

Book Review

Ictiofauna de Aguas Continentales Chilenas. Víctor Hugo Ruiz Rodríguez & Margarita Marchant San Martín. Universidade de Concepción, Chile, 2004. 356pp.

Freshwater fishes of South America are widely known through the species of three orders of the Ostariophysi (Characiformes, Siluriformes, and Gymnotiformes), the dominant group in South and Central Americas, as well as the speciose family Cichlidae and the small Cyprinodontiformes. The dominance of these five groups, however, is not generalized through the entire continent. The fish fauna from the austral portion of South America, in both Chile and Argentina, is much less diverse, with a few native representatives of the Characiformes and Siluriformes, and the presence of fish groups more related to the fish fauna of Australia, as the Percichthyidae and Galaxiidae, than to the northern portion of the continent.

The book *Ictiofauna de Aguas Continentales Chilenas* brings us information about the composition of this interesting fauna in the west side of the Andes in Chile. Chilean territory has several small and isolated river basins draining to the Pacific, with a high endemism. However, the presence of several isolated drainages does not reflect into high species diversity. The total number of valid native freshwater species listed by the authors to all country totals only 43 species.

The book starts with some general information on ichthyology as basic guidelines in nomenclature, morphology (illustrated with several sketches), biology, ecology, and maintenance of fishes. Conservation is one of the main concerns of the book, mainly in connection with the effects of introduced freshwater fish species. In fact, the small number of native species (43) contrast with a total of 26 introduced freshwater fish species. An analysis of the conservation status of the native species is followed by an analysis of the number and reasons of exotic fish introductions. To pick up some examples, the number of recognized introductions for aquaculture amounts to 495, and the number of accidental introductions sum up 139.

The next section of the book has a small description of each order, family, and genus and a key to all species, native or not. Follows a comprehensive summary of each species, including common names, type-locality, synonyms, diagnoses, several aspects of species biology and/or ecology, data on distribution, discussion on taxonomic and/or phylogenetic information, and the description of the conservation status. All species are illustrated in very simple line drawing representations.

Some of the species listed in the index and at pages 98-99 are followed by an observation stating as "synonym of ...", but are treated separately in the key and species accounts. The authors discuss the status of these species under each species account. I have checked all these situations in Reis *et al.* (2003) and all four species reported in the species list as synonyms of *Orestias agassizi* (Cyprinodontidae) are considered valid by Costa in Reis *et al.* (2003), as correctly treated in the remaining portion of the book. The species *Brachygalaxias gothei* (Galaxiidae) is reported in the species list of the book and also by Berra in Reis *et al.* (2003) as synonym of *Brachygalaxias bullocki*, but authors kept it separately in key and species account based on a citotaxonomic study that recognized it as valid. Finally, *Odontesthes (Cauque) debueni* (Atherinopsidae) is reported in the species list of the book and also by Dyer in Reis *et al.* (2003) as synonym of *Odontesthes (Cauque) brevianalis*, but treated separately along the book.

Literature Cited

Reis, R. E., S. O. Kullander & C. J. Ferraris, Jr. 2003. Check list of the freshwater fishes of South and Central America. Porto Alegre, Edipucrs, i-xi + 1-729.

Luiz R. Malabarba, Departamento de Zoologia, Universidade Federal do Rio Grande do Sul, Av. Bento Gonçalves 9500, 91501-970-900 Porto Alegre, RS, Brazil; and, Museu de Ciências e Tecnologia, Pontifícia Universidade Católica do Rio Grande do Sul, Av. Ipiranga 6681, Caixa Postal 1429, 90619-900 Porto Alegre, RS, Brazil.