

Introduction

The franciscana, *Pontoporia blainvillei*, is endemic to the coastal waters of the western South Atlantic Ocean, occurring from Espírito Santo State, southeastern Brazil (ca 18°25'S - 30°42'W) (Siciliano, 1994), to Chubut Province, Argentina (ca 42°35'S - 64°48'W) (Crespo *et al.*, 1998). Although more closely related to the so-called river dolphins than to other marine dolphins, the franciscana is primarily a marine species, found mainly in coastal and estuarine waters (Praderi, 1986).

Recent evidence indicates that franciscanas are not distributed continuously throughout the species' range. They are extremely rare or absent in two northern segments (Siciliano *et al.* 2000), which suggests the existence of two small isolated populations, one in northern Espírito Santo and the other in northern Rio de Janeiro, southeastern Brazil. The reasons for these hiatuses are unclear. However, they may be related to the species' evident preference for turbid waters less than 30-35 m deep since both areas have relatively clear, deep waters (Siciliano *et al.*, 2000).

Mortality of franciscanas in fishing operations has been observed for almost sixty years. Reports on by-catch in shark gillnet fisheries off Uruguay date back to the early 1940s (Van Erp, 1969). Although gillnetting also began in southern Brazil and Argentina in the 1940s, no record of by-catch exists for that time. Gillnet fisheries for bottom-dwelling fish became the major, but not the only, conservation concern for franciscanas in Brazil and Argentina in the 1980s. Nowadays, by-catch has been reported from the main fishing villages along most of the species' distribution (e.g. Corcuera, 1994; Praderi, 1997; Secchi *et al.*, 1997; Zanelatto, 1997; Di Benedetto *et al.*, 1998; Ott, 1998).

Fisheries have a major impact on populations of franciscana but the severity of the impact seems to vary across the species' range. There is evidence that some local populations may be declining (Secchi, 1999; Secchi *et al.*, in press a). Reliable stock determination is necessary to evaluate how by-catch affects stocks so that they can be preserved through local management actions. Following the phylogeographic approach of Dizon *et al.*, (1992), which applies an hierarchical classification scheme to stock designations, Secchi *et al.* (in press b) reviewed available information on franciscana stock discreteness, including data on distribution, population response, phenotype and genotype. The mtDNA, morphometric and life history data, taken together, provide evidence in favour of splitting the species into four management stocks: two in coastal waters of Brazil, a third in Rio Grande do Sul State (southern Brazil) and Uruguay, and a fourth in coastal Argentine waters. The areas inhabited by these stocks were called Franciscana Management Areas or FMA I to IV. Although evidence for certain stock divisions was limited, the proposed classification scheme was recommended as a basis for management action at the local scale and as a framework for guiding further field research efforts.

Conservation of the franciscana has been a priority topic at the international level since 1986 when a workshop on "river dolphins" in the People's Republic of China in 1986 recommended that the species be listed as "Vulnerable" (Perrin and Brownell, 1989). IUCN has continued to list the franciscana as "Data Deficient" because serious depletion has only been suspected and no proper assessment of status has been completed and published (IUCN, 2000). However, there has been a substantial increase in the amount and quality of research since 1986, especially in the last 10 years. Researchers from universities in Brazil, Uruguay and Argentina are better trained, and the series of franciscana workshops conducted since 1992 have stimulated and facilitated collaborative, focused work on this species. The workshops have had the fundamental goal of identifying needs and priorities for research and conservation of the franciscana. The many important contributions in genetics, population dynamics, ecology, fishery interactions, stock identity, modelling, socio-economics and other areas mean that we are closer to achieving concrete conservation goals based on solid science. Nevertheless, basic studies in many parts of the species' range are still needed for proper status assessment and the development of effective conservation measures.

At the Fourth Workshop for the Co-ordination of the Research and Conservation of Franciscana in the Western South Atlantic (held in Porto Alegre, Brazil, 5-9 November, 2000) participants agreed that franciscana is the cetacean species most affected by fisheries in the western South Atlantic, and they were uncomfortable with the "Data Deficient" classification. It was agreed that the conservation status should be re-examined. The participants resolved to produce documentation that would support reclassification. Such documentation was to include an exhaustive review of many aspects of the species' biology and ecology, fishery interactions, education and legislation, among others. The establishment of working groups was seen as the most effective way to compile the necessary data. Given the amount of information assembled by the working groups, it was decided to produce a special issue on franciscana. At the same time, the Latin American Society for Aquatic Mammals (Sociedad Latinoamericana de Especialistas en Mamíferos Acuáticos/Sociedade Latino-Americana de Especialistas em Mamíferos Aquáticos - SOLAMAC) was planning to establish a new Journal. Conversations between the SOLAMAC secretariat through its in-charge President and the co-ordinators of the Fourth Workshop led to the idea of publishing the Special Issue on Franciscana as the inaugural volume of the new Latin American Journal of Aquatic Mammals.

This Special Issue of The Latin American Journal of Aquatic Mammals contains the Final Report of the Fourth Workshop, the Reports of specific Working Groups (i.e. Distribution and Behaviour, Biology and Ecology, Vital Parameters, Stock Identity, Fishery Interactions, Abundance Estimates, Legislation and Education) and several papers presented during the Workshop. Some other papers not presented during the Workshop were also considered. The papers are arranged according to the Agenda of the Workshop. The Editors are grateful to many scientists who undertook the time-consuming and crucial task of reviewing the manuscripts and Reports. These were: Mariano Koen Alonso, Masao Amano, Nélio Barros, Ricardo Bastida, Oliver Boisseau, Marie Van Bressen, Deanna Clement, Kike Crespo, Luciano Dalla Rosa, Karen Evans, Tom Jefferson, Claude Joiris, Toshio Kasuya, Robin Law, Claudio Leonzio, Fernanda Marques, Giuseppe Notarbartolo di Sciara, Paulo Ott, Vic Peddemors, Susana Pedraza, Bill Perrin, Toni Raga, Randy Reeves, Christoph Richter, Diego Rodriguez, Marcos C. O. Santos, Salvatore Siciliano, Brian Smith, Elena Valsecchi, Koen Van Waerebeek, John Wang, Heidi Weiskel, Bernd Würsig and Alexandre Zerbini.

The Editors would like to acknowledge the financial support provided by Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA), the Fundação "O Boticário de Proteção à Natureza", the Cetacean Specialist Group of the World Conservation Union's Species Survival Commission (CSG/IUCN-SSC), the International Whaling Commission (IWC), the Yaqu Pacha Foundation, and the Cetacean Society International (CSI) for the organisation of the Fourth Workshop. Logistical support was provided by the Grupo de Estudos de Mamíferos Aquáticos do Rio Grande do Sul (GEMARS), the Centro de Estudos Costeiros, Limnológicos e Marinhos/Universidade Federal do Rio Grande do Sul (CECLIMAR/UFRGS) and the Museu Oceanográfico "Prof. Eliézer de C. Rios" (MO-FURG).

Special thanks go to the sponsors of this Special Issue: Yaqu Pacha Foundation, the Convention for Migratory Species/UNEP, the World Wildlife Fund-US, the Cetacean Specialist Group/IUCN-SSC, and the Cetacean Society International. Thanks also to authors who contributed papers and Reports and all participants of the Fourth Workshop.

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Editor of this Special Issue

* The Editor was granted with a scholarship from the Brazilian Council for Scientific and Technological Development (CNPq) (Process 200889/98-2).

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