

## New Records of Feather Lice from some Seabirds in Chile

Authors: Sepúlveda, María Soledad, Palma, Ricardo L., and Ochoa-

Acuña, Hugo

Source: Journal of Wildlife Diseases, 33(2): 371-372

Published By: Wildlife Disease Association

URL: https://doi.org/10.7589/0090-3558-33.2.371

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at <a href="https://www.bioone.org/terms-of-use">www.bioone.org/terms-of-use</a>.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

## New Records of Feather Lice from some Seabirds in Chile

María Soledad Sepúlveda,¹ Ricardo L. Palma,² and Hugo Ochoa-Acuña,³¹ Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, Florida, 32611, USA; ² Museum of New Zealand, P.O. Box 467, Wellington, New Zealand; ³ Department of Zoology, University of Florida, Gainesville, Florida, 32611, USA

ABSTRACT: Six species of chewing lice (Phthiraptera: Menoponidae, Philopteridae) are reported from four species of seabirds collected off the coast of Chile. They are Eidmanniella pellucida, Piagetiella transitans, and Piagetiella caputincisa, from a Guanay cormorant (Phalacrocorax bougainvillii); Harrisoniella ferox collected from a black-browed albatross (Diomedea melanophrys); Ancistrona vagelli from a white-necked petrel (Pterodroma externa); and Pelmatocerandra flinti collected from a Magellan diving petrel (Pelecanoides magellani). Eidmanniella pellucida and P. transitans are reported from Chile for the first time. Piagetiella caputincisa from the Guanay cormorant may be a contaminant from a red-legged shag (Phalacrocorax gaimardi).

Key words: Chewing lice, Phthiraptera, seabirds, new records.

While collecting specimens of seabirds from Chile for phylogenetic and environmental studies, the opportunity arose to obtain both external and internal parasites from several of these avian hosts. Information regarding the parasitic fauna of seabirds from Chile is fragmented and incomplete. Here, we present the results of a limited survey on the ectoparasites of four species of seabirds. The helminth fauna of these groups of birds is under study, and will be published elsewhere.

During February to March 1995, the following host species were collected at different geographic locations in Chile: One immature (unknown sex) Guanay cormorant (Phalacrocorax bougainvillii) from Iquique (20°13'S, 70°10'W); one adult male black-browed albatross (Diomedea melanophrys) from Robinson Crusoe Is-Juan Fernández Archipelago (33°37′S, 78°53′W); one adult male whitenecked petrel (Pterodroma externa) from Alejandro Selkirk Island, Juan Fernández Archipelago (33°45'S, 80°45'W); and one adult male Magellan diving-petrel (Pelecanoides magellani) from Puerto Williams (54°56′S, 67°37′W). Birds were collected using a shotgun, under appropriate permits (Resolution 3102) from the Chilean government (Servicio Agrícola y Ganadero, Santiago, Chile). Only macroscopically visible arthropods were collected, stored in 70% isopropyl alcohol, and sent to the Museum of New Zealand (Wellington, New Zealand) for identification. Representative specimens of these arthropods are deposited in the Museum of New Zealand Entomology Collection (Wellington, New Zealand; accession number 6/1996).

Six species of chewing lice (Phthiraptera: Menoponidae, Philopteridae) were collected and identified from the four species of birds examined. Eidmanniella pellucida (two females) and Piagetiella transitans (two females and two males) were collected from the Guanay cormorant. Eidmanniella pellucida is known from several species of the genus Phalacrocorax from North and South America, Europe, Africa, and New Zealand (Ryan and Price, 1969). This louse has not been previously reported from Chile. Species of the genus Piagetiella are only found on Pelecaniformes (Families Pelecanidae and Phalacrocoracidae), and specimens of P. transitans have been collected from Guanay cormorants in Peru (Price, 1970). This is the first report of *P. transitans* from Chile. We also collected from this host one male of Piagetiella caputincisa, a species normally found in red-legged shags (*Phalacrocorax* gaimardi). Three males and three females of P. caputincisa from P. gaimardi collected in Bahía Concepción, Chile, in January 1981 are held in the collection of the Museum of New Zealand. This sample is a new host record for P. caputincisa, and a new species record for Chile. In our study, this louse may have moved from its normal host to *P. bougainvillii* by human agency, since specimens of *P. gaimardi* and *P. bougainvillii* were collected and processed during the same day.

A single male of Harrisoniella ferox was collected from the black-browed albatross. Lice of the genus Harrisoniella are regularly found on albatrosses (Diomedea spp.) and, although very conspicuous, they are usually not collected in large numbers (Palma and Pilgrim, 1984). Harrisoniella ferox has been recorded from black-browed albatrosses from South Africa, Tasmania and New Zealand (Palma and Pilgrim, 1984). Carriker (1964) recorded H. ferox (as H. chilensis) off Valparaíso, Chile on the Antarctic fulmar (Fulmarus glacialoides), but Palma and Pilgrim (1984) regarded the latter as an accidental host.

One nymphal stage of Ancistrona vagelli was collected from a white-necked petrel. Ancistrona vagelli has been reported from several species of petrels, including pinkfooted shearwaters (Puffinus creatopus) and Kermadec petrels (Pterodroma neglecta) from the Juan Fernández Archipelago, Chile (Thompson, 1940; Von Kéler, 1952).

Pelmatocerandra flinti (several males and females), were collected from a Magellan diving petrel. Pelmatocerandra flinti was originally described from the same host collected at Desolación Island, Chile by Emerson and Price (1971).

This study was supported by an American Museum of Natural History Grant,

awarded to Dr. Gary Nunn. We wish to thank Dr. Gary Nunn for his help in the collection of bird specimens, and the Servicio Agrícola y Ganadero, and the Corporación Nacional Forestal in Chile for granting us permission for the collection of bird specimens.

## LITERATURE CITED

- CARRIKER, M. A. 1964. Descriptions of new and little known species of Mallophaga (Insecta) from maritime hosts of Chile, South America. Publicaciones del Centro de Estudios Entomológicos 6: 1–26.
- EMERSON, K. C., AND R. D. PRICE. 1971. A new species of *Pelmatocerandra* from a diving petrel (Mallophaga: Philopteridae). Proceedings of the Entomological Society of Washington 73: 211– 213.
- PALMA, R. L., AND R. L. C. PILGRIM. 1984. A revision of the genus *Harrisoniella* (Mallophaga: Philopteridae). New Zealand Journal of Zoology 11: 145–166.
- PRICE, R. D. 1970. The *Piagetiella* (Mallophaga: Menoponidae) of the Pelecaniformes. The Canadian Entomologist 102: 389–404.
- RYAN, S. O., AND R. D. PRICE. 1969. A review of the genus *Eidmanniella* (Mallophaga: Menoponidae) from the Pelecaniformes. Annals of the Entomological Society of America 62: 815–823.
- THOMPSON, G. B. 1940. Anoplura (Siphunculata and Mallophaga) from Juan Fernández Hosts. In Natural history of Juan Fernández and Easter Island, C. Skottsberg, (ed.). Almqvist and Wiksells, Upsala, Sweden, pp. 639–642.
- VON KÉLER, S. 1952. On some Mallophaga of seabirds from the Tristan Da Cunha Group and the Dyer Island. Journal of the Entomological Society of South Africa 15: 204–238.

Received for publication 27 July 1996.