

**ESTIMATION OF THE BOTTLENOSE DOLPHIN (*TURSIOPS TRUNCATUS*)
POPULATION IN THE CROATIAN PART OF THE ADRIATIC SEA**

HRVOJE GOMERCIC¹, CURO HUBER², DAMIR MIHELIC¹, HRVOJE LUCIC¹,
TOMISLAV GOMERCIC² & MARTINA CURAS¹

¹ Department of Anatomy, Histology and Embryology, Faculty of Veterinary
Medicine, University of Zagreb, 10000 ZAGREB, Heinzlova 55, CROATIA

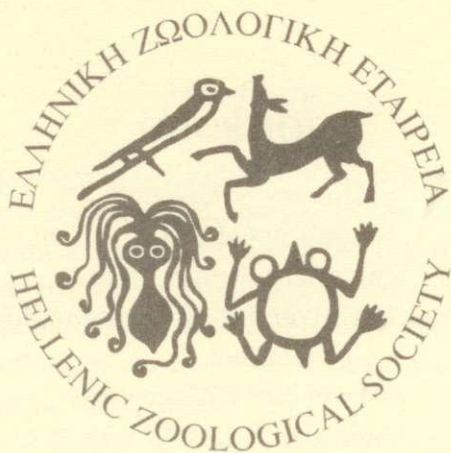
² Department of Biology, Faculty of Veterinary Medicine, University of Zagreb,
10000 ZAGREB, Heinzlova 55, CROATIA

The aim of the study was to estimate the total number of bottlenose dolphins – *Tursiops truncatus* (Montagu 1821), the size and composition of dolphin schools, the number of cubs, and their spatial distribution in the Croatian part of the Adriatic Sea in winter. We also wanted to record the presence of any other species of cetaceans and other sea mammals.

Aerial surveys of dolphins were performed on 27 December 1998 by four small aircraft from an altitude of 200 m and at airspeed of 150-200 km/h. During eight hours we surveyed 45.8% of totally 31,660 km² of the Croatian part of the Adriatic Sea.

We saw 16 different bottlenose dolphin schools comprising a total number of 80 different adult and 8 cubs. We calculated that in the whole of the Croatian part of the Adriatic Sea there were 40 dolphin schools comprising a total of 218 specimens (202 adult animals and 16 cubs). In the winter period in question, dolphin cubs accounted for 10% of the population, while 31.3% of dolphin schools had one or more cubs that were smaller by about one-third of their body length compared to adults. Average school size was 5.5. The estimated abundance of bottlenose dolphins in the Croatian part of the Adriatic Sea was: in inshore waters 10.7/1,000 km², and in offshore waters 3.3/1,000 km². Only one sighted school was in offshore waters, 19.0 km from the nearest coast, but 5 hours and 40 minutes later this school was in inshore waters. All other sighted bottlenose dolphin schools were in internal waters, or less than 5 km from the coast. Not one specimen of any other marine species was observed.

This research was the first counting and first study of seasonal (winter) distribution and density of bottlenose dolphins in the Croatian part of the Adriatic Sea.

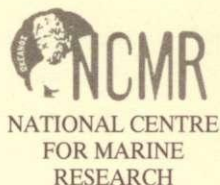


9th ICZEGAR ABSTRACTS

9th INTERNATIONAL CONGRESS
ON THE ZOOGEOGRAPHY AND ECOLOGY
OF GREECE AND ADJACENT REGIONS



THESSALONIKI 22-25 MAY 2002

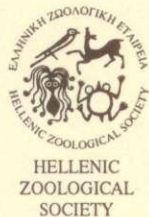


published by
The Hellenic Zoological Society, © 2002

SPONSORS

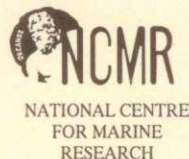
Ministry of Culture
Egnatia Odos S.A.
University Studio Press
Aristotle University of Thessaloniki
Scientact Co
Fishing News Magazine
Airforum Travel Agency
Ecodevelopment S.A.

9th INTERNATIONAL CONGRESS ON THE ZOOGEOGRAPHY AND ECOLOGY OF GREECE AND ADJACENT REGIONS



Organised by:

The Hellenic Zoological Society
&
National Centre for Marine Research



Printed by



UNIVERSITY STUDIO PRESS

Tel. +30310 - 209637 & 209837

Fax +30310 - 216647

Thessaloniki - Greece

ISBN 960-85298-6-7