

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

By Patterson et al. (2003)

Identification Information

1 Abstract: This data set contains distribution information for all mammals 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 MOU signed by NatureServe, The Nature Conservancy/Migratory Bird Program, Conservation International/CABS, World Wildlife Fund-US, and Environment Canada governs the development and sharing of these data.

The ArcView shape files contain the known terrestrial range of each species. Ranges may be depicted as polygons where a species is widespread, as points where there are isolated records, or both. 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 alphabetical order). For example, polygon files for the rodent *Perognathus flavescens* would be named pero_flav1_pl.xxx and *Perognathus flavus* would be named pero_flav2_pl.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 Bruce Patterson, Wes Sechrest, Marcelo Tognelli, Gerardo Ceballos, The Nature Conservancy – Migratory Bird Program, Conservation International – CABS, World Wildlife Fund – US, and Environment Canada – WILDSPACE."

Point Of Contact

4 Contact Person: Bruce E. Young

5 Contact Organization: NatureServe

6 Position: International Zoologist

7 Address: (NatureServe Headquarters) 1101 Wilson Blvd, 15th Floor, Arlington, VA, 22209, USA. (Young's office) Apartado 75-5655, Monteverde, Puntarenas, Costa Rica.

8 Contact Voice Telephone: (in Costa Rica) 506-645-6231

9 Contact Fax Number: (in Costa Rica) 506-645-6231

10 Contact Email Address: bruce_young@natureserve.org

11 Contact website: www.natureserve.org; www.infonatura.org

Citation

12 Citation:

Patterson, B. D., G. Ceballos, W. Sechrest, M. F. Tognelli, T. Brooks, L. Luna, P. Ortega, I. Salazar, and B. E. Young. 2003. Digital Distribution Maps of the Mammals of the Western Hemisphere, version 1.0. NatureServe, Arlington, Virginia, USA.

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." Some Middle American ranges and most South American ranges use a slightly different basemap, called "Lacpol", provided by the GIS lab of the 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. Both base maps are provided with the CD. A few maps use the "Cntry98" basemap that ESRI once provided with their software.

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 either by scanning source documents, georeferencing the resulting image, and digitizing over range boundaries on the screen; or by eye from the source maps occurring in field guides or species accounts (such as the Mammalian Species Account series). These maps were then reviewed and appropriate corrections made to the database. A list of the references cited in the database appears in the References Cited document on this CD. When more than one reference was used for a particular polygon or point, the references for the northern portions of the range precede references for the southern portion of the range.

Metadata Reference Information

21 Metadata Date: 15 May 2002

22 Creation Date: 25 May 2003

23 Most recent Update: 6 June 2003

24 Update Notes: First complete compilation of maps for all mammal species of the Western Hemisphere.