

Podarcis carbonelli

Taxonomic Authority: Pérez Mellado, 1981

Synonyms:

Order: Sauria

Notes on taxonomy: This taxon was formerly a subspecies of Podarcis bocagei, but was raised to species rank (Sá-Sousa 2000a, Sá-Sousa and Harris 2002) based on genetic differences (see also: Harris et al. 2002; Harris and Sá-Sousa 2001, 2002; Pinho et al. 2003).

Region: 1

Common Names:

Lagartixa de Carbonell Portuguese

Family: Lacertidae

General Information

Biome Terrestrial Freshwater Marine

Geographic Range of species:

This species occurs only in highly fragmented populations in western and central Portugal, occurring more contiguously in Aveiro in central Portugal. In western Portugal it occurs down to sea-level in many fragmented sites, while in central Portugal it occurs in hilly sites above 500m. In Spain it is known from two areas in on the northern slopes of the central mountain system at 500-1,200m. It also occurs at Coto Donana in southwestern Spain at sea-level, and on the Berlenga Islands in Portugal (as a separate subspecies, P.c. berlengensis).

Conservation Measures:

Many of the southern populations are protected (including in the Coto Donana National Park). In central Portugal and Spain, some populations are in natural parks.

Species population information:

It can be common in suitable habitat. The southern populations are generally very small, but can be abundant in tiny areas. However, many populations are probably in decline, especially in the south of its range.

Habitat and Ecology Information:

In Spain and central Portugal it occurs in oak forest. At sea-level it lives only in sand dunes. It lays one to three egg clutches a year, with one to five eggs in each.

Threats:

The southern populations are almost certainly at risk from climate change. Loss of habitat due to touristic developments in the south, and wood plantations (pine) in central Portugal are also serious threats.

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 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
--	-----------------------------	----------------------------	---------	--------------	------------

Major Lakes

Major Rivers

Upper Level Habitat Preferences

	Score
1.4 Forest - Temperate	1
10.2 Coastline - Sand, Shingle or Pebble Shores (incl. sand bars, spits, sandy islets, dune systems)	1

Lower Level Habitat Preferences

Score

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"/>
1.1	Agriculture	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.1.2	Wood plantations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.1.2.2	Large-scale	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.4	Infrastructure development	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.4.3	Tourism/recreation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	Pollution (affecting habitat and/or species)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.1	Atmospheric pollution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.1.1	Global warming/oceanic warming	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Conservation Measures

Code	Conservation measures	In place	Needed
1	Policy-based actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.1	Management plans	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.1.1	Development	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.1.2	Implementation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2	Legislation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2.1	Development	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2.1.2	National level	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2.1.3	Sub-national level	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2.2	Implementation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2.2.2	National level	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.2.2.3	Sub-national level	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2	Communication and Education	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.2	Awareness	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Research actions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.1	Taxonomy	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.2	Population numbers and range	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.3	Biology and Ecology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.4	Habitat status	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.5	Threats	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.9	Trends/Monitoring	<input checked="" 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 checked="" 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:

Red Listing

Red List Assessment: Endangered (EN) Possibly Extinct

Red List Criteria: B1ab(i,ii,iii,iv,v)

Rationale for the Red List Assessment: Listed as Endangered, because its Extent of Occurrence is less than 5,000 km², its distribution is severely fragmented, and there is continuing decline in its Extent of Occurrence, in its Area of Occupancy, in the extent and quality of its habitat, in the number of locations, and in the number of mature individuals.

Current Population Trend: Decreasing

Date of Assessment: 12/17/2004

Assessor(s): Paulo Sá-Sousa, Valentin Pérez-Mellado

Notes on Red listing:

Bibliography

- Sá-Sousa, P., 2000, Distribución de la lagartija Podarcis carbonelli (Pérez-Mellado, 1981) en Portugal., Boletín de la Asociación herpetológica española, , , 11:, 12-16, ,
- Sá-Sousa, P. and Harris, D.J., 2002, Podarcis carbonelli Perez-Mellado, 1981 is a distinct species., Amphibia-Reptilia, , , 23:, 459-468, ,
- Harris, D.J., Carranza, S., Arnold, E.N., Pinho, C. and Ferrand, N., 2002, Complex biogeographical distribution of genetic variation within Podarcis wall lizards across the Strait of Gibraltar., Journal of Biogeography, , , 29:, 1257-1262., ,
- Harris, D.J. and Sá-Sousa, P., 2001, Species distinction and relationships of the western Iberian Podarcis lizards (Reptilia, Lacertidae) based on morphology and mitochondrial DNA sequences., Herpetological Journal, , , 11:, 129-136, ,
- Harris, D.J. and Sá-Sousa, P., 2002, Molecular phylogenetics of Iberian wall lizards (Podarcis): is Podarcis hispanica a species complex?, Molecular Phylogenetics and Evolution, , , 23:, 75-81, ,
- Pinho, C., Harris, D.J. and Ferrand, N., 2003, Genetic polymorphism of 11 allozyme loci in populations of wall lizards (Podarcis sp.) from the Iberian peninsula and North Africa., Biochemical Genetics, , , 41:, 343-359, ,
- Malkmus, R., 2004, , Amphibians and reptiles of Portugal, Madeira and the Azores-archipelago., , , A.R.G. Gantner Verlag K.G., Ruggell (Germany)
- Pérez-Mellado, V., 1981, La lagartija de Bocage, Podarcis bocagei (Seoane,1884): primeros datos sobre su distribución, colorido y ecología., Amphibia-Reptilia, , , 1, 253-268., ,
- Pérez-Mellado, V., 1981, Nuevos datos sobre la sistemática y distribución de Podarcis bocagei (Seoane,1884) (Sauria, Lacertidae) en la Península Ibérica., Amphibia-Reptilia, , , 2, 259-265., ,
- Pérez-Mellado, V., 1986, Podarcis bocagei - Nordwestsibirische Mauereidechse., , Handbuch der Reptilien und Amphibien Europas, Band 2/II., Echsen III (Podarcis)., Böhme, W., , pp. 15-24, Aula-Verlag, Wiesbaden
- Andreu, A., Bea, A., Braña, F., Galán, P., López-Jurado, L.F., Pérez-Mellado, V., Pleguezuelos, J.M. and Salvador, A., 1998, Reptiles., Fauna Ibérica, , , 10, 1-705, Museo Nacional de Ciencias Naturales. CSIC., Madrid