

METADATA: Digital Distribution Maps of the Birds of the Western Hemisphere

Identification Information

1 Abstract: This data set contains distribution information for all birds occurring in the Western Hemisphere. The goal of this project is to make this distributional information freely available to the public to inform conservation and other land-use decisions. A Memorandum of Understanding signed by NatureServe (then known as the Association for Biodiversity Information), The Nature Conservancy/Migratory Bird Program, Conservation International/CABS, World Wildlife Fund-US, and in 2000, with the subsequent addition of Environment Canada, governed the initial development and guidelines for sharing of these data. The MOU expired in 2003, but NatureServe, the compiler of the data set, continues to maintain the data largely in the spirit of the original MOU.

The ArcView shape files contain the known range of each species. Ranges may be depicted as polygons where a species is widespread, as points where there are isolated records, or both. Not all vagrant occurrences are depicted, especially those in the US and Canada. The files are arranged in folders by family. The file naming convention, designed to allow manipulation of the files in Arc/Info, is as follows.

POLYGON files are named: gggg_ssss_pl.xxx where gggg are the first 4 letters of the genus name, ssss are the first 4 letters of the specific name, and xxx are the extensions (e.g., shp, dbf) that ArcView attaches to shapefiles.

POINT files are named: gggg_ssss_pt.xxx.

If a genus or species name has fewer than 4 letters, the entire name is used (e.g., the point file for *Ara severa* would be ara_seve_pt.xxx).

If >1 species in the same family has the same first four letters of both the genus and species names, then the numbers 1, 2, etc. are added after the "ssss". Where possible, the "1" is assigned to the species that comes earliest in taxonomic order. For example, point files for the furnariid *Asthenes humicola* would be named asth_humi1_pt.xxx and *Asthenes humilis* would be named asth_humi2_pt.xxx.

DBF files accompanying each polygon contain taxonomic information, distribution status, sources and other details about the maps (see Data Attributes section below).

2 Use Constraints: These data may not be used for commercial purposes.

3 Dataset Credit: Users MUST credit all partners of the MOU in any product produced in any media that uses information contained in this database. Such credit should read:

“Data provided by NatureServe in collaboration with Robert Ridgely, James Zook, The Nature Conservancy — Migratory Bird Program, Conservation International — Center for Applied Biodiversity Science, World Wildlife Fund — US, and Environment Canada — WILDSPACE.”

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Citation

12 Citation:

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Spatial Reference Information

13 Projection: Unprojected (ESRI Geographic)

14 Projection Parameters: Units: decimal degrees

15 Datum: North American 1983

16 Base Map: Most maps are based on the Digital Chart of the World as a basemap (1:1,000,000 scale), developed by the Defense Mapping Agency of the United States of America. Several edits were performed on this coverage by Environment Canada's Meteorological Service of Canada - Ontario Region - Geomatics Unit to correct errors and omissions. For more details see <http://map.on.ec.gc.ca/wildspace/hemi-ims.html> and click on the link "More About Base Maps." Many South American ranges use a slightly different basemap, called "Lacpol", provided by the GIS lab of the former Latin American Science Department of The Nature Conservancy in 2000. Lacpol was produced at a coarser scale than the DCW. The coastlines of the two basemaps rarely vary by more than 1.5 km, although the boundaries of estuaries and islands may vary by as much as 4 km.

Data Attributes

17 Number of Items in Attribute Table: 13

18 Names of Attributes:

- * Shape - Point or Polygon
- * English Name
- * Scientific Name [genus + species (+subspecies)]
- * Authority [name + year; in parentheses if genus has changed]
- * Family
- * Presence - Is/was it there (Codes are listed below)
- * Origin - How/why is it there (Codes are listed below)
- * Compiler [Name + date]
- * Scale of source map
- * Taxonomic comments
- * Distribution comments
- * References [authors name and publication date]
- * Reviewers [names + dates]

19 Codes:

Presence

1 - Extant

2 - Possibly present

3 - Probably extinct/Historically present but no recent records

4 - Extinct

5 - Extirpated purposely - (applies to introduced species only)

6 - Occurs on indicated island chain, but not necessarily on every island in the chain

7 - Subfossil/fossil

Origin

1 - Native (year round)

2 - Native (breeding seasons only)

- 3 - Native (nonbreeding seasons only)
- 4 - Native (as a passage migrant or wanderer)
- 5 - Native (seasonal permanence uncertain)
- 6 – Introduced (Alien) – [anthropogenically since 1600]
- 7 - Either introduced or native
- 8 - Reintroduced
- 9 - Either reintroduced or introduced
- 10 - Vagrant (an unusual record where a species does not regularly occur or migrate; only applicable to points)
- 11 – Unknown

20 Data Compilation Notes: Most maps were digitized by eye or from scanned images of source maps occurring in field guides or species accounts (such as the Birds of North America series). These maps were then reviewed and appropriate corrections made to the database. A list of the references cited in the database for all species on Version 1.0 follows. Additional References cited on version 3.0 are available on the page of the associated species at www.natureserve.org/infonatura.

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Metadata Reference Information

21 Metadata Date: 15 May 2002

22 Creation Date: 17 March 2003

23 Most recent Update: 17 October 2007

24 Update Notes: Version 3.0 incorporates numerous changes based on taxonomic updates of the South American Check-List Committee through March 2007 and the 47th supplement to the AOU *Check-list of North American Birds* as well as distributional updates gleaned from the literature. The data set is now more complete for species that occur in the Western Hemisphere only as migrants. Alaskan ranges were updated based on information kindly provided by the Alaska Natural Heritage Program, and Yucatan ranges were updated based on data provided by Barbara MacKinnon. The ranges of 115 species of birds endemic to the east slope of the Andes in Peru and Bolivia were revised based on the results of a NatureServe-led project to predict distributions of these species. Overall, this version of the data base includes substantive updates to the ranges of 250 species, as well as taxonomic updates. In addition, more extensive QC has cleaned up a number of problems such as typographical errors and overlapping polygons. The database now includes New World range information for 4,273 species based on over 275 references.

Version 2.1 included for the first time the marine ranges of all species that occur regularly over water. Previous versions included terrestrial ranges only. Maintains all revisions to terrestrial ranges included in version 2.0, which included a major revision of South American species to bring the taxonomy in line with the South American Check-List Committee of the AOU and revisions of many North American species to match the last 100 accounts of the Birds of North America series.