

FOREWORD

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The sperm whale is one of only two great whales regularly encountered in the Mediterranean Sea. It was once considered to be quite abundant in some parts of the Mediterranean, but large herds are not reported nowadays and several lines of evidence support the hypothesis that the population is depleted.

While no estimate of population size exists for the region, the total number of sperm whales in the Mediterranean is more likely in the hundreds than the thousands. Genetic analysis indicates that the population is reproductively isolated while photo-id and acoustic data reveal little interchange with the neighbouring Atlantic population. Information on the reproductive behaviour and ecology of the species in the Mediterranean remains sparse.

The sperm whale Mediterranean subpopulation is listed as endangered, following the criterion C2a (ii) which refers to ‘population size estimated to number fewer than 2500 mature individuals and either; a continuing decline, observed, projected, or inferred, in numbers of mature individuals and at least 95% of mature individuals in one subpopulation’ (Notarbartolo di Sciara G, Frantzis A, Bearzi G, Reeves R. 2012. *Physeter macrocephalus* Mediterranean subpopulation. In IUCN 2013. IUCN Red List of Threatened Species. Version 2013.1. <www.iucnredlist.org>).

The poor understanding of the ecology and status of the population, together with the suspected decline in numbers emphasize the importance of sharing information.

There have been no large coordinated studies of sperm whales within the basin; there has never been a coordinated survey for example. The vast majority of the research is carried out by small groups, often NGOs or volunteer organizations. It was against this background that in 2011 an international workshop on the ‘Ecology, Behaviour and Conservation of the Mediterranean Sperm Whale’ was organized to provide a forum for scientists working on sperm whale in the Mediterranean Sea to come together, discuss relevant topics, share experiences, plan and make recommendations. The meeting took place on the island of Ischia (Italy) on 17 and 18 November 2011.

The goals the workshop were straightforward: to promote greater participation in international dialogue and scientific knowledge exchange on Mediterranean sperm whale with a view to strengthening scientific and conservation efforts locally, nationally and internationally.

A broad range of topics were covered during the workshop with participants from Italy, Spain, Greece, France, and UK sharing their expertise and knowledge.

We strongly believe (and hope) that its legacy and the conclusions expressed in the recommendations will be useful in furthering the conservation of the species in the Mediterranean, our primary concern.

This special issue of *Aquatic Conservation: Marine and Freshwater Ecosystems* brings together many of the contributions to the workshop covering a range of key topics including ecology, behaviour, and threats to the species in the Mediterranean Sea.

We would like to thank all the authors for their interest in the special issue, all the referees for their timely and thorough work, and the editor of *Aquatic Conservation: Marine and Freshwater Ecosystems*, Prof. John M. Baxter, for having accepted to host this special issue and for his invaluable assistance in the whole editorial process.

We hope that you will enjoy reading these articles as much as we have enjoyed our collaboration on these exciting topics.

We are grateful to a number of organizations:

- the 'Total Foundation' (Ishmael Project) and the 'Mava Foundation' (Prometeos Project/ IUCN-Med) for covering part of the organizational

expenses and the entire publication costs through the Association 'Menkab: il respiro del mare';

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- the NGO 'Ocean Care', the 'Riccardo Domenici Association', and the Casamicciola and Lacco Ameno municipalities for supporting Oceanomare Delphis Onlus in covering part of the organizational expenses;
- the Oceanomare Delphis Onlus Honorary President Katia Massaro and full member Marco Castagna who generously contributed to the catering costs.

Thank you for joining us in this 'adventure' and for the enthusiastic participation in the workshop. We had no doubt that it would not have been the success that it was without your presence. It was an honour for us to work with you and we hope that your trust in us has been rewarded.

1ST INTERNATIONAL WORKSHOP ON MEDITERRANEAN SPERM WHALE

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DEDICATION

We would like to dedicate this special issue to Malcolm Roy Clarke (4 October 1930 – 10 May 2013).

Most of us feel deeply the great loss for science that Malcolm's passing represented.

Malcolm's first interest was in whale physiology and in marine mammal parasites, which he studied in the 1950s on voyages with British whalers hunting in the Antarctic. He also carried out extensive research on the physiology of the sperm whale's head in an attempt to discover how the animals regulate their buoyancy during their long dives into the oceanic depths.

Malcolm's study of sperm whales' stomachs led him to become interested in cephalopods, the sperm whales' main food source. He developed a sub-speciality of identifying squid beaks, publishing several reference works, while his work on oceanic and deep-sea squid, their vertical distribution and their importance as prey for marine mammals, highlighted the central role of cephalopods in marine ecosystems, opening new avenues for research.

He worked all over the world, carrying out research in South Africa (Cape Town, Durban and Port Elizabeth), Indonesia, Australia (Perth and Melbourne), New Zealand, USA (Florida and Hawaii), France, Portugal (Madeira and Azores), Spain (Canary Islands), Denmark, Faroe Islands and Norway.

Malcolm wrote or contributed to more than 150 scientific papers and edited six books. He founded, and served as secretary and president of the Cephalopod International Advisory Council; and in 1996 he edited a special issue of the *Philosophical Transactions of the Royal Society* on 'The Role of Cephalopods in the World's Oceans'. He was a visiting professor at the University of Liverpool and later a visiting scientist at the University of the Azores.

After retirement from the Marine Biological Association in 1987, Malcolm continued his work on squid and whales with support from the Royal Society and the Leverhulme Trust.

He worked to the last day of his life.