“Summer Sea Turtle Surveys on St. Vincent Island”
by Bailey Black, St. Marks NWR Visitor Services Representative/ACE Intern

The sun rises over Indian Pass illuminating the horizon with deep oranges, and vibrant shades of purple and pink. Heat lighting can be seen in the distance jumping horizontally from cloud to cloud. I am greeted by St. Vincent National Wildlife Refuge’s biologist and he wastes no time getting right to business. He outlines what our day should ideally look like out on St. Vincent Island. We gather our belongings and board the boat. The boat ride is brief but offers a moment of respite before a scorching day of field work under the Florida summer sun. As we approach St. Vincent Island the semi-constructed boat house comes into view. Beyond the boat house I can’t seem to make out much else aside from the thick vegetation encompassing the island. I remember thinking, how bizarre, a piece of land with no human inhabitants or any substantial development–a breath of fresh air, quite literally. The biologist beaches the boat and as we walk up onto shore he starts divulging a plethora of fascinating information about St. Vincent NWR and some of the island’s wild inhabitants.

St. Vincent Island is a triangular shaped barrier island that can be found approximately 10 miles southwest of the town of Apalachicola, Florida. The island is about 9 miles long and 4 miles wide and is part of the St. Vincent National Wildlife Refuge which encompasses over 12,492 acres. (Source: U.S.Fish & Wildlife Service). Like so many other wildlife refuge’s the primary present day purpose of St. Vincent Island is to remain in its most natural state to allow wildlife to thrive. St. Vincent Island, though small in size, is home to a wide variety of flora and fauna including many migratory and even endangered species–increasing the island’s ecological importance. My reason for visiting St. Vincent Island was to assist with nesting sea turtle surveys.

Several different species of sea turtles nest along the coast of Florida. The duration of nesting season varies slightly between species but generally begins in May and ends in October. During nesting season these amazing female animals are guided by their natural instincts to come ashore under the cover of darkness to lay their eggs. Mother sea turtles do not stay to incubate their eggs nor do they return to the nest site to ensure that their hatchlings have successfully made it to the ocean. Unfortunately, a very small percentage of hatchlings will survive to adulthood. Sea turtle eggs–and hatchlings–make a nutritious meal for nearby predators. Despite the odds, SVNWR’s biologist informed me that St. Vincent Island was having a record year for both loggerhead and green sea turtle nests which provides a glimmer of hope for two species that have historically been in decline.

SVNWR’s biologist and I spent a majority of our day covering ground on the utility task vehicle (UTV) searching for new sea turtle tracks. New tracks could be an indicator that a female sea turtle had emerged from the water and laid eggs. However, it is not uncommon for females to emerge then circle back to the water without digging a nest cavity–this is known as a “false crawl”. Not only were we looking for new tracks indicating the possibility of a new nest, we were also checking on nest sites that had already been established this season. Throughout our

survey we were able to identify several sets of new tracks. Once new tracks were identified SVNWR's biologist would attempt to locate the nest beneath the earth's surface where I would assist him in placing a wire cage around the nest. The wire cage is strategically placed in hopes of preventing the eggs from being dug up by predators on the island such as raccoons, ghost crabs and even red wolves. Each newly located nest would be marked with a wooden stake and a bright yellow label indicating that this site consisted of a sea turtle nest which makes it unlawful to disturb the area in any way. We also collected a series of data on each nest which included mapping the location, the date it was found (in order to predict the hatching window), what species of sea turtle we believed to have laid the nest and other useful information. The data being collected on St. Vincent Island will be used as part of a larger data set that has been collected over the years and will be further analyzed and utilized not only by local biologists but also on a statewide and even national level.

In addition to what wildlife biologists are doing, there are many ways that you can ensure their survival as well such as recycling and avoiding single-use plastic products. Single-use plastics (oftentimes unintentionally) end up in our oceans and along our beaches which is problematic because they have the ability to harm sea turtles in a variety of ways. Many sea turtles mistake items such as plastic bags for jellyfish, a popular sea turtle meal. Sea turtles are also susceptible to becoming entangled in improperly discarded trash such as loose fishing line. The work that wildlife biologists conduct is essential to understanding and learning more about the amazing species that we coexist with here on Earth. If we are better able to understand them we will be better able to protect them.

Sea turtle tracks on St. Vincent Island.
Image courtesy of Bailey Black.

Sea turtle nest with protective cage covering to prevent predation.
Image courtesy of Bailey Black.