METADATA: Digital Distribution Maps of *The IUCN Red List of Threatened Species*™

Version 3

Identification Information

1. Abstract: This dataset contains distribution information of species assessed for *The IUCN Red List of Threatened Species*™. The maps are developed as part of a comprehensive assessment of global biodiversity in order to highlight taxa threatened with extinction, and thereby promote their conservation.

The *IUCN Red List of Threatened Species* contains assessments for more than 63,000 species about half of which have spatial data. Spatial data is available for most of the comprehensively assessed groups, including all amphibians, mammals, birds, reef-building corals, angelfish, butterflyfish, parrotfish, groupers, wrasses, sharks and their relatives, seagrasses, mangroves, and seasnakes. Spatial data is also available for a growing set of selected terrestrial and freshwater species including plants, fishes, reptiles and various invertebrate groups. Across all of these groups there are species listed as Data Deficient which are not mapped because their provenance is unknown. These spatial data are made freely available for non-commercial use to help inform conservation planning and other decision making processes. For more information about the assessment process, please see the IUCN Red List website (www.iucnredlist.org/).

The data are held in shapefiles, the Esri native format and contain the known range of each species. Ranges are depicted as polygons. Files are named using the scientific name (genus_species) of each species. DBF files accompanying each polygon contain taxonomic information, and contain information on 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 or any revenue generating activities. Please refer to the Terms and Conditions of Use at: http://www.iucnredlist.org/info/terms-of-use.

3. Credits: Users MUST provide the appropriate credit(s) for this spatial data if it is used in any product produced in any media.

For individual species maps, credit information is provided in the Citation field of the attribute data which accompanies each shapefile. This information should be used in conjunction with the credit information for the spatial data set as a whole using the following format:
<Citation field information>. In: IUCN 2012. *IUCN Red List of Threatened Species. Version 2012.1*. http://www.iucnredlist.org. Downloaded on <insert appropriate date>.

For example, if the spatial data for the Reticulate Collared Lizard (*Crotaphytus reticulatus*) was used in a field guide, the credit for the map would be as follows:
NatureServe and IUCN (International Union for Conservation of Nature) 2007. *Crotaphytus reticulatus*. In: IUCN 2012. *IUCN Red List of Threatened Species. Version 2012.1*. http://www.iucnredlist.org. Downloaded on 30 June 2012.

To provide credit to the dataset as a whole (or in general) or to substantial portions of the dataset the following citation should be used:

IUCN 2012. *IUCN Red List of Threatened Species. Version 2012.1*. http://www.iucnredlist.org.
Downloaded on <insert appropriate date>.

Contact Information:

4. Contact Organization: IUCN Red List Unit

5. Contact Email Address: RedListGIS@iucn.org

Spatial Reference Information

6. Projection: Unprojected (Geographic Coordinate system)

7. Projection Parameters: Units – decimal degrees

8. Datum: WGS_1984

9. Base Maps: Several public domain datasets are used for demarcating range boundaries:

i. Digital Chart of the World (1:1,000,000 scale) developed by the Defense Mapping Agency of the United States of America.

ii. ArcWorld, Esri Data and Maps 9.3, developed by Environmental Systems Research Institute (Esri).

iii. World Database on Protected Areas 2012, developed by the UNEP World Conservation Monitoring Centre, (UNEP-WCMC).

iv. ETOPO2 Global 2-Minute Gridded Elevation Data version 2001 developed by the National Oceanic and Atmospheric Administration, National Environmental Satellite, Data, and Information Service
National Geophysical Data Center.

v. HydroSHEDS, (**Hydro**logical data and maps based on **Sh**uttle **E**levation **D**erivatives at multiple **S**cales), developed by the by the Conservation Science Program of World Wildlife Fund (WWF).

Data Attributes

10. Number of fields in Attribute Table: 15 (16 for freshwater species)

11. Names of Attributes:

Field	ESRI Field Type	Description
ID_NO	Integer	Internal Record ID
BINOMIAL	String	Scientific name of the species
BASINID (for freshwater species only)	Integer	River Basin ID (Hydrosheds). (Note that this field is only included when species are mapped using the freshwater mapping protocol)
PRESENCE	ShortInt	Is/Was the species in this area, codes listed below
ORIGIN	ShortInt	Why/ How the species is in this area, codes listed below

SEASONAL	ShortInt	What is the seasonal presence of the species in the area, codes listed below
COMPILER	String	Name of the individual/s or institution responsible for generating the polygon, if not IUCN
YEAR	ShortInt	Year in which the polygon was mapped or compiled, or modified
CITATION	String	Individual/s or institution responsible for providing the data
SOURCE	String	Source of distribution range given
DIST_COMM	String	Distribution comments that refer directly to the polygon
ISLAND	String	Name of the island the polygon is on
SUBSPECIES	String	Epithet
SUBPOP	String	Epithet
TAX_COMM	String	Taxonomic comments that refer directly to the polygon. Includes notes on polygons pertaining to subspecies or subpopulations
LEGEND	String	Code containing the combinations of the presence, origin and seasonality fields determining how the map will be displayed on the IUCN Red List website

12. Coded domain values for Presence, Origin and Seasonality

i. Presence:

Code	Presence
1	Extant
2	Probably Extant
3	Possibly Extant
4	Possibly Extinct
5	Extinct (post 1500)
6	Presence Uncertain

Extant – The species is known or thought very likely to occur presently in the area, usually encompassing current or recent (post 1980) localities where suitable habitat at appropriate altitudes (or depths) remains.

Probably Extant – The species' presence is considered probable, either based on extrapolations of known records, or realistic inferences (e.g., based on distribution of suitable habitat at appropriate altitudes and proximity to areas where it is known or thought very likely to remain Extant). 'Probably Extant' ranges often extend beyond areas where the species is Extant, or may fall between them.

Possibly Extant – The species may possibly occur, and should be searched for, but there are *no known records* and less than probably occurrence. 'Possibly Extant' ranges often extend beyond areas where the species is Extant or Probably Extant, or may fall between them.

Possibly Extinct – The species was formerly known or thought very likely to occur in the area, but it is most likely now extirpated from the area because habitat loss/other threats are thought likely to have extirpated the species and/or owing to a lack of records in the last 30 years.

Extinct – The species was formerly known or thought very likely to occur in the area, but there have been no records in the last 30 years and it is almost certain that the species no longer occurs, and/or habitat loss/other threats have almost certainly extirpated the species.

Presence Uncertain – The species was formerly known or thought very likely to occur in the area but it is no longer known whether it still occurs (usually because there have been no recent surveys).

Notes:
a) These codes are mutually exclusive; a polygon coded as "Extant" cannot also be coded as "Extinct".
b) To obtain the total historical range of a species, one would sum polygons for Extant, Probably Extant, Possibly Extinct, Extinct and Presence Uncertain, but not Possibly Extant.

ii. Origin:

Code	Origin
1	Native
2	Reintroduced
3	Introduced
4	Vagrant
5	Origin Uncertain

Native – The species is/was native to the area.

Reintroduced - The species is/was reintroduced through either direct or indirect human activity.

Introduced – The species is/was introduced outside of its historical distribution range through either direct or indirect human activity.

Vagrant – The species is/was recorded once or sporadically, but it is known not to be Native to the area.

Origin Uncertain - The species' provenance in an area is not known (it may be Native, Reintroduced or Introduced).

Notes:
a) These codes are mutually exclusive; a polygon coded as "Native" cannot also be coded as "Introduced".

iii. Seasonality:

Code	Seasonality
1	Resident
2	Breeding Season
3	Non-breeding Season
4	Passage
5	Seasonal Occurrence Uncertain

Resident – the species is/was known or thought very likely to be resident throughout the year.

Breeding Season – The species is/was known or thought very likely to occur regularly during the breeding season and to breed.

Non-breeding Season – The species is/was known or thought very likely to occur regularly during the non-breeding season. In the Eurasian and North American contexts, this encompasses 'winter'.

Passage – The species is/was known or thought very likely to occur regularly during a relatively short period(s) of the year on migration between breeding and non-breeding ranges.

Seasonal Occurrence Uncertain – The species is/was present, but it is not known if it is present during part or all of the year.

Metadata Reference Information

13. Date Created:
Nov 2009 (Version 1)

14. Most recent Update:
June 2012 (Version 3)