

Oceanic migration of post-nesting loggerhead sea turtles in the northwestern North Pacific tracked by satellite telemetry

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Keywords: loggerhead sea turtle, satellite telemetry, oceanographic condition

The study of migration routes for loggerhead sea turtles is important to demonstrate the seasonal changes of their distribution and feeding ground. Migration routes of subadult turtles from Hawaii to off Japan were investigated by satellite telemetry. However oceanic distribution of post-nesting females in the North Pacific is not well-known. In this study, we tracked two post-nesting loggerhead turtles nested at Omaezaki beach, Japan in 2002 and 2003 by satellite telemetry. The relationship between movements of the turtles and oceanographic condition (SST and SSH) were examined. The first loggerhead was tracked for 265 days from 29 July 2002 to 19 April 2003 with total distance of approximately 9,800 km. The turtle traveled eastward from the Pacific coast of Honshu to offshore after staying near nesting site for a week. Then it rounded counterclockwise in the area around 36-37°N latitude and 156-158°E longitude from the end of September to the middle of November. In the late November, the turtle moved eastward again, and turned to south around the 170°E longitude in the middle of December. Finally, it turned westward in February. Tracking of the second loggerhead in 2003 is still in progress, and the movement routes were similar to the first turtle. Movement of the turtles correlated with the direction of the Kuroshio Current and seasonal changes of the Kuroshio-Oyashio transition region. The transition region known as highly productive waters may provide important feeding ground for post-nesting loggerhead turtles.

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