

Book Reviews

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BOOK REVIEW ...

Marine Mammals Ashore: A Field Guide for Strandings, Joseph R. Geraci and Valerie J. Lounsbury. Publication TAMU-SG-93-601. Texas A&M University Sea Grant College Program, P.O. Box 1675, Galveston, Texas 77553-1675, USA. 1993. 305 pp. \$25.00 U.S.

This field guide provides the reader with the most current and widely accepted techniques for handling stranded dead and alive marine mammals. It includes sections on manatees (*Trichechus manatus*), sea otters (*Enhydra lutris*), and pinnipeds and cetaceans that reside in or migrate through the United States and adjacent waters (including parts of Canadian, Mexican, Puerto Rican, and Virgin Islands waters). The water resistant pages and waterproof soft vinyl cover are spiral bound and of a size (216 \times 152 mm) to fit easily into any field kit.

The guide has 13 chapters, and leaf margins are darkened for quick reference to chapters. The first three chapters are devoted to setting up a response team, getting organized, and dealing with the public and media. The third chapter is used to address topics that often are overlooked, such as crowd management for the safety of all and getting the most out of often-needed but generally inexperienced on-site volunteers. Chapter 4 "Decisions on the Beach" is used to address the three options for a response team after the decision has been made that a live animal needs assistance: return to the water, transport to a care facility, or euthanasia. In this chapter the authors also clarify the consequences of each option. A sensitive discussion on euthanasia of cetaceans is expanded in Chapter 6 and details are given of various methods and how each may be received by the team and the public. For example, the authors rightfully suggest that, if a cetacean is euthanized by means other than lethal injection, the procedure must be done behind a visual barrier "for the sake of the other whales on the beach as well as the public." Listed also are inhumane and ineffective methods; e.g., suffocation by blocking the blowhole. Chapters 5 through 9 separately address pinnipeds, single strandings of cetaceans, mass strandings of cetaceans, manatees, and sea otters. Some of the pertinent topics in each chapter are the biology, mortality, handling, transport, rehabilitation, and euthanasia by species. Numerous handling techniques are described and accompanied by illustrations. For instance, in Chapter 5, six separate illustrations cover various techniques for the capture of pinnipeds. The final pages at the ends of the pinniped and cetacean chapters are devoted to a brief but excellent summation of the species common to the United States and adjacent waters; 15 species of pinnipeds and 46 species of cetaceans are listed and pictured in color drawings; stranding frequencies in 11 North American regions and a summary of each species' range, size, distinguishing features, and habits are featured. Each of these abbreviated synopses contains descriptive and life history information that make this guide a convenient field identification manual.

Chapter 10 "Specimen and Data Collection' has 105 pages and is probably the most detailed section of the book. In this chapter, the authors describe techniques with illustrations for sampling live animals, stress the need for clear protocols for necropsies, and give suggestions for the distribution of samples. One table, handy for quick field reference, lists samples to collect from carcasses and the best methods for preservation. Diagrams are used to illustrate measuring, dissecting, and sampling techniques. A useful section of this chapter includes a code system for prioritizing collection of samples by the condition of the carcass. It is detailed in the type of data to obtain, however, and is best reviewed prior to its need in the field. For instance, photographs and morphometrics should be taken of all specimens, even if of limited value from those with advanced decomposition. Samples for bacteriology and virology are useful only from live or recently expired animals.

Chapters 11 through 13, "Carcass Disposal," "Health and Safety Risks," and "The Follow-Up" include information that often is neglected after the initial frenzy of handling a stranding. The extensive reference list (38 p.) will be helpful to anyone interested in further reading.

Three appendices provide useful, specific lists of suggested field equipment, a sample necropsy report form, and a sample telephone directory for listing relevant local contact numbers. Missing are sample measurement forms for each marine mammal group. Although vital measurements are listed in the diagram legends for each group in Chapter 10, it would have been useful to have forms that could be copied for field use.

This guide should be read before it is used in the field. It covers a vast amount of information that could best be referenced if the reader were familiar with its contents in advance. It is very well illustrated and the authors have used numerous drawings to supplement the various topics discussed in each chapter. This is a valuable book that should be in the field kits of all who respond to marine mammal strandings. Although it covers marine mammals indigenous to the United States and adjacent waters, it would be a useful resource for those working with marine mammals anywhere in the world. The numerous color illustrations, easy to follow format, and humorous inserts make this field guide enjoyable reading as well.

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BOOK REVIEW ...

Health and Management of Free-ranging Mammals, coordinated by M. Artois. Scientific and Technical Review, Office International des Epizooties (OIE). December 1992. Vol. 11(4): 993-1221 (\$34.00 U.S.) and March 1993. vol. 12(1):1-294 (\$40.00 U.S.).

The two soft covered volumes contain summaries of 48 presentations made at a symposium held in Nancy, France in October 1991. Introductory remarks, indices of subjects and authors, a paper on the role of the Office International des Epizooties (OIE) in protecting the health of free-ranging mammals, 12 short communications (abstracts generally one page or less in length), concluding remarks, and deliberations of a committee meeting on selected animal trypanosomes are presented in each of French, Spanish, and English. Twenty-five of 31 papers are in English, the remainder in French. Abstracts of all 31 papers are present in all three languages.

Graphs, tables, and maps are clear, concise and complementary to text. The few photographs, including photomicrographs, contribute little because they are poorly reproduced.

The striking feature of these volumes is the diversity of topics addressed. Mammals studied include rare, threatened, and endangered species and species of rodents, carnivores, bats, ruminants, pinnipeds and cetaceans. Papers on home range (urban feral cats), population reproductive parameters (red foxes), and predator-prey relationships (wolves and bears on livestock) in addition to papers on parasites and diseases emphasize the breadth of topics important to epizootiology.

Principal subject areas are reviews, surveys, assessment of impacts, and control of parasites and diseases. The papers cover a wide variety of topics on internal and external parasites, bacteria and viruses. Reviews include the ecology of tularemia; ecological impacts and effects of myxomatosis on lagomorphs; herpesviruses in seals; impacts of the nematode *Crassicauda* on whales; and canine rabies. The review on canine rabies is broad and supported by an extensive review of literature. The reviews offer few, if any, original data.

There are a number of survey papers that provide many valuable new data. Surveys for *Trichinella* in wildlife of northern Italy, *Echinococcus multilocularis* in red foxes in Switzerland, rabies virus in bats in the Netherlands, and murine viruses in voles in Canada are important contributions to understanding the distribution of these organisms within free-ranging wildlife.

Description of the temporal and spatial spread of mange over Sweden and of the occurrence of anthrax and rabies over decades in a park in Namibia provide perspectives on the epizootiology of diseases at scales for which data are seldom available. Detailed serological surveys of Arabian oryx (*Oryx leucoryx*) for antibodies to bacterial and viral pathogens are a valuable contribution to knowledge of exposure of this endangered species to agents of disease.

There are few papers on methods. However, a paper on use of polymerase chain reaction techniques to detect Echinococcus multilocularis in feces of red fox (Vulpes vulpes) is stimulating, relevant, and indicates areas for further research. Mathematical modelling of the potential for Capillaria spp. to control house mice (Mus musculus) in Australia during times of population explosion' of the mice is an insightful delineation of important variables to consider in control programs. Similarly, use of serological data to model dynamics of foot and mouth disease virus (FMD) in buffalo of South Africa identifies important considerations leading to understanding the epizootiology of FMD. Three short papers provide an overview of techniques being used to try to control rabies in freeranging mammals in North America.

The importance of disease in translocations of mammals is an important topic that receives attention. In an excellent review, examples of diseases introduced by translocated wildlife and of diseases to which translocated wildlife became exposed are documented. Issues and methods that should be considered both before and after translocations occur are outlined. Two complementary papers on myxomatosis in the United Kingdom are presented as a review of the primary impacts of this introduced disease on rabbits; the secondary impacts on vegetation, predators and rabbits; and also the extent to which vectors of the virus may influence primary impacts of myxomatosis on rabbits when in a later enzootic state. Resource managers in wildlife agencies should be encouraged to read these papers and others referenced by them before developing protocols for translocation of wildlife.

Data and discussion of data in some papers, and most short communications, are limited and perfunctory. This is not surprising considering their length. In some cases, the data presented have already been made available in other publications. This detracts from those papers for which the data are original and published for the first time. I would have preferred that more of the papers were extensive and provided original data and that fewer of them were one to three page reports of past or ongoing studies.

For those readers wishing to gain insight into the breadth of work being conducted on parasites and diseases of wild mammals, these volumes are excellent. However, the primary researcher expecting to find significant contributions on specific topics will be disappointed with some titles and pleased with others.

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