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## NOTES

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### BROAD-WINGED HAWK CAPTURES HAWKSBILL TURTLE HATCHLING IN THE FLORIDA KEYS

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The Broad-winged Hawk (*Buteo platypterus*) is a migrant in south Florida and winters regularly in the Florida Keys (Robertson and Woolfenden 1992). It is an opportunistic predator that captures a wide variety of prey types (Rusch and Doerr 1972, Keran 1978, Janik and Mosher 1982), including very young snapping turtles (*Chelydra serpentina*) (Mosher and Palmer 1988). However, capture of a hatchling sea turtle by a Broad-winged Hawk has not been previously documented.

The endangered hawksbill turtle (*Eretmochelys imbricata*) is a spongivorous, circum-tropical reptile that rarely nests in the U.S. (Meylan 1992, Meylan et al. 1995).

On the morning of 10 October 2000 (ca 0730 hrs), from a distance of ca 8 m Markey observed a Broad-winged Hawk perched 2.5 m above ground on a sign in a parking lot at Bahia Honda State Park (FL Keys, Monroe County). A hawksbill turtle nest—1 m from the edge of the parking lot and ca 16 m from where the hawk was perched—had hatched the night before. Two disoriented live hatchling turtles had crawled landward onto the parking lot. Thirteen dead hawksbill hatchlings (cause of death unknown) were scattered on the beach.

Less than a minute after first observing the hawk, Markey saw it descend to the parking lot and capture one of the live hatchling turtles. The hawk returned to the perch whereupon Markey, in an effort to startle the bird sufficiently to drop the turtle, rushed towards it. The bird took flight with the turtle in its talons.

The height of the hawk's perch was exceptionally low; reported perch height ranges from 10 to 20 m (Goodrich et al. 1996). That Markey was able to approach the hawk so closely prior to its attack may be attributable to the bird's habituation to people. She had previously observed a Broad-winged Hawk elsewhere in the park that allowed a close approach.

The mean weight of a hawksbill hatchling is 14.3-14.5 g (Limpus et al. 1983, Hitchins et al. 2004) and within the 10-30 g weight of prey most commonly captured by the Broad-winged Hawk (Goodrich et al. 1996). Compared with an older hawksbill turtle, a hatchling has limited endochondral ossification and its shell has not fully hardened. Thus, a Broad-winged Hawk likely could breach a hatchling turtle's shell and consume the flesh within.

We found no literature on raptor predation of sea turtles. Several raptor species do prey occasionally on freshwater turtles: Snail Kite (*Rostrhamus sociabilis*) (Sykes et al.

1995), Osprey (Postupalsky and Kleiman 1965), and, over a wide area, Bald Eagle (*Haliaeetus leucocephalus*) (Clark 1982). Birds that prey opportunistically on hatchling sea turtles include the Great Frigatebird (*Fregata minor*) (Lagarde et al. 2001), Black Vulture (*Coragyps atratus*) (Mrosofsky 1971), and Turkey Vulture (*Cathartes aura*) (Fowler 1979).

Predation of hatchling sea turtles by Broad-winged Hawks and other terrestrial raptors in the Florida Keys is inherently rare and thus inconsequential to sea turtle productivity because hatchling turtles normally emerge from nests and promptly enter the sea at night. Further, most sea turtle nests hatch in advance of the sizable fall raptor migration.

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