

ON THE STATUS OF SEA TURTLE POPULATIONS (Caretta caretta L. and Chelonia mydas L.) IN THE NORTHERN MEDITERRANEAN SEA, TURKEY

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SUMMARY: Research includes the present status, reproductive and nesting behavior, productivity and predators of Caretta caretta L. and Chelonia mydas L. on the Turkish Aegean and Mediterranean coast. 34 Caretta and 15 Chelonia females were measured, and the period between nesting trials was determined by tagging methods. Statistically important length correlations found.

RESUME: Les recherches qui comprends la copulation, l'instincts de nidification, le production et predateur des C.caretta et C.mydas ont été effectuées toute au long des côtes Egéenne et Méditerranéenne de Turquie.

INTRODUCTION: This study includes data from 3 nesting seasons (1978-1980) on the status of sea turtles nesting on the Turkish Aegean and Mediterranean shores (Lat.36°N Long. 26°E, Lat.42°N Long. 36°E). Our long range aim is to secure the continuity of their populations threatened by touristic establishments and industrialization with a wide conservation program.

METHODS: Research stations covering a total of 110 km. were chosen in Köyceğiz, Kumluca, Belek, Side, Alanya, and Mersin along the 2000 km. coast. Each season investigations lasted from April to September. Observations were made from 9 P.M. to 5 A.M. Measurements were taken and individual marginal shields were noted. Statistical analyses of young, subadult and adult turtle lengths and weights were made. (HUGHES, 1974). Tagging with monel metal tags continues in the 1980 nesting season (CALDWELL et.al.1959, CARR et.al.1978). The development of C.caretta under laboratory conditions from hatchling to adult is being observed.

RESULTS and CONCLUSIONS: C.caretta nests at all 6 stations with Köyceğiz-Dalyanköyü (average 4 nests/night) leading. From tagging data, 60-80 females nest in this region. (HUGHES, 1974) Important correlations were not found for number of eggs laid, straight carapace length, and weight (Table I). Total egg number at the

stations (excluding Mersin-Kazanlı) is about 140,000. Almost 47% of nests are destroyed by predators, tide or man-made vehicles.

SCL	65	63	68	75	83,5	81	80	74	72	73	69	75	73,5	72	74
Eggs	104	76	80	90	92	110	146	101	93	109	59	76	60	102	81
Wt.	50	55	40	55	92	70	80	57	63	59	42	58	57	54	63

Table I: Measurement of straight carapace length (cm.), number of eggs laid and weight (kg.) of sub-adults and adult C.caretta

11-11 and 12-12 marginal shield distributions are frequent in this region (Table II, III). Important correlations in measurements of subadult and adults are found. These are shown in linear form

SCALE	PATTERN	n	%FREQ.	SCALE	PATTERN	n	%FREQ.
Nuchals	1	46	92,0	Margi-nals	11L 11R	29	58,0
	2	4	8,0		12L 12R	10	20,0
Vertebrals	5	50	100,0		11L 12R	6	12,0
Subra-caudals	2	50	100,0		12L 11R	5	10,0
Costals	5L 5R	50	100,0				

Table II: Shield distributions of young C.caretta

SCALE	PATTERN	n	%FREQ.	SCALE	PATTERN	n	%FREQ.
Nuchals	1	30	88,2	Costals	5L 5R	34	100,0
	2	4	11,7		Margi-nals	11L 11R	8
Vertebrals	5	33	97,0	12L 12R		17	50,0
	6	1	2,9	11L 12R		4	11,7
Supra-caudals	2	34	100,0	12L 11R		3	8,8
Inter-gular	0	14	41,1	13L 11R		1	2,9
	1	16	47,0	13L 12R		1	2,9
Inter-anal	2	4	11,7				
	0	18	52,9				
	1	16	47,0				
	2	-	-				

Table III: Shield distribution of sub-adult and adult C.caretta.

C.mydas nests only at Belek, Side, Alanya and Mersin with 12 reemergences/night indicating a large population in Mersin-Kazanlı.

LITERATURE CITED:

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