# St. John Project Report Year One

**July 2023** 









## St. John, US Virgin Islands

The US Virgin Islands are comprised of St. Croix, St. Thomas and St. John. The US controlled territory is 40 miles East of Puerto Rico (photo to the right). St. John is situated between St. Thomas to the West, and Tortola (British Virgin Islands) to the North. It is geographically the smallest island in the US Virgin Islands with an area of 19 square miles. Its population of 5,000 people makes it the least populated in the USVI. Two thirds of the island is national park.



## Northside "Needle in a Haystack"

In late June 2023 an 11 day assessment survey was completed around St. John. Six days were completed on the Northside of St. John (Turner Bay to Newfound Bay), with multiple swimming surveys completed over the areas pre selected to be of high value. Those areas were:

- 1. S. Mayo Reef to Cinnamon Cay
- 2. Windswept Beach to Trunk Cay to Peter Cay
- 3. Stevens Cay
- 4. Leinster Bay
- 5. Caneel Bay
- 6. Hawksnest Bay



These locations were surveyed several times with minimal success. The Northside has a ton of habitat ranging in degrees of condition but the documentation of hawksbill turtles in these locations appears to be random and sporadic. We recorded multiple days with

only a single hawksbill sighted and only a single day with three hawksbills sighted (this is important as it relates to the Southside of the island). In the simplest terms, lots of habitat for hawksbills, not a lot of hawksbills. Ten confirmed sightings and seven captures in six days. This makes management difficult as hawksbills could be anywhere at anytime. Of note was a large hawksbill documented at the entrance to Turner Bay (photo to the right-later observed at the entrance to Cruz Bay) with "bubble butt", showing clear signs of a healed boat strike.



#### **Southside Success**

Conversely, on the Southside of the island, from White Cliffs/Europa Bay to the end of Round Bay there were 15 sightings, and 10 captures over five days of research. Three of

the research days on the Southside yielded three turtles per day, which again, was never accomplished on the Northside of the island. Additionally, hot spots (Salt Pond to Little Lameshur Bay, and all of Round Bay) guaranteed hawksbill within 10-15 minutes getting in the water. Last but not least, the guaranteed presence of hawksbill turtles in Round Bay wasn't the only surprise. The size of the hawksbills documented from these four bays making up Round Bay (Long, Hanson, Haulover, and Elk) was shocking. Four turtles were documented in these bays and all four turtles were at a minimum of 60cm or larger. The largest turtle was 73cm in length. Hawksbill turtles are considered to be an adult starting around the 75cm mark, meaning, the four turtles documented in Round Bay, are close to being adult hawksbill turtles (photo below).

#### **Year One Conclusion**

Expectations for the Northside of St. John for the abundance of hawksbill turtles did not come to fruition. Pre-trip research consisting of YouTube videos and discussions with local St. Johnians directed us to several locations where individuals or video had documented hawksbills. The six days spent on the Northside of St. John translated to minimal success. Observations and captures were less than the Southside with somedays consisting of a single observation or capture. This was unexpected due to the pre-trip research but also because of the substantial habitat. The Northside has ample habitat to support more hawksbills than documented.

Misidentification may be one of the issues with individuals reporting sightings. Turtles "spotted" over reef structure are often associated to be hawksbill turtles when more than not, on the Northside, they are green



turtles. We had several "turtle people" misidentify turtles species, therefore, there is some belief that turtles previously identified as hawksbills may in fact have been green turtles.

The Southside of St. John supplied the majority of sightings and captures. The relative absence of people and boats is the working hypotheses for their presence. As mentioned previosly, pretrip research identified the Lameshur Bay/ Saltpond general area as an area of importance. This pre-trip assessment was correct with numerous sightings and captures from White Cliffs to Ramshead (including one very large adult male). The surprise of the trip



came from Round Bay, where we documented numerous **LARGE** hawksbills. Large is capitalised and in bold because it was a shock to capture and document four turtles, all over 60cm, three of them over 70cms. Hawksbill turtles are considered to be an adult at 75cms in length. These turtles are very close to being adults, or possibly already adults,

and they are either in their adult foraging habitat, or possibly about to begin their migration to their nesting grounds. Whatever their status, more information in the form of satellite tags, would be extremely beneficial as it relates to the hawksbills of Round Bay.

Last but not least, it is a good sign to see some **smaller recruits** (hawksbills caught on Johnson's Reef, Mennebeck Bay, and Steven Cay-<u>pictured below</u>) as in any habitat, new recruitment is part of the natural process and a characteristic of a healthy habitat.







In summation, the Northside of the island is going to be a difficult task to monitor as the turtles are difficult to find thus the "needle in a haystack" reference. Meanwhile, the Southside appears to be the chosen habitats for hawksbills, including large hawksbills. In Year Two, The Hawksbill Project would like to survey area missed in Year One due to weather (East End Bay, Privateer Bay, Pond Bay, and Flanagan Island), spend more time in the Lameshur toSaltpond and Round Bay habitats (as we missed some-<a href="hawksbillsitting">hawksbillsitting on sea grass photo above</a>) and check on specific locations on on the Northside to challenge the Year One conclusion.

\*Of importance to note-after the completion of our research we had two individuals, Dr. Caroline Rogers and Linda send us photos of tagged hawksbills. Turtle 1 (photo on the left) was photographed in Trunk Bay after initially being captured in Peter Bay and Turtle 16 was photographed South Haulover Bay, the location of its initial documentation.



