

PREFACE

In 1994, Randall Reeves and the late Stephen Leatherwood coined the term 'facultative river dolphins' to describe those species of the order Cetacea with populations occurring in both fresh and marine waters. They included in this category the Irrawaddy dolphin (*Orcaella brevirostris*), finless porpoise (*Neophocaena phocaenoides*), and tucuxi (*Sotalia fluviatilis*). These three species are not among the 'obligate river dolphins,' species with ranges restricted to freshwater systems: the baiji (*Lipotes vexillifer*) of the Yangtze River; susu (*Platanista gangetica gangetica*) and bhulan (*P. g. minor*) of the Ganges, Brahmaputra, Meghna, Karnaphuli-Sangu, and Indus river basins; and boto (*Inia geoffrensis*) of the Amazon and Orinoco systems.

In 2000, in the Executive Summary to "Biology and Conservation of Freshwater Cetaceans in Asia," Reeves, Brian Smith, and Toshio Kasuya noted that both finless porpoises and Irrawaddy dolphins inhabit freshwaters of Asia. As a result of this, they suggested that these two species should be included in the category 'Asian freshwater cetaceans.' We treat them in this volume as the 'facultative freshwater cetaceans of Asia.' A bit of a mouthful, to be sure, but we feel it is important to give these two species special recognition, in view of the fact that they face most of the same threats that endanger the obligate river dolphins in Asia, but by virtue of their historically lower profile, have received less conservation attention.

In this collection of 17 papers, we attempt to present a credible, up-to-date summary of the work that is being conducted on the facultative freshwater cetaceans of Asia. In Chapters 1 and 2, patterns of geographical variation in skull morphology of finless porpoises and Irrawaddy dolphins are documented, with some suggestions for needed taxonomic revisions. Chapter 3 summarizes recent work on the population structure of Japanese finless porpoises. Distribution and abundance of finless porpoise populations in Hong Kong and Japan's Inland Sea are assessed in Chapters 4 and 5. Chapters 6, 7, and 8 provide preliminary assessments of the conservation status of three freshwater Irrawaddy dolphin populations in the Ayeyarwady River of Myanmar, Songkhla Lake of Thailand, and Mahakam River system of Indonesia. The behavior and ecology of the only known wholly-freshwater population of the finless porpoise is described in Chapter 9. Aspects of the ecology (life history, feeding habits, surface and dive times, acoustic signals, and mortality) of a coastal marine population of finless porpoises, which occurs in Hong Kong and nearby Chinese waters, are detailed in Chapters 10 through 14. The distribution and status of marine populations of Irrawaddy dolphins in Australia, and Malampaya Sound, Philippines,

are discussed in Chapters 15 and 16. Finally, in Chapter 17, we provide some concluding thoughts, including brief summaries of the recent status of finless porpoise and Irrawaddy dolphin populations that have received some directed ecological study, as well as a series of recommendations for conservation of these facultative freshwater cetaceans of Asia.

All of the papers in this collection underwent anonymous peer-review by two to three referees. The review process for all papers in which either editor was a co-author was handled by the other editor in an anonymous fashion. The only exception was the final chapter, which is co-authored by both editors. The reviews for this chapter were handled by *Raffles Bulletin of Zoology* Editor, Navjot Sodhi. We would like to take this opportunity to express our appreciation to the referees, who freely gave of their time to help ensure that this volume would be a high-quality endeavor: L. T. Ballance, I. Beasley, S. J. Chivers, B. E. Curry, D. Fertl, T. Gerrodette, S. K. Hung, T. Kasuya, J. Laake, R. G. LeDuc, J. G. Mead, T. Norris, E. C. M. Parsons, W. F. Perrin, W. Perryman, R. R. Reeves, H. Rosenbaum, P. Rudolph, F. Trujillo, D. Wang, J. Y. Wang, D. Weller, B. Würsig, and K. Zhou, as well as several who remain anonymous to one or both of us.

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This volume is dedicated to the young researchers who spend weeks on end in the field conducting conservation-oriented research on these animals. We sincerely hope that the publication of this volume will provide a much needed boost to the respective profiles of these two facultative freshwater cetaceans of Asia, and will help people to take notice of the myriad problems they face.

Thomas A. Jefferson
Brian D. Smith
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