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## A SUMMARY OF THE BIRDS CAPTURED WITH MIST-NETS AND/OR CENSUSED IN THE SOUTHERNMOST FORESTS OF THE WORLD

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In this section we present a summary of morphological and ecological data for 26 species that were captured with mist-nets during the first eleven years (January 2000-December 2010) of the Long-Term Ornithological Research Program at the Omora Ethnobotanical Park and its associated study sites in the Cape Horn Biosphere Reserve. The birds are presented in a sequence starting with the most frequently captured to the less frequently captured species. For each species we provide a two-pages description.

The first page begins with a photograph of the species, including the following information to the right:

- Total number of captures of species  $n$  (TC)
- Relative percentage of the total captures of species  $n$   
(% of TC species  $n / \sum \text{TC all species}$ )
- Total number of different captured and banded individuals of species  $n$
- Percentage of recaptured individuals of species  $n$
- Maximum recorded longevity for species  $n$

The definition of each of these terms is provided in detail in the previous chapter.

Below the picture, we include a summary table with the morphometric measurements of the birds captured with mist-nets, distinguishing between males and females in the case of species with a clear sexual dimorphism.

Below the morphometric table, we include a brief paragraph with information about the diet of each species, based on preliminary analyses of the content of the feces collected from birds captured with mist-nets, supplemented with field observations and review of the literature.

The second page begins with a distribution map of the species in the Cape Horn Biosphere Reserve (CHBR) based on 61 sites in which bird censuses along transects with observation-listening stations were conducted (see detail in previous chapter). For each site, the map indicates the presence (color circles) or the absence (white circles) of the species. When present the species is present, the map illustrates if it is found year round (green circles) or only during the breeding season (yellow circles).

Below the CHBR map, we include another map with the entire range of distribution of the species. We use the following nomenclature of colors to indicate the species' spatio-temporal patterns:

-  green = year-round resident
-  yellow = present only during the breeding season
-  blue = present only during the non-breeding season
-  violet = occasional visitor

To the right of the distribution map of the species, a graph illustrates the seasonal variations in the monthly mean ( $\pm$  SE) of birds captured with mist-nets (Total number captured birds / [net area ( $\text{m}^2$ ) x number of hours of net display (h)] x  $10^4$ ) at Omora Park and associated study sites in the Cape Horn Biosphere Reserve.

Finally, for each species we include three short paragraphs with concise information about (i) the distribution and habitat use, (ii) the life-habits and ecology, and (iii) the conservation status. This information is based on the mist-net capture data, supplemented by field observations and a review of the literature. The conservation status considered also the Chilean Hunting Law (*La Ley de Caza y su Reglamento*, Edición 2009, Servicio Agrícola y Ganadero, Chile; <http://www.avesdechile.cl/Odocs/leydecaza.pdf>) and the IUCN recommendations.

The 26 species of birds captured with mist-nets are organized into four groups. Because the banding program focuses on passerines and other small birds that inhabit the world's southernmost forests, the first group of birds (Section A) includes the 18 species of small

birds that have been captured in the interior or at the margins of forests “Passerines and other small birds captured with mist-nets in the sub-Antarctic forests at Omora Park and complementary sites on Navarino Island.”\*

Because we accidentally captured with the mist-nets some larger birds in the forest interior or margins (non-passerines), the data for five species were included in Section B “Larger-sized birds incidentally captured with mist-nets in the sub-Antarctic forests at Omora Park and other sites on Navarino Island.”

At Omora Park, we also mist-netted passerine birds inhabiting the high-Andean habitats. For this reason, we included data from two species captured just above the tree-line in Section C “Passerines inhabiting the high-Andean habitats above the tree-line captured with mist-nets at Robalo Mountain, Omora Park, Navarino Island.”

Finally, at Omora Park and some preliminary mist-netting efforts in the capital city of the Chilean Antarctic Province, Puerto Williams, we captured one exotic bird species, which we included in the last Section D “Exotic passerines captured with mist-nets in the sub-Antarctic forests at Omora Park and Puerto Williams on Navarino Island.”

At the end of this chapter we indicate the main bibliographic sources used in the preparation of the maps with the whole range of distribution of the species, and the concise information about the general description of morphology, diet, distribution and habitat use, life-habits and ecology, and conservation status.

Our quantitative data on morphology, spatial and temporal distribution of the species complement previous ornithological publications based on studies conducted mostly during the summer in Tierra del Fuego and occasionally on Navarino Island and the Cape Horn Archipelago. Most of these early publications have been limited to short-term studies or correspond to field guides that include qualitative data or quantitative data recorded in other regions of South America. A list with the main bibliographic sources of these valuable previous studies that were particularly valuable for preparing the description of the morphology, feeding, distribution and use of habitat, lifestyle and ecology, conservation status and preparing maps of the total area of each species is provided.

\*Two of the species included in this first group, the Magellanic Tapaculo (*Scytalopus magellanicus*) and the Blue-and-white Swallow (*Pygochelidon cyanoleuca*), were captured with mist-nets in Omora Park only at the beginning of the long-term banding program in the year 2000. No morphological data were recorded for the few individuals captured. For this reason, for these two species we provide morphological information recorded in other study sites nearby, and we do not include a graph for monthly capture rates with mist-nets.