

Human Impact Lab: Ask a Biologist: Sea Turtle Nesting

Loggerhead Marineline Center

Loggerhead Marineline Center is an ocean conservation organization and sea turtle hospital located adjacent to one of the most important sea turtle nesting beaches in the world. The Center features an on-site campus hospital, research laboratory, educational exhibits and aquariums, and also operates the Juno Beach Pier, which hosts world-class angling and sightseeing. The Center's conservation team works with 76 local and international organizations across six continents to form partnerships and share conservation initiatives and best practices that are core to its mission of ocean conservation. The Center is expanding and has launched its Waves of Progress capital expansion campaign, designed to accelerate and amplify LMC's conservation and education impact.

Our mission is to promote conservation of ocean ecosystems with a special focus on threatened and endangered sea turtles. Our vision is to be recognized locally and internationally as the leading authority in sea turtle education, research and rehabilitation.



Lesson Objectives

- I can explain what a Sea Turtle Researcher is
- I can describe the basics about migration patterns of sea turtles
- I can identify the nesting behaviors of female sea turtles

Vocabulary

- **Migration:** seasonal movement of animals from one region to another.
- **Forage:** search widely for food or provisions
- **Geographic:** belonging to or characteristics of a particular region

Resources

- <https://marinelife.org/seaturtles/facts/>
- <https://marinelife.org/seaturtles/research/>



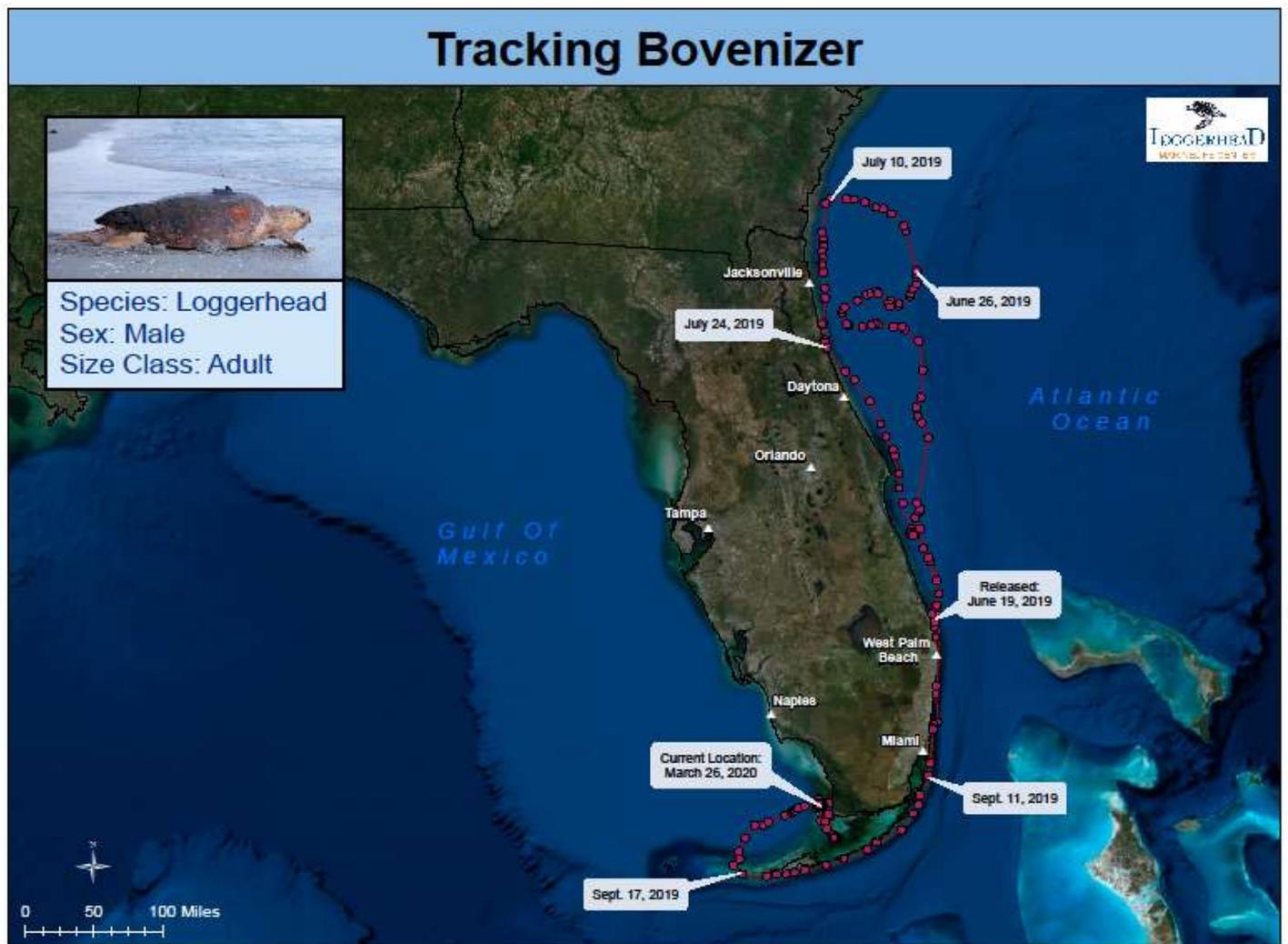
Visit [Marinelife.org](https://marinelife.org) to learn more about Loggerhead Marineline Center!

Bovenizer's Travels

Bovenizer is an adult male loggerhead turtle that was found at the intake canal of FPL's St. Lucie Site on April 14, 2019. Biologists with Inwater Research Group brought the turtle to LMC's Sea Turtle Hospital because the animal was underweight and had a soft plastron (you could see the heart beating through it). Initial bloodwork and radiographs appeared normal, but an ultrasound of the heart and major vessels suggested the presence of endarteritis, an inflammation of the vessels, probably caused by a parasite in the blood.

Bovenizer was treated for internal parasites and follow-up ultrasounds showed signs of improvement. On June 19, 2019 Bovenizer was released from Juno Beach with a satellite transmitter affixed to his carapace. Not much is known about adult male sea turtles since they spend their entire lives at sea. Unless they are sick and strand (wash up on shore) biologist have little opportunity to study them. Therefore, it is important for us to collect as much data as we can from Bovenizer's journey.

Directions: Use the satellite tracking map below to describe and answer questions about Bovenizer's movement patterns found on the next page.



Bovenizer's Travel

1. Circle Bovenizer's movements that are considered migratory.
2. Circle the area where Bovenizer's spent most of his time.
3. What direction did Bovenizer migrate?

4. Where did Bovenizer migrate to and from? (Identify geographic location in terms of cities)

5. How many days did Bovenizer travel until he found an area where he spent a significant amount of time?

Explain the reasons for Bovenizer's movement patterns using your knowledge of the biology and ecology of sea turtles and their migration patterns (Watch the Facebook Live video: Ask a Biologist Sea Turtle Nesting)

6. Determine the time period (months) of Bovenizer's movement patterns. Use the information at the beginning of this worksheet to determine his release date and the number of days at large on the satellite tracking map.

7. When do sea turtle typically mate/nest? You know that Bovenizer is a male sea turtle. Are his movement patterns related to mating? If not, what are other possible reasons for his migration north?

Whose track?

Directions: Using the pictures below, name the sea turtle species under each picture. After naming each species, match them to the correct tracks they make by drawing a line.

