

## **Sea Turtle Response to Airborne Sargassum Odors**

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Little is known about the behavior of sea turtles in the first few years of their lives; much of that time is spent navigating the open ocean, eating and growing. Sea turtles rely on olfactory cues to find food sources and learn about their current environment. Knowing the kind of cues that turtles respond to, in the air and water, would help to reveal their feeding and navigational habits in this life history stage. Several studies have hypothesized that juvenile sea turtles rely on floating sargassum mats for food and shelter in the open ocean, yet there are little data on how sea turtles find those ephemeral mats. In this study, we tested juvenile turtles' responses to different airborne olfactory cues- distilled water, food, and sargassum- to determine whether the turtles responded to the scent of sargassum. Both the time the turtles spent with their nares out of water and the number of individual breaths the turtles took, before and after being exposed to the odorants, were measured. The results demonstrate that sea turtles spent significantly more time with their nares out of water when exposed to sargassum and food odors than when they were exposed to distilled water odors, indicating that they could be using these cues to forage or find shelter while in the open ocean.