

various high seas and coastal fisheries of many countries are known to impact loggerhead turtles throughout their range, but the extent of mortality on the feeding grounds off Baja remains unknown. We present results of systematic surveys conducted from 2002-2003, which show that bycatch mortality of loggerhead turtles along the BCP is alarmingly high and is a significant impediment to recovery of this species in the Pacific. We discuss habitat use and foraging ecology based on our diet studies and satellite telemetry, and we show that we have integrated our findings with community-based conservation initiatives to raise awareness and develop methods to reduce bycatch in partnership with fisherman and their communities.

### **Foraging hot spots and migration corridors for loggerhead (*Caretta caretta*) and olive ridley (*Lepidochelys olivacea*) sea turtles in the oceanic North Pacific**

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Satellite telemetry from 26 loggerhead (*Caretta caretta*) and 10 olive ridley (*Lepidochelys olivacea*) sea turtles captured and released from pelagic longline fishing gear provided information on the turtles' position and movement in the central North Pacific. These data together with environmental data from satellite remote sensing are used to describe the oceanic habitat used by these turtles. The results indicate that loggerheads travel westward, move seasonally north and south primarily through the region 28°-40°N, and occupy sea surface temperatures (SST) of 15°-25°C. Their dive depth distribution indicated that they spend 40% of their time at the surface. Loggerheads are found in association with fronts, eddies, and geostrophic currents. Specifically, the Transition Zone Chlorophyll Front (TZCF) and the southern edge of the Kuroshio Extension Current (KEC) appear to be important forage and migration habitats for loggerheads.

In contrast, olive ridleys were found primarily south of loggerhead habitat in the region 8°-31°N latitude, occupying warmer water with SSTs of 23°-28°C. They have a deeper dive pattern than loggerheads, spending only 20% of their time at the surface and 60% shallower than 40m. However, the three olive ridleys identified from genetics to be of western Pacific origin spent some time associated with major ocean currents, specifically the southern edge of the KEC, the North Equatorial Current (NEC), and the Equatorial Counter Current (ECC). These habitats were not used by any olive ridleys of eastern Pacific origin suggesting that olive ridleys from different populations may occupy different oceanic habitats.

### **Marine turtle conservation program in the northwestern Mediterranean Sea**

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The northwestern Mediterranean Sea is an important developmental habitat and migration route for juvenile and subadult loggerhead turtles. In this area, longline fishing efforts became very intensive during the summer season and annually a large number (15,000 – 20,000) of juvenile and subadult loggerhead turtles are accidentally caught.



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