

Analysis of stranded sea turtles in the north-western Adriatic Sea

by Marco Affronte and Dino Scaravelli

Abstract. Through systematic recording of stranded individuals, it was shown that marine turtles regularly occur in the Upper Adriatic Sea. All 443 specimens examined belonged to the Loggerhead Turtle, *Caretta caretta*. The highest numbers are found during the summer months (July–September), the lowest in the cold season. Most individuals are juveniles, suggesting that Loggerheads use the Upper Adriatic Sea primarily as foraging area until they reach maturity. The north-wester Adriatic Sea seems not to play an important role as a wintering and hibernation area, and no important role at all for adults. In 1999, exceptionally high numbers of Loggerhead Turtles were recorded ($n = 95$); most of them were smaller than 40 cm Curved Carapace Length, and thus smaller than the average of other years. Two Loggerhead Turtles recovered in the Adriatic Sea had been tagged at the nesting grounds at Zakynthos, Greece.

Kurzfassung. Durch eine systematische Erfassung von gestrandeten Tieren konnte gezeigt werden, dass Meeresschildkröten regelmäßig in der nordwestlichen Adria vorkommen. Bei allen der 443 untersuchten Tieren handelte es sich um Unechte Karettschildkröten, *Caretta caretta*. Die höchsten Zahlen werden in den Sommermonaten (Juli – September) registriert, die niedersten in der kalten Jahreszeit. Bei der Mehrzahl der Meeresschildkröten handelt es sich um Jungtiere, was vermuten lässt, dass für Unechte Karettschildkröten die nordwestliche Adria vor allem als Nahrungsgebiet bis zur Erreichung der Geschlechtsreife dient. Die Bedeutung als Überwinterungsgebiet scheint gering zu sein, und Alttiere scheinen generell kaum aufzutreten. 1999 wurden außergewöhnlich viele Schildkröten registriert ($n = 95$); die meisten hatten eine Carapax-Länge (CCL) von weniger als 40 cm, und waren damit kleiner als im Durchschnitt der übrigen Jahre. Zwei Unechte Karettschildkröten, die in der nördlichen Adria gefunden wurden, waren an den Niststränden von Zakynthos (Griechenland) markiert worden.

Key words. Loggerhead Turtle, *Caretta caretta*, temporal distribution, size classes, migration, Mediterranean.

Introduction

Large numbers of Loggerhead Turtles, *Caretta caretta*, are captured accidentally in the southern Adriatic-Ionian Sea, but the status further north is insufficiently known: GROOMBRIDGE (1990) reports that the number of turtles caught in the central-north Adriatic is small, but the region may be of importance as an overwintering or “hibernation” zone. Thanks to the results of several recent studies by LAZAR and others (LAZAR 1995, LAZAR et al. 2000, LAZAR et al., in press, LAZAR & TVRTKOVIĆ 1995), the region is listed as a critical marine habitat for sea turtles within the revised “Action Plan for the Conservation of Mediterranean Marine Turtles” (RAC/SPA 1999). Nesting is not known from the Adriatic Sea; the nearest nesting sites are situated at Zakynthos, Greece.

Stranded Loggerhead Turtles are found regularly along the north-western Adriatic coast.