**Book Review**


*Raptor Biomedicine III, Including Bibliography of Diseases of Birds of Prey* is a compilation of papers that were presented at the Third International Raptor Biomedical Conference held in Midrand, South Africa, in 1998. This book supplements previous proceeding articles from the First International Symposium on Diseases of Birds of Prey held in 1980 in London, UK (Cooper and Greenwood, 1981) and the Second International Symposium on Biomedical Research in Raptors held in 1988 in Minneapolis, USA (Redig et al., 1993). In contrast with proceedings from the previous raptor biomedical conferences, *Raptor Biomedicine III* contains only a critical selection of the papers offered for publication. Subsequent to being selected for publication, each paper was refereed by a minimum of 2 independent sources.

The book is composed of 33 chapters, which are organized into 8 parts: Microbiology, Parasitology, Pathology and Poisoning, Medicine and Surgery, Veterinary Management and Captive Breeding, Rehabilitation and Telemetry, Resolution, and Bibliography. Contributors to the text include a number of international authors with multidisciplinary expertise. As a result, the individual chapters within each section originate from multiple scientific perspectives and address a broad range of topics in varied degrees of detail.

In Part I, Microbiology, specific viral and bacterial pathogens of raptors are reviewed. The section includes 2 chapters reviewing Newcastle disease (avian PMV-1) and herpesvirus infections in birds of prey. A chapter is included on considerations for the production of a falcon herpesvirus vaccine. This chapter involves a brief review of immunology with explanations on the unique characteristics of herpesviruses that complicate the production of a safe and effective vaccine. Two further chapters discuss investigations of *Mycoplasma* species and *Clostridium*-species enterotoxemia in raptorial birds.

Parasitology is the focus of Part II. An emphasis is placed on trichomoniasis, with 3 of the 6 chapters within the section devoted to varied medical, geographic, and host-related aspects of the *Trichomonas*-species infestations. A thorough paper is presented, summarizing and condensing the information gathered to date on the endoparasites in raptors. Two more specific chapters conclude the section, reviewing the endoparasites in free-ranging birds of prey in Germany and the parasitologic findings in captive falcons in the United Arab Emirates. These chapters direct attention toward the role of parasites in ecosystems.

The third section, Pathology and Poisoning, includes a review of the neoplasms of birds of prey and chapters on the pathology and diseases of 2 specific raptor species. A relatively small portion of the book is dedicated to poisoning, with a single chapter on lead poisoning in endangered sea eagles. The editors may not have placed an emphasis on toxicology in this book, knowing that previous proceeding publications have devoted entire sections to environmental toxicities in raptor populations.

The fourth part, Medicine and Surgery, comprises the largest single section within the book. The papers in this section describe recent advances in raptor medicine and surgery. A comprehensive chapter on the pathophysiology, diagnosis, and treatment of renal disorders is included within the section in addition to a review of the disorders of the posterior eye segment. Surgical aspects covered include anatomical considerations and surgical techniques for tendon repair and a discussion on the use of combining an external skeletal fixator and intramedullary pin for treatment of long bone fractures. A final chapter outlines 2 studies on the use of antibiotic-impregnated polymethyl methacrylate beads in the treatment of bumblefoot in raptors. This part of the book contains a wealth of clinically applicable information supplemented by remarkably detailed illustrations and descriptive photos.

Individual chapters on conservation and rehabilitation issues are included in Parts V and VI. Part V contains papers on the veterinary management and captive breeding of raptors. Topics range from veterinary considerations during the hunting trip to management aspects for reintroduction projects and the molecular sex determination in Spanish Imperial Eagle nestlings. A chapter on the immobilization of the Eurasian buzzard with oral tiletamine/zolazepam provides useful information for the field biologist and veterinarian requiring chemical immobilization in raptors. Part VI consists of papers related to the aspects of rehabilitation and telemetry techniques. Chapters in this section emphasize factors contributing to post-release survival and indicate the importance of monitoring released individuals in order to adequately assess success rates.

The book concludes with a chapter on the current legal considerations for the international movement of diagnostic and research samples from raptors. The author outlines some of the difficulties involved in importing and exporting materials from birds and the effects such restrictions have on the international collaboration for scientific research toward the interests of endangered and threatened species. Any person involved in the interna-