

Resources available to individuals and organisations involved with marine turtle research and conservation in the Mediterranean

by Brendan J. Godley, Atef Ouerghi and Michael S. Coyne

Abstract. We review some key resources freely or cheaply available to those involved with marine turtle research and conservation in the Mediterranean. These include: *Marine Turtle Newsletter*, Listservs, bibliographic databases, Mediterranean specific technical manuals, IUCN Marine Turtle Specialist Group publications, internet sources and books.

Kurzfassung. Es wird eine Übersicht über Informationsquellen gegeben, die für Forschung und Schutz der Meeresschildkröten im Mittelmeer kostenlos oder kostengünstig zur Verfügung stehen. Dazu zählen: Der *Marine Turtle Newsletter*, Listserver, bibliographische Datenbanken, spezifische Technische Handbücher, Publikationen der IUCN Marine Turtle Specialist Group, Internet-Sites und Bücher.

Key words. Listservs, internet, databases, sea turtle, conservation.

At a recent workshop dedicated to marine turtle biology and conservation in Cairo, the general consensus was that there were many resources freely or cheaply available to workers in the Mediterranean that were underused. There now follows a review of what we feel are key resources. To expedite transmission of information, we have borrowed heavily from the text of promotional correspondence, websites and announcements published by the disseminating organisations in the *Marine Turtle Newsletter*. The overview of organisations and institutions working on marine turtles in the Mediterranean published by KASPAREK (2001) in the same issue of *Zoology in the Middle East* should be treated as complementary to this article.

1. Marine Turtle Newsletter

This publication is freely distributed quarterly and is available both in English and Spanish (*Noticiero de Tortugas Marinas*) and is circulated to over 2500 individuals and organisations world-wide. There is no subscription charge and the publication relies on donations. In addition to the print version, each new addition is promptly made available as an Adobe portable downloadable format (PDF) and as html web pages at <<http://www.seaturtle.org/mtn/>>. In addition, an ever-extending back catalogue of previous issues is becoming available in these formats, with the eventual goal of having all back issues freely available. The content of the *MTN/NTM* constitutes the best single source of up-to-date information in the form of editorials, articles, notes, meeting reports, announcements, opinionated letters, digest of news and

legal briefs and listings of recent marine turtle related publications (peer-reviewed papers, technical reports and theses). In short: a must for those involved closely with marine turtles. If you know of anyone who might benefit from receiving the MTN or NTM then please contact the editors (B. J. GODLEY, A. C. BRODERICK) at the address given below. If they have good internet access we suggest that they subscribe to the online version where they can automatically receive an e-mail reminder when the web version of the most recent edition is now available or receive it as a PDF.

2. Listservs

These are automatic e-mail discussion lists to which members send messages that are distributed to all members. Being subscribed to them does increase e-mail traffic but they act as a fantastic source of contacts and information. There are two which are of relevance to Mediterranean turtle workers:

MedTurtle: A Regional List Server Discussion Group for the Mediterranean. This was set up by Dimitris MARGARITOULIS, Vice-Chair for the Mediterranean and North-eastern Atlantic, IUCN/SSC Marine Turtle Specialist Group. Its aims are to promote regional collaborative conservation efforts. It is an all inclusive list and to date has some 70 marine turtle workers subscribed. If you are interested and wish to subscribe to MedTurtle please send an e-mail to: <medturtle-request@compulink.gr> with the word "SUBSCRIBE" in the body of the message. If you want to leave the group, write "UNSUBSCRIBE". If you want to send messages to MedTurtle please use the following address: <medturtle@compulink.gr>. You must subscribe to the list before you can submit messages.

CTURTLE: This is the international list server dedicated to marine turtles and is administered by the Archie Carr Center for Sea Turtle Research (ACCSTR) at the University of Florida. Its aims are to improve communication among individuals around the world who are interested in sea turtle biology and conservation. To date there are more than 950 subscribers from more than 25 countries. Complete information on subscribing to CTURTLE is available at <<http://accstr.ufl.edu/cturtle.html>> but in summary: To subscribe from an Internet address, send an email message to LISTSERV@lists.ufl.edu with the one-line message SUBSCRIBE CTURTLE (your first name) (your last name). To post information to all subscribers on the list, send an email message to CTURTLE@lists.ufl.edu. Because submissions to CTURTLE are restricted to subscribers only, all submissions by subscribers must be made from the email address from which they subscribed.

3. Bibliographic databases

There are three bibliographic databases of particular interest to Mediterranean turtle people:

Sea Turtle Online Bibliography

This is another excellent free resource made available by the Archie Carr Center for Sea Turtle Research. It includes over 12,000 references on all aspects of sea turtle biology, conservation and management. The bibliography is available over the Internet and is continually updated. Complete information on accessing the bibliography is found at <

ufl.edu/biblio.html>. Submit new publications for inclusion in the bibliography to: Karen Bjorndal, Archie Carr Center for Sea Turtle Research University of Florida, P.O. Box 118525, Gainesville, Florida 32611 USA or by using the submission form at the MTN-Online <<http://www.seaturtle.org/mtn/pubs.shtml>>.

Online Bibliography of *Caretta caretta*

The Florida Caribbean Science Center, U.S. Geological Survey, hosts an updated version of its online publication entitled “*A bibliography of the loggerhead sea turtle *Caretta caretta* (Linnaeus, 1758), including references to fossils placed in the genus.*” The bibliography includes 2,026 references, and includes original published papers in both the scientific and popular press, theses, dissertations, and many abstracts. The bibliography may be accessed in two ways, through the Herpetology page of the Florida Museum Natural History <<http://www.flmnh.ufl.edu/natsci/herpetology/caretta/Caretta.htm>>or through the Amphibian and Reptile page of the Florida Caribbean Science Center <http://www.fcsc.usgs.gov/Amphibians_and_Reptiles/amphibians_and_reptiles.html>. To submit new publications to the bibliography, send a copy to: C. Kenneth Dodd, Jr., Florida Caribbean Science Center, U.S. Geological Survey, 79 N.W. 71st Street, Gainesville, Florida 32653 USA.

Descriptive Bibliography of Marine Turtles in the Mediterranean and Black Seas

A census of all recent studies on Mediterranean marine turtles is planned to become available in both report form and database form at <<http://www.rac-spa.org.tn/>>. To submit new publications to the bibliography, send a copy to the Director of the Regional Activity Centre for Specially Protected areas (RAC/SPA) (address below).

4. Mediterranean Specific Technical Manuals

Three technical manuals have been commissioned to date and are distributed by RAC/SPA. If you would like to receive copies of these then please contact RAC/SPA using the contact details below.

Tagging Manual of Mediterranean Marine Turtles

The aim of this handbook is to give information about the methods that should be used and the problems which must be dealt with every time a “tagging and release” programme is launched. Posters and leaflet are available on the subject in three languages (English, French and Arabic). GEROSA, G. (1996): *Manual on Marine Turtle Tagging in the Mediterranean*. – Mediterranean Action Plan - UNEP, RAC/SPA, Tunis, 48 pp.

Manual of Marine Turtle Conservation in the Mediterranean

This publication attempts to give practical information that may be useful, under Mediterranean conditions for marine turtle conservation work. It was originally conceived as an aid for the training courses held by the Department of Fisheries of Cyprus, at Lara turtle reserve, for UNEP/MAP sponsored trainees from Mediterranean countries and for volunteers and other scientists working on the Cyprus Turtle Conservation Project. This manual is still seen as a supplement to practical training in turtle conservation techniques. DEMETROPOULOS, A. & M. HADJICHRISTOPHOROU (1995): *Manual on Marine Turtle Conservation in the Mediterranean*. – UNEP(MAP)SPA, IUCN, CWS, MANRE/Fisheries Department, Cyprus, 62 pp.

Interaction of Marine Turtles with Fisheries in the Mediterranean

The aim of the present report is to give a general picture of the possible interaction of fishing activities and Mediterranean marine turtle populations. Data obtained in the Mediterranean and elsewhere on capture efficiency and the mortality caused by different types of fishing gear is considered. It is then compared with presumed marine turtle distribution and with the fishing effort of different countries, in order to propose some priorities in which the limited resources for conservation and research projects can be invested. GEROSA, G. & P. CASALE (1999): *Interaction of marine turtles with fisheries in the Mediterranean*. – Mediterranean Action Plan - UNEP, RAC/SPA, Tunis, 59 pp.

5. Publications of the IUCN Marine Turtle Specialist Group

Research and Management Techniques for the Conservation of Sea Turtles

The IUCN/SSC Marine Turtle Specialist Group (MTSG) has published this essential manual which is available in English and Spanish (French will be published in early 2002). More than 100 experts from around the world participated in the production of the manual's 42 chapters. Information is provided on a host of issues in seven sections: Overview; Taxonomy and Species Identification; Population and Habitat Assessment; Data Collection and Methods; Reducing Threats; Husbandry, Veterinary Care and Necropsy; and Legislation and Enforcement. The manual was designed to provide guidance for field researchers and conservationists and standardise methodology to allow comparison of data within regions and across ocean basins. Residents of the USA and Western Europe can purchase the manual by sending the mailing address and a US\$25 cheque made payable to "IUCN Marine Turtle Specialist Group" to M. Donnelly, MTSG, c/o TOC, 1725 DeSales St., NW Suite 600, Washington, DC 20036 USA. Copies may also be ordered with a credit card by sending an email to <mdonnelly@oceanconservancy.org>. Residents of developing countries may request a complimentary copy by contacting M. Donnelly (address above). Please provide a very brief description of your research or conservation program. Please state which language edition you would like.

IUCN-MTSG Global Strategy

In 1995 the IUCN/SSC Marine Turtle Specialist Group published "A Global Strategy for the Conservation of Marine Turtles" for wide distribution around the world. Since its initial production in English, the MTSG and its members have translated the Strategy into Spanish, French, Arabic, Chinese, Portuguese and Farsi. The Strategy includes recommendations to develop and support programs that promote the survival of healthy marine turtle populations and the habitats on which they depend. The cornerstone of the Strategy is the need for conservation to be guided by the constraints of marine turtle biology. It recognises marine turtles are a shared international resource to be managed for sustainability by involving local communities and integrating local, regional, and national efforts. The strategy includes nine primary strategies. Copies are available for US\$ 8.00 from the MTSG Washington D.C. office (address above). Please make cheques payable to "MTSG/TOC" and indicate which language edition you would like.

6. World-wide Web Resources

There are many other sources of information available on the web which have not been mentioned above.

seaturtle.org

A great place to start looking for web resources is www.seaturtle.org. It serves as a portal to other sites and resources related to marine turtles available on the world-wide web. In addition it also offers online registration for the Annual Sea Turtle Symposium, the most comprehensive list of contact details for sea turtle people around the world, and free web-based e-mail to registered users. Seaturtle.org has recently begun offering free web space to individuals and organizations. The primary purpose is to provide a centralized home on the web for material related to marine turtles and encourage people to make their information available. Research results, project reports, art work, personal stories, or anything else related to marine turtles it welcome. Other material is acceptable, but should not dominate a site. To learn more visit <http://members.seaturtle.org/>.

Euroturtle

Euroturtle <http://www.euroturtle.org> has been established jointly by MEDASSET, the Mediterranean Association to Save the Sea Turtles, and King's College Taunton. It is Europe's first Sea Turtle Biology and Conservation Web Site for Science and Education. Since its launch in 1997, EuroTurtle has had strong links with conservation and environmental education. Within the conservation section there are detailed notes on the biology and distribution of the seven species of marine turtle. Also in this section, there is an accurate identification key and a host of other important conservation resources. The conservation section also includes the MEDASSET website, which has a rich source of scientific data and reports on the current state of turtle conservation in the Mediterranean. Euroturtle has so far been visited by over 100,000 visitors.

US National Marine Fisheries

The Office of Protected Resources of the US National Marine Fisheries service offers a general overview of each species. Also available from their electronic library are recovery plans for each species and proceedings of many of many past Sea turtle Symposia in PDF format. http://www.nmfs.noaa.gov/prot_res/

Sea Turtle Tag Inventory

The Archie Carr Center for Sea Turtle Research (ACCSTR) maintains a Sea Turtle Tag Inventory to avoid further duplication of tag numbers when tags are purchased by different research programs and to assist in reporting recapture data for turtles when only the tag number has been recorded. They invite colleagues to send their lists of tag series. The greater the participation, the greater the potential to meet the objectives of the inventory. See <http://accstr.ufl.edu/taginv.html>

Marine Turtle DNA Sequence Patterns

The Archie Carr Center for Sea Turtle Research has developed a website to facilitate marine turtle population genetic studies. As the number of laboratories conducting marine turtle genetics research increases and the chances for duplicating sequence designations increases, the coordination for identifying, naming, and cataloging sequence patterns becomes more

critical. In an effort to facilitate this coordination and to avoid the confusion of duplication of sequence designations in publications, they have established this website for listing DNA sequence patterns. See <<http://accstr.ufl.edu/genetics.html>>.

7. Books

Among the large number of books available on sea turtles, we would specifically recommend two of them:

- Lutz, P. L. & J. A. Musick (Editors) (1996): *The Biology of Sea Turtles*. – CRC Press, Boca Raton. ISBN 0-8493-8422-2 (Price *ca.* \$85.00).
- Bjorndal, K. A. (Editor) (1995): *Biology and Conservation of Sea Turtles* (Revised Edition). – Smithsonian Institution Press, Washington. ISBN 1-56098-619-0. (Price *ca.* \$40.00)

In addition, the volume of *Zoology in the Middle East* within which this publication is contained is dedicated to Mediterranean marine turtles. Copies can be obtained by writing to the publisher: Kasperek Verlag, Mönchhofstr. 16, 69120 Heidelberg, Germany (E-mail: Kasperek@t-online.de).

8. Networking

It should not be forgotten that one of the best sources of information is other workers. Join the listservs, scan the bibliographies, write to authors and attend meetings. By meeting and sharing experiences all will benefit. In addition, a recurring problem in sea turtle biology and conservation is data sharing. Make your data available. Consider submitting a note to the *MTN/NTM*, circulate a technical report, put them up in a website; but above all get the information out there.

Acknowledgements: Many thanks to Karen ECKERT (WIDECASST) for suggesting we undertake this review and we would like to acknowledge the positive feedback from all the turtle workers concerned with specific resources, some of whom had authored the original texts upon which specific passages were based.

Authors' addresses: Dr. Brendan J. Godley, Marine Turtle Newsletter/Marine Turtle Research Group, School of Biological Sciences, University of Wales, Swansea, SA2 8PP, UK. E-mail: MTN@swan.ac.uk. – Atef Ouerghi, Regional Activity Centre for Specially Protected Areas (RAC/SPA), Mediterranean Action Plan-UNEP, Bd. de l'Environnement, BP 337-1080 Tunis Cedex. E-mail: car-asp@rac-spa.org.tn. – Dr. Michael S. Coyne, National Ocean Service, 1305 East-West Highway, SSMC-IV, Rm 9257, Silver Spring, MD, 20910, USA. E-mail: mcoyne@seaturtle.org.