

# Marine Turtle Newsletter

## Two Records of Live Olive Ridleys from Central California, USA

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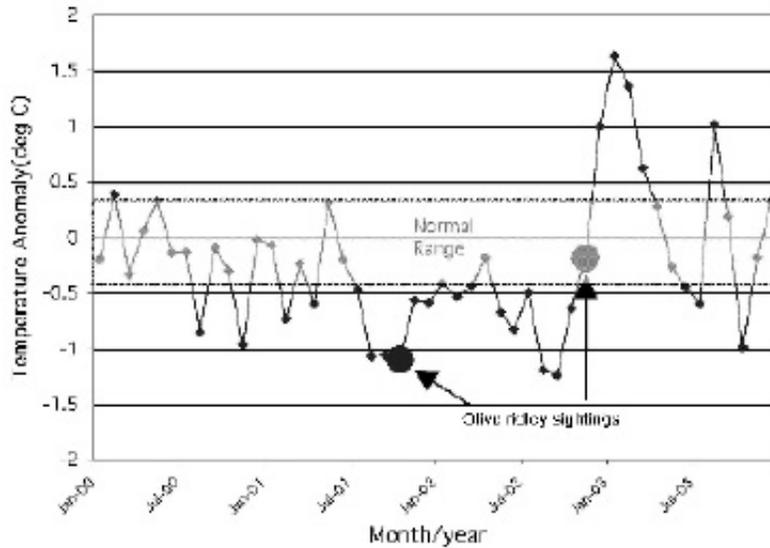
The distribution of *Lepidochelys olivacea* is circumtropical, occurring in the Atlantic, Pacific and Indian Oceans, but information on its migratory patterns is fragmentary (Plotkin 2003). In the eastern tropical Pacific, it is the most abundant and widespread sea turtle. Pitman (1990) recorded 247 sightings of individuals in the “warm tropical waters of the eastern Pacific; its range to the north was bounded by the cold California Current.”

Most published records located north of southern California are of dead stranded turtles. For example, known records from Alaska (n=3) were all dead stranded turtles (Hodge & Wing 2000; B.L. Wing pers. comm. 2003, National Marine Fisheries Service pers. comm.), and a ridley stranded on the ocean side of Point Reyes Peninsula was also dead (Evens 1993). The possibility exists that these animals died elsewhere or were injured and were carried by currents out of their normal range before being observed in more northerly locations.

Alternatively, these turtles might have been injured elsewhere and then carried out of their range by the currents before they died and stranded. Bolten (University of Florida pers. comm. 2004) found that loggerhead turtles injured by longline fishing hooks survived for long periods, and were transported by currents to different locations than turtles that were not injured. Here we report observations of two olive ridley turtles from Central California, both of which were alive and appeared healthy and uninjured.

On October 10, 2001 at 12:30 hr, fishers on the salmon sport fishing vessel “Flying Fish” pulled up a live olive ridley (photo available from the author), entangled in their fishing line, 1/2 mile west of Muir Point off the Marin County, California coast (37.51°N, 122.41° W). Length of tail indicated an adult male. Captain Brian Guiles (vessel captain pers. comm. 2001) reported that the turtle appeared to be in good condition and vigorously swam away upon release. This is the same turtle erroneously reported in the press as a green turtle (*Chelonia mydas*: Marin Independent Journal, Jan. 18, 2002).

On November 28, 2002 at approximately 15:00 hr, an olive ridley turtle (photo available from author) was observed by one of us (RW) swimming up to and hauling out on Shell Beach in Tomales Bay State Park, California, approximately nine miles inland from the Pacific, near the town of Inverness. Tomales Bay is a long shallow estuary (average depth <20 feet, average width ~1 mile), extending approximately 12 miles south from its mouth at the southern end of Bodega Bay and terminating at Lagunitas Creek south of the town of Inverness. The turtle remained on the beach approximately 30 minutes before re-entering the water and swimming off. A water temperature of 13° C was measured at the site two days later. The turtle appeared to be uninjured, and was lean but not emaciated. Presumably the same turtle was sighted by park visitors (Aaron Ward, CA State Park Ranger, pers. comm. 2002) on 5 December 2002, hauled out at Indian Beach in Tomales Bay State Park, approximately two miles north of Shell Beach.



**Figure 1.** Plot of sea surface temperature departure from normal between 2000 and 2003 based on data averaged from the period 1965-2003 for a 1 degree by 1 degree grid centered on 122.5 West, 37.5 North. The normal temperature range is the mid tercile of data, denoted as opaque, which ranges between -0.441 and +0.314 C (David Pierce pers. comm.). (Source is Reynolds and Smith, 1994).

Marine turtles sightings in northern latitudes sometimes have been associated with warm-water years (Eckert 1993), but records from Alaska occurred in warm and normal-water temperature years (Hodge & King 2000). The October 2001 sighting occurred after two months of below normal monthly sea surface water temperatures (lower tercile) and was preceded by several months of normal (mid tercile) or below normal temperatures; and the November 2002 observation occurred during normal monthly sea surface temperatures, but was preceded by 6 continuous months of below normal monthly sea surface water temperatures (figure 1). At least in these two particular sightings, both of which involved apparently uninjured, free swimming olive ridley turtles, the observations were associated with normal or colder than normal sea surface temperatures.

The three plausible explanations for an olive ridley on land are: (1) reproductive activity, (2) stranding due to injury, or (3) thermoregulation. No reproductive activity was observed and the turtle did not appear injured. The ridley that hauled onto the beach may have been attempting to raise its body temperature above that of the cold water it was swimming in. Olive ridley turtles are known to thermoregulate at the water surface and have been reported to crawl out onto floating debris in the open ocean, but the authors are not aware of this species thermoregulating on land.

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