

# Chioglossa lusitana

Taxonomic Authority: Bocage, 1864

Synonyms:

Region: 10

Common Names:

Golden-striped Salamander English  
Salamandra Rabilarga Spanish

Order: Caudata

Family: Salamandridae

Notes on taxonomy: Two genetically distinct forms are recognized, based on genetic data (Alexandrino et al. 2000, 2002), but these have yet to be formally to be described as subspecies.

## General Information

Biome  Terrestrial  Freshwater  Marine

### Geographic Range of species:

This species is restricted to mountainous and hilly areas in northwestern Spain (Galicia and Asturias) and northern and central Portugal with an annual precipitation of over 1,000mm. Its distribution is patchy because its required habitat is fragmented. It has been introduced to the Serra de Sintra, Portugal. It has an altitudinal distribution 100 - 1,000m (records above 1,000m asl require confirmation).

### Habitat and Ecology Information:

The species is associated with clear, well-oxygenated, small to medium sized slightly acidic streams (although in Portugal it has been found in water with pH 7 to 8), with dense surrounding vegetation in mountainous and hilly areas. The species has also been recorded from caves and abandoned flooded mines. It is associated with broad-leaved oak forest, and is secondary vegetation, but not in commercial plantations. The females lay approximately 12 to 20 eggs in shallow stream water, often attaching the eggs to the bottom substrate. It is often associated with areas of traditional farming practices, and is particularly found in dry stone walls. Some populations in northwestern Spain have disappeared to replacement of broad-leaved forest with other habitats.

### Conservation Measures:

It is protected by national legislation in both Portugal and Spain. It occurs in several protected areas including Picos de Europa National Park, Spain and Peneda-Gerês National Park, Portugal. It is listed on Appendix II of the Berne Convention, and is also listed on Annexes II and IV of the EU Natural Habitats Directive.

### Threats:

The major threats to the species are pollution of streams with agrochemicals, canalisation and water extraction from streams for agricultural purposes, and the loss of terrestrial habitats associated with the streams through conversion to forestry plantations (Eucalyptus and Pinus plantations). In Portugal habitat is at risk from fire.

### Species population information:

This is a localised species that may be abundant in suitable habitats (4 to 5 adults per metre of brook habitat). Eastern Spanish populations are found at lower population densities, and there have been reports of declines and extinctions of some populations in Galicia. In Portugal populations are widespread and abundant (P. Arntzen, pers. comm.) and not in any immediate danger, but they are considered to be vulnerable because of their specialised habitat requirements (Paulo, 1997).

## Country Distribution

	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Portugal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spain	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## FAO Marine Habitats

Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced
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## Major Lakes

## Major Rivers

## Upper Level Habitat Preferences

	Score
1.4 Forest - Temperate	1
5.1 Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	1
5.18 Wetlands (inland) - Karst and Other Subterranean Hydrological Systems (inland)	1
7.1 Caves and Subterranean Habitats (non-aquatic) - Caves	1
7.2 Caves and Subterranean Habitats (non-aquatic) - Other Subterranean Habitats	1

## Lower Level Habitat Preferences

	Score
Broadleaf Forest	1
Conifer Boreal Forest	9
Conifer Forest	9
Coniferous Forest	9
Cool Broadleaf Forest	2
Cool Conifer Forest	9
Cool Mixed Forest	9
Cool Southern Hemisphere Mixed Forest	9
Deciduous Broadleaf Wood	9

Evergreen Broadleaf Forests	9
Mixed Forest	2
Moist Eucalyptus	9
Montane Tropical Forest	9
Rain Green Tropical Forest	9
Urban	9

### Major threats

Code	Description of threat	Past	Present	Future
1	Habitat Loss/Degradation (human induced)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.3	Extraction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.3.6	Groundwater extraction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.3.7	Other	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.7	Fires	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	Pollution (affecting habitat and/or species)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3	Water pollution	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.1	Agriculture	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### Conservation Measures

Code	Conservation measures	In place	Needed
1	Policy-based actions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.2	Legislation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.2.1	Development	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.2.1.1	International level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.2.1.2	National level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.2.2	Implementation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.2.2.1	International level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.2.2.2	National level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Research actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.2	Population numbers and range	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.3	Biology and Ecology	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.5	Threats	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.8	Conservation measures	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.9	Trends/Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Habitat and site-based actions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4.1	Maintenance/Conservation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4.4	Protected areas	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4.4.1	Identification of new protected areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.4.2	Establishment	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.4.3	Management	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### Utilisation of Species

Purpose/Type of Use	Subsistence	National	International	Other purpose:	
Primary forms removed from the wild	100%	>75%	51-75%	26-50% <25%	<i>Other forms removed from the wild:</i>
Source of specimens in commercial trade	100%	>75%	51-75%	26-50% <25%	<i>Other source of specimens:</i>
Trend in wild offtake/harvest in relation to total wild population numbers over last five years:					
Trend in offtake/harvest produced through domestication/cultivation over last five years:					
CITES: Not listed					

### Red Listing

Red List Assessment: Vulnerable (VU)  Possibly Extinct

Red List Criteria: B2ab(ii,iii,iv)

Rationale for the Red List Assessment: Listed as Vulnerable because its Area of Occupancy is probably less than 2,000 km<sup>2</sup>, its distribution is severely fragmented, and there is continuing decline in its Area of Occupancy, in the extent and quality of its habitat, and in the number of locations in Portugal and Spain.

Current Population Trend: Decreasing

Date of Assessment: 12/17/2004

Assessor(s): Jan Willem Arntzen, Jaime Bosch, Mathieu Denoël, Miguel Tejedo, Paul Edgar, Miguel Lizana, Iñigo Martínez-Solano, Alfredo Sa

Notes on Red listing:

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