



Checklist of the parasites of the black-necked swan, *Cygnus melanocoryphus* (Aves: Anatidae), with new records from Chile

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Abstract

Black-necked swans (*Cygnus melanocoryphus*) are endemic to the southern cone of South America. Their range extends from Brazil and Paraguay south to Argentina and Chile. A total of 16 parasite species were collected from 7 swans from the Biobío region, Chile, of which 12 are new records for Chile and 11 represent new host records, *Echinostoma trivolvis*, *Paranomostomum* sp., *Microsomacanthus* sp., *Nadejdolepis* sp., *Retinometra* sp., *Avioserpens* sp., *Capillaria skrjabini*, *Ingrassia cygni*, *Anatoecus penicillatus*, *A. icterodes* and *A. keymeri*. A checklist is presented that summarizes sites of infections, localities, life cycles and their intermediate hosts (if known), and the pertinent references to demonstrate the wide diversity of parasites of black-necked swans. Our review of the existing literature (23 publications) along with our own records provided information on a total of 18 families and 27 genera, including 33 described species (some only identified to genus), of which 11 were recorded only in Chile (8 endoparasites and 3 ectoparasites), and 6 only in Argentina (4 endoparasites and 2 ectoparasites). Five parasites are known only from captive swans in European zoos. Parasites recorded from *C. melanocoryphus* include 23 helminths and 10 ectoparasites (one leech and 9 arthropods).

Key words: checklist, parasites, helminths, Phthiraptera, acari, black necked swans, *Cygnus melanocoryphus*, trematode, cestode, nematode, lice, mites

Introduction

The black-necked swan (*Cygnus melanocoryphus* (Molina, 1782)) is endemic to the southern cone of South America. Originally described as *Anas melanocorypha* by Molina (1782), it is believed to form a complex of species with mute swans (*Cygnus olor* (Gmelin, 1789)) and black vultures (*Coragyps atratus* (Bechstein, 1793)). It is sometimes placed in the monotypic genus *Sthenelides* (del Hoyo *et al.* 1992). The total population is estimated at approximately 100,000 individuals distributed among Chile, Argentina, southeastern Brazil and Paraguay (Schlatter *et al.* 1991). In Chile, climatic influences cause opportunistic displacements of black-necked swans among different wetland areas occurring near the Pacific coast (Vilina *et al.* 2002). The species is considered as not globally threatened in Cites II (del Hoyo *et al.* 1992).

The purpose of this study is to present a checklist of the parasites described in black-necked swans that summarizes sites of infections, localities, life cycles and their intermediate hosts (if known), along with the pertinent references, to demonstrate the wide diversity of parasites of this host species. In addition, new host and geographic records from Chile are reported.