

## Book review

MARINE MAMMAL SENSORY SYSTEMS. Published by Plenum Press, New York and London, ISBN number 0-306 44351-1.

*Marine Mammal Sensory Systems*, edited by Jeanette Thomas, Ronald Kastelein and Alexander Supin, is the collection of original papers given at the second of the first two Symposia dedicated to the Sensory Systems of Marine Mammals—mainly Cetacea. Consisting of some 770 pages in a hard back cover, and published by Plenum Press of New York and London, it contains 48 papers set out under 5 main headings. These are:

Sensory Anatomy, Morphology and Neurology, Hearing Abilities, Echolocation Abilities, Acoustic Communication and Behaviour, and Sensory Systems and Behaviour.

The spelling throughout this book follows the American, rather than the English, usage.

The first chapter consists of ten papers, 4 from the Russian Federation, 3 from the United States and one each from China, Japan and Germany. The Cetacean ear, eye and nasal system is covered in detail and, as with all the other sections, each paper is followed by an excellent, detailed and wide ranging bibliography. So often in works like this the references are confined to those written in the Continent of the author.

The second is dominated by papers from the Russian Federation (8), with only one each from China, the USA and the Ukraine. For readers, and for those attending the Symposium, it is very interesting to hear for sure what is, or has been, taking place in the old USSR. Here one reads of the differences between the Chinese River Dolphin (*Lipotes vexillifer*), the Beluga (*Delphinapterus leucas*) and the bottlenose dolphin (*Tursiops truncatus*). Unfortunately two papers in this section do not identify, by Linnaean terminology, the species concerned, though the critic might argue that anyone interested enough to study this tome 'would know by inference' which species was meant.

Echolocation abilities cover the harbour porpoise (*Phocoena phocoena*), the bottlenose dolphin (*Tursiops truncatus*) and the false killer whale (*Pseudorca crassidens*), and the papers came from the USA (3), the Russian Federation (3) and Japan and the Ukraine (1 each).

Acoustic communication and behaviour cover the Harbour Seal (*Phoca vitulina*), the Beluga (*Delphinapterus leuca*), the Humpback Whale (*Megaptera novaeangliae*), the Hawaiian Monk Seal (*Monachus schauinslandi*), the California sea lion (*Zalophus californianus*), the Northern Elephant Seal (*Mirounga angustirostris*) and the bottlenose dolphin (*Tursiops truncatus*). Five papers come from the North American continent and two from the Russian Federation.

Sensory systems and behaviour is discussed in relation to the Weddell Seal (*Leptonychotes weddelli*), to the California sea lion (*Zalophus californianus*), the humpback whale (*Megaptera novaeangliae*), the bottlenose dolphin (*Tursiops truncatus*) and the Minke whale (*Balaenoptera acutorostrata*). Although one paper is entitled 'Cetacean Detection and Responses to Fishing Gear' it is surprising to fail to find reference in it to the outstanding work that has been continuing in the U.K. for some time now. The rest of the papers are dominated by work from the States—8 in all—2 come from the Netherlands and one each from Italy and Ukraine.

As previously mentioned, references in all sections were excellent—with the one exception of a Russian paper where only four references were quoted, and these in Russian. There was a good, though one must admit, not over extensive subject index, and perhaps a main author index might be considered for future volumes.

As with any such widespread and detailed international meetings, the main headache for reporting editors is to the interpretation of the translations of papers not written in the native tongues of the authors. Never will all readers be satisfied, though the editors cannot win either! Too much 'correction' interferes with the natural style of the author and though this reviewer would have liked more detailed attention given to correct English spelling and usage, the presence of an American co-editor would have made this difficult.

At \$180 this book may well be outside the reach of individual students or researchers, but to any Institute with a name in the study of marine mammal sensory systems, this volume is a must—and presumably should be kept on the bookshelf alongside the previous volume on the Rome Symposium in 1989 and the up and coming report on the third

Symposium being held in the Netherlands in 1994.

It may be said that the standard of paper and binding could be uprated but presumably this was a question of the balance between a very much higher price, and consequent reduced distribution, and a reasonable price making the information available to as wide a readership as possible. I believe that in

this last endeavour the editors have succeeded and should be congratulated.

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