

TAGGING GREEN TURTLES (*CHELONIA MYDAS*) AND LOGGERHEAD TURTLES (*CARETTA CARETTA*) IN SYRIA

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Introduction

Within the Mediterranean only the loggerhead turtle (*Caretta caretta*) and the green turtle (*Chelonia mydas*) nest (Margaritoulis, 2003) with the green turtle population being so depleted from historic levels it is listed as critically endangered in the IUCN Red Lists (ERASG, 1996). Recent population reviews for loggerhead turtles (Margaritoulis et al 2003) and green turtles (Kasperek et al, 2001) indicated that little was known concerning the status of sea turtle populations in Syria.

In 2004, during beach surveying efforts for nesting turtles in Syria, a 'major' new green turtle population was discovered on the 12.5km beach south of Lattakia City (Rees et al, in press). Additionally it was learned that there are high levels of interactions between Syrian fisheries and marine turtles (Jony & Rees, in press; Rees et al, 2004).

Both nocturnal surveys during the nesting season and co-operative efforts with fishermen afforded the first opportunities to observe turtles in the wild, to obtain basic biometric data and tag the turtles before they returned to the sea after nesting or were released after being caught in fishing nets.

Methods

Tags used in this investigation were model 681, 'monel' metal tags produced by the National Band & Tag Company (Kentucky, USA), placed in the trailing edge of the fore flippers as suggested by Balazs (1999). Turtles were double tagged whenever possible to avoid loss of turtle identity, which would happen if a turtle were to lose its single tag.

Nesting turtles were observed on Lattakia beach (35.440°N 35.895°E) and allowed to finish laying their eggs and initiate the covering phase of nesting before they were tagged and measured. Curved carapace length

notch-tip (CCL n-t) was measured (Bolten, 1999). Supplemental data on nesting turtle size was obtained from two stranded female turtles that were known to have been sexually mature as they had either nested or were due to nest in that season.

Other turtles were obtained opportunistically from co-operative fishermen who had incidentally captured them and brought them to port for records to be made. Tags were applied, as above, and carapace measurements (CCL n-t) were taken before the turtles were released.

Results and discussion

Only green turtles were observed during the nocturnal beach patrols and hence only the size of adult female green turtles can be presented. Mean size (CCL n-t), including data from two stranded turtles, was 91.4cm (SD 3.9, range 85.0-97.5, n=10). These measurements are similar to a 4-year average (92.0cm) recorded at Alagadi Beach, an important green turtle rookery on Cyprus (Broderick & Godley, 1996). Similarity in nesting female size is expected, due to the restricted distribution of green turtle nesting within the Mediterranean as compared to loggerhead populations; nesting loggerheads of Greece are larger than their counterparts in Cyprus (Margaritoulis et al, 2003).

Data from eight incidentally captured loggerhead and green turtles are presented in Table 1; they provide some important preliminary data on the year-round presence of marine turtles in Syrian waters.

Turtle No.	Species	CCL (n-t)	Date
1	Cc	73	08-10-2005
2	Cc	58	01-12-2005
3	Cc	80	25-12-2005
4	Cm	31	05-03-2005
5	Cc	67	08-03-2005
6	Cm	31	12-03-2005
7	Cm	29	21-03-2005
8	Cc	71	25-03-2005

Table 1. Turtles incidentally captured that were subsequently tagged and released in the period October 2004 to March 2005. Cc=*Caretta caretta*, Cm=*Chelonia mydas*.

Both species of marine turtle that nest in Syria were captured during winter months; however, there is a distinct bimodality of mean carapace size defined by species. Loggerhead turtles were clearly larger sub-adults or adults whereas the green turtles were all ca. 30cm which may

represent the size at which they change from oceanic to neritic habitats in the Mediterranean (cf. Margaritoulis and Teneketzis, 2004). It would thus appear that Syria not only hosts a regionally important green turtle rookery, but may also provide possibly important foraging areas for juvenile green turtles.

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Mohammad Jony (left) returning a tagged loggerhead to the sea.



Adib Saad tagging a juvenile green turtle.



Green turtle camouflaging her nest.

Photos by Alan Rees / Archelon