

Iberolacerta bonnali

Taxonomic Authority: (Lantz, 1927)

Synonyms:

Region: 1

Common Names:

Pyrenean Rock Lizard English
Lagartija Pirenaica Spanish

Order: Sauria

Family: Lacertidae

Notes on taxonomy: This species was formerly included in the genus Lacerta, but is now included in Iberolacerta, following Carranza et al. (2004), and based on evidence from Arribas (1998, 1999), Carranza et al. (2004), Harris et al. (1998) and Mayer and Arribas (2003).

General Information

Biome Terrestrial Freshwater Marine

Geographic Range of species:

This species is present in the central Pyrenees Mountains of France and Spain. It ranges from 1,580 to 3,060 m asl.

Habitat and Ecology Information:

This species is found in subalpine and alpine habitats and is most commonly found in rocky slopes, outcrops and similar areas, sometimes close to alpine meadows. It is an egg-laying species.

Conservation Measures:

This species is listed on Appendix III of the Bern Convention. In Spain it is present in the National Parks of Ordesa-Monte Perdido and Aigüestortes-Estany de Sant Maurici, the Biosphere Reserve of Ordesa-Viñamala), the Natural Park of Posets-Maladeta and a number of other protected areas.

Threats:

This species is possibly threatened by overgrazing of habitat by cattle, and is inferred to be threatened by future habitat loss through the development of ski resorts, lodges and hotels, the construction of roads and tracks, and the use of all terrain vehicles. It is additionally threatened by the possible development of hydroelectric projects and mining. It is also possible that this species will be significantly impacted by climate change.

Species population information:

It may be locally common in suitable habitat, being more abundant in subalpine habitats. The populations are fragmented by unsuitable habitat, but are probably stable.

Country Distribution

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

Major Lakes

Major Rivers

Upper Level Habitat Preferences

	Score
4.4 Grassland - Temperate	1
6 Rocky areas (eg. inland cliffs, mountain peaks)	1
11.3 Artificial/Terrestrial - Plantations	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"/>
1.1.4	Livestock	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.1.4.2	Small-holder	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.3	Extraction	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.3.1	Mining	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.4	Infrastructure development	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.4.3	Tourism/recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.4.4	Transport - land/air	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.4.6	Dams	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Pollution (affecting habitat and/or species)	<input type="checkbox"/>	<input 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"/>
1.2.2	Implementation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.2.2.1	International 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"/>
3.4	Habitat status	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.5	Threats	<input type="checkbox"/>	<input checked="" type="checkbox"/>

6.1	Atmospheric pollution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3.8	Conservation measures	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.1.1	Global warming/oceanic warming	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3.9	Trends/Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Intrinsic factors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4	Habitat and site-based actions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9.1	Limited dispersal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4.1	Maintenance/Conservation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9.9	Restricted range	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4.4	Protected areas	<input checked="" 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:	
14. Research		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Primary forms removed from the wild	100%	>75%	51-75%	26-50%	<25%	Other forms removed from the wild:
1. Whole animal/plant	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Source of specimens in commercial trade	100%	>75%	51-75%	26-50%	<25%	Other source of specimens:
Wild	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Trend in wild offtake/harvest in relation to total wild population numbers over last five years:	Unknown					
Trend in offtake/harvest produced through domestication/cultivation over last five years:						
CITES:	Not listed					

Red Listing

Red List Assessment: Near Threatened (NT) Possibly Extinct

Red List Criteria:

Rationale for the Red List Assessment: Listed as Near Threatened since although its Area of Occupancy is less than 2,000 km², thus making the species close to qualifying for Vulnerable, its population is probably stable.

Current Population Trend: Stable

Date of Assessment: 12/17/2004

Assessor(s): Valentin Pérez-Mellado, Marc Cheylan

Notes on Red listing:

Bibliography

- Arnold, E.N., 2003, , Reptiles and amphibians of Europe., , 288 pp., Princeton University Press., Princeton and Oxford.
- Pleguezuelos, J.M., Márquez, R. and Lizana, M., 2002, , Atlas y Libro Rojo de los Anfibios y Reptiles de España., , pp. 584, Dirección General de la Conservación de la naturaleza-Asociación Herpetológica Española., Madrid.
- Arribas, O.J., 1993, Intraspecific variability of *Lacerta* (*Archaeolacerta*) *bonnali* Lantz, 1927 (Squamata: Sauria: Lacertidae)., *Herpetozoa*, , 6(3/4), 129-140, ,
- Arribas, O.J., 1993, Estatus específico para *Lacerta* (*Archaeolacerta*) *monticola bonnali* Lantz, 1927 (Reptilia, Lacertidae)., *Bol. R. Soc. Esp. Hist. Nat. (Sec. Biol.)*, , , 90(1-4), 101-112, ,
- Arribas, O.J., 1997, Morfología, filogenia y bibliografía de las lagartijas de alta montaña de los Pirineos (*Microforma*)., , Tesis doctoral., , 353 pp, Publicaciones de la Universitat Autònoma de Barcelona., Barcelona
- Arribas, O.J., 1999, Phylogeny and relationships of the mountain lizards of Europe and Near East (*Archaeolacerta* Mertens, 1921, sensu lato) and their relationships among the eurasian lacertid radiation., *Russ. J. Herpetol.*, , , 6(1), 1-22, ,
- Arribas, O.J., 2000, Taxonomic revision of the Iberian 'Archaeolacertae' III: Diagnosis, morphology, and geographic variation of *Iberolacerta bonnali* (Lantz, 1927) (Squamata: Sauria: Lacertidae)., *Herpetozoa*, , , 13(3/4), 99-131, ,
- Crochet, P.-A., Chaline, O., Surget-Groba, Y., Debain, C. and Cheylan, M., 2004, Speciation in mountains: phylogeography and phylogeny of the rock lizards genus *Iberolacerta* (Reptilia: Lacertidae)., *Molecular Phylogenetics and Evolution*, , , 30(3):, 860-866, ,
- Mayer, W. and Arribas, O.J., 1996, Allozyme differentiation and relationship among the Iberian-Pyrenean Mountain Lizards (Squamata: Sauria: Lacertidae)., *Herpetozoa*, , , 9(1/2):, 57-61, ,
- Odierna, G., Aprea, G., Arribas, O., Capriglione, T., Caputo, V. and Olmo, E., 1996, The karyology of the Iberian rock lizards., *Herpetologica*, , , 52(4), 542-550, ,
- Palanca, A., Rey, J., Riobó, A. and Vences, M., 1997, Parapatry of two lizard species (*Podarcis muralis*, *Lacerta bonnali*) at Circo de Piedrafita (Alto Aragón, Pyrenees, Spain)., *Zeitschrift für Feldherpetologie*, , , 4, 208-210, ,
- Vences, M., Rey, J., Puente, M., Miramontes, C. and Dominguez, M., 1998, High altitude record of the Pyrenean lizard, *Lacerta bonnali*., *Zeitschrift für Feldherpetologie*, , , 5, 249-251, ,
- Carranza, S., Arnold, E.N. and Amat, F., 2004, DNA phylogeny of *Lacerta* (*Iberolacerta*) and other lacertine lizards (Reptilia: Lacertidae): did competition cause long-term mountain restriction?, *Systematics and Biodiversity*, , , 2:, 57-77, ,
- Arribas, O.J., 1998, Osteology of the Pyrenean mountain lizards and comparison with other species of the collective genus *Archaeolacerta* Mertens, 1921 s.l. from Europe and Asia Minor., *Herpetozoa*, , , 11, 155-180., ,
- Harris, D.J., Arnold, E.N. and Thomas, R.H., 1998, Relationships of lacertid lizards (Reptilia: Lacertidae) estimated from mitochondrial DNA sequences and morphology., *Proc. Roy. Soc. London Ser. B*, , , 265, 1939-1948, ,
- Mayer, W. and Arribas, O.J., 2003, Phylogenetic relationships of the European lacertid genera *Archaeolacerta* and *Iberolacerta* and their relationships to some other 'Archaeolacertae' (sensu lato) from Near East, derived from mitochondrial DNA sequences., *Journal of zoological Systematics and evolutionary Research*, , , 41:, 157-161, ,
- Pérez-Mellado, V., Barbadillo, L. J., Barahona, F., Brown, R.P., Corti, C., Guerrero, F. and Lanza, B., 1993, A systematic survey of the Iberian rock lizard *Lacerta monticola* Boulenger, 1905., , Lacertids of the Mediterranean region., Valakos, E. D., Böhme, W., Pérez-Mellado, V. and Maragou, P., , 85-105, Hellenic Zoological Society, Athens
- 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