. Lang Bank Red Hind Spawning Aggregation Area on St. Croix
2. Mutton Snapper Spawning Aggregation South-side of St. Croix
3. Buck Island Reef National Monument
4. St. Croix East End Marine Park

Lang Bank Red Hind Spawning Aggregation Area on St. Croix

- The Lang Bank Red Hind Spawning Aggregation Area was established by National Marine Fisheries Service in 1993 to improve fisheries management while emphasizing the protection of red hind spawning aggregations.
- The Lang Bank area is located in the EEZ offshore at the eastern most point St. Croix and has a no-take area of 11.7 km.
- Lang Bank is governed by the CFMC, NOAA, and the VI Dept. of Planning & Natural Resources.
- In 2014 a study of the area discovered new benthic biota and reef fishes in the area.
- 98 species/taxonomic groups of benthic algae, sponge, scleractinian corals, hydrocorals, and octocoral species reported within MCD.
- December 1st-February 28th – closed to all bottom tending gear.



of

- Commercially fish species reported within the area include Groupers, Snappers, Jacks, Triggerfish, Angelfish, Parrotfish. Other fish species recorded are Goatfish, Grunt, Squirrelfish, Surgeonfish, Tilefish, Wrasses, Lionfish, Cero, Great barracuda, reef and nurse shark, and southern stingray.
- In 2011 the Lionfish invasion occurred within the area.
- Four (4) scientific studies have been done since the establishment of Lang Bank:
 1. **Nemeth 2007 study** compared the spatial and temporal patterns of red hind movements and migrations from annual spawning aggregation on St. Thomas (MCD) and St. Croix (Lang Bank).
 2. **Nemeth 2008 study** investigated what factors influence the timing of spawning or selection of aggregation sites in red hind in the eastern Caribbean.
 3. **Garcia-Sais 2014 study** characterized the mesophotic habitats of Land Bank.
 4. **Kadison 2017 study** used 2 long-term fisheries independent dataset collected by the VI Territorial Coral Reef Monitoring Program and NOAA's Center of Coastal Monitoring and Assessment to compare both the occurrence and size of several species of large and commercially important reef fishes between St. Thomas/St. John and St. Croix.

Mutton Snapper Spawning Aggregation South-side of St. Croix

- Established in 1993 as part of a rule intended to protect and conserve the highly exploited mutton snapper populations.
- In 1996, NMFS added a change to the regulations to alter the boundary of the Mutton Snapper Spawning Aggregation (MSSA) area to make it compatible with USVI regulations.
- MSSA is located in USVI territorial waters offshore SW St. Croix.
- Total area consists of 8.9 km (no-take area).



- MSSA is closed to fishing April 1st – June 30th.
- MSSA is governed by CFMC, NOAA, and VI Dept. of Planning & Natural Resources.
- **Kojis and Quinn 2011 study** described the benthic habitats of MSSA.
- A 2009 and 2010 study provided information on the status of *Lutjanus analis* spawning aggregation on the southwestern insular shelf of St. Croix, verifying the spawning period of this species and providing life history information.
- Lion Fish was observed regular in this area since 20212.

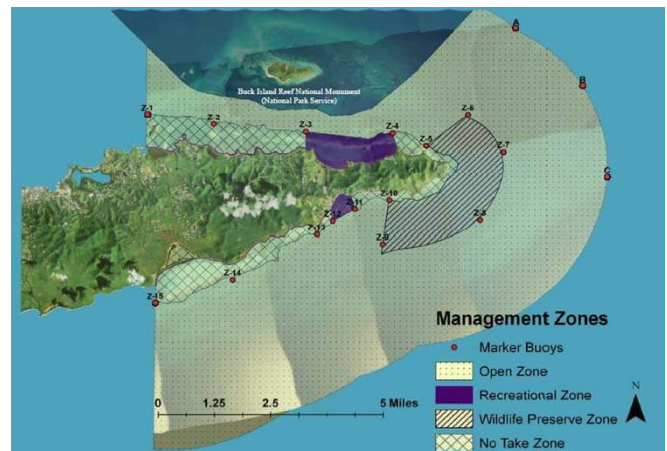
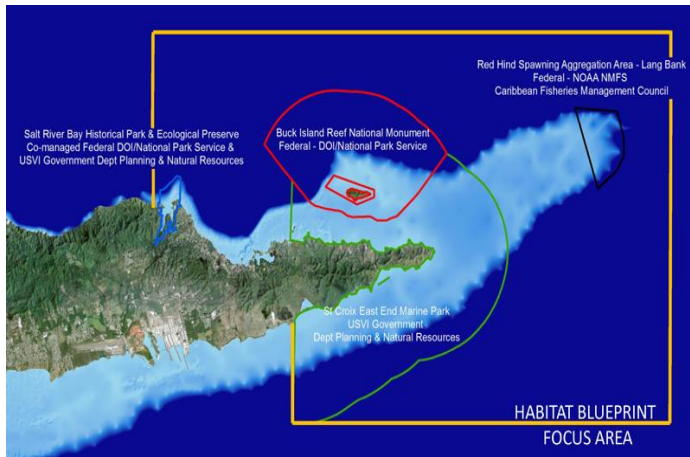
Buck Island Reef National Monument



- Buck Island Reef National Monument protects Buck Island, a small, uninhabited 176-acre (712,000 m²) island about 1.5 miles north of the northeast coast of St. Croix, and 18,839 acres of submerged lands, totaling 19,015 acres.
- It was first established as a protected area by the U.S. Government in 1948, with the intention of preserving “one of the finest marine gardens in the Caribbean Sea.”
- This U.S. National Monument was created in 1961 by John F. Kennedy and greatly expanded in 2001 by Bill Clinton, over the opposition of local fishermen.
- Buck Island National Monument is one of few places in the Virgin Islands where brown pelicans and threatened least terns nest.
- Two thirds of the island is surrounded by an Elkhorn coral barrier reef, providing an ecosystem for over 250 fish species and a variety of other marine life including spotted eagle rays, nurse sharks and lemon sharks, and juvenile Blacktip reef sharks and Whitetip reef sharks.
- In the spring endangered Leatherback turtles come onto the beach to nest, while Green turtles and Hawksbill turtles nest during the summer months.

- This was the primary fishing ground for lobster, conch, and deep water snapper, along with pelagic fishing.

St. Croix East End Marine Park



- The East End Marine Park was established in 2003 by Act No. 6572 Bill No. 24-0308 to protect the largest island barrier reef system in the Caribbean.
- The park is located on the last 6 miles of the eastern end of St. Croix and includes about 12 miles of coastline.
- The park extends from high-water mark out three (3) miles and encompasses 60 square miles of offshore coral reef and other marine habitat.
- The park includes approximately 5 square miles of “no-take areas”, which are off limits to any fishing and harvesting.
- A turtle refuge extends about 1 mile into the Caribbean Ocean from the shoreline of the island’s primary hawksbill and green turtle nesting beaches (Jack Bay, Isaac Bay, and East End Bay).