

Pleurodeles waltl

Taxonomic Authority: Michahelles, 1830

Synonyms:

Order: Caudata

Notes on taxonomy:

Region: 10

Common Names:

Gallipato	Spanish
Pleurodèles de Waltl	French
Sharp-ribbed Salamander	English
Spanischer Rippenmolch	German
Spanish Ribbed Newt	English
Triton d'Espagne	French
Triton de Waltl	French

Family: Salamandridae

General Information

Biome

Terrestrial

Freshwater

Marine

Geographic Range of species:

This species is distributed in central and southern Iberia, and in the coastal plain of northern Morocco. The populations of this species in Iberia and North Africa are very fragmented (there is a small Area Of Occupancy within the wide Extent Of Occurrence). The southernmost populations in Morocco might be extinct (T. Slimani and El Hassan El Mouden, pers. comm.). It is essentially a lowland species becoming rare above 900m asl, although it may be found at 1565m asl in the Sierra de Loja, Granada, Spain.

Conservation Measures:

There is a need to monitor vulnerable populations in northern and eastern Spain and Portugal. It is listed on Appendix III of the Berne Convention and is protected by national legislation in Spain. The species occurs in a number of protected areas in Iberia. Captive breeding of the species and habitat restoration projects are in place in parts of Spain.

Habitat and Ecology Information:

This is a highly aquatic species of Mediterranean type habitats including scrub, open wood and cultivated land. It is generally found in ponds, dayas, wadis, lakes, ditches and slow-moving streams (often temporary in nature) with plenty of vegetation cover. The adults are mostly found under stones or in mud in their aquatic habitats, or sheltering under cover on land if the wetland dries up. The female deposits around 1,500 to 800 eggs on plants and stones in ponds. This species may be present in slightly modified aquatic and terrestrial habitats.

Threats:

The species is generally threatened through loss of aquatic habitats through drainage, agrochemical pollution, the impacts of livestock (in North African dayas), eutrophication, domestic and industrial contamination and infrastructure development. The species has largely disappeared from coastal areas in Iberia and Morocco close to concentrations of tourism and highly populated areas (e.g., Madrid). Introduced fishes and crayfish (*Procambarus clarkii*) are known to prey on the eggs and larva of this species, and are implicated in its decline. Mortality on roads (road kill) has been reported to be a serious threat to some populations.

Species population information:

It is not abundant over most of its distribution, with populations being more scattered and fragmented in the east and north of the Iberian Peninsula. It is common in the northern part of Morocco. Some population declines in this species have been observed, most especially in eastern Spain. It appears to be in decline in Morocco, and the southernmost populations are probably extinct.

Country Distribution	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Gibraltar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Morocco	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	Lower Level Habitat Preferences	Score
3.8 Shrubland - Mediterranean-type Shrubby Vegetation	1	Marsh Wetland	9
5.1 Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	1	Mire, Bog, Fen	9

5.2 Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	1
5.5 Wetlands (inland) - Permanent Freshwater Lakes (over 8ha)	1
5.6 Wetlands (inland) - Seasonal/Intermittent Freshwater Lakes (over 8ha)	1
5.7 Wetlands (inland) - Permanent Freshwater Marshes/Pools (under 8ha)	1
5.8 Wetlands (inland) - Seasonal/Intermittent Freshwater Marshes/Pools (under 8ha)	1
11.2 Artificial/Terrestrial - Pastureland	1
12.2 Artificial/Aquatic - Ponds (below 8ha)	1

Major threats

Code	Description of threat	Past	Present	Future	Conservation Measures		In place	Needed
					Code	Conservation measures		
1	Habitat Loss/Degradation (human induced)	✓	✓	✓	1	Policy-based actions	✓	□
1.1	Agriculture	✓	✓	✓	1.2	Legislation	✓	□
1.1.1	Crops	✓	✓	✓	1.2.1	Development	✓	□
1.1.1.3	Agro-industry farming	✓	✓	✓	1.2.1.1	International level	✓	□
1.1.4	Livestock	✓	✓	✓	1.2.1.2	National level	✓	□
1.1.4.3	Agro-industry	✓	✓	✓	1.2.2	Implementation	✓	□
1.4	Infrastructure development	□	✓	✓	1.2.2.1	International level	✓	□
1.4.1	Industry	□	✓	✓	1.2.2.2	National level	✓	□
1.4.2	Human settlement	□	✓	✓	3	Research actions	□	✓
2	Invasive alien species (directly affecting the species)	✓	✓	✓	3.2	Population numbers and range	□	✓
2.2	Predators	✓	✓	✓	3.4	Habitat status	□	✓
4	Accidental mortality	✓	✓	✓	3.5	Threats	□	✓
4.2	Collision	✓	✓	✓	3.8	Conservation measures	□	✓
4.2.2	Vehicle collision	✓	✓	✓	3.9	Trends/Monitoring	□	✓
6	Pollution (affecting habitat and/or species)	✓	✓	✓	4	Habitat and site-based actions	✓	✓
6.3	Water pollution	✓	✓	✓	4.1	Maintenance/Conservation	✓	✓
6.3.1	Agriculture	✓	✓	✓	4.4	Protected areas	✓	✓
6.3.2	Domestic	✓	✓	✓	4.4.1	Identification of new protected areas	□	✓
6.3.3	Commercial/Industrial	✓	✓	✓	4.4.2	Establishment	✓	□
6.3.4	Other non-agricultural	✓	✓	✓	4.4.3	Management	✓	✓

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% Other forms removed from the wild:
Source of specimens in commercial trade	100%	>75%	51-75%	26-50% <25% Other source of specimens:

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: Near Threatened (NT) Possibly Extinct

Red List Criteria:

Rationale for the Red List Assessment: Listed as Near Threatened because this species is probably in significant decline (but probably at a rate of less than 30% over ten years) because of widespread habitat loss through much of its range, and the effects of invasive species, thus making the species close to qualifying for Vulnerable.

Current Population Trend: Decreasing

Date of Assessment: 12/17/2004

Assessor(s): Pedro Beja, Jaime Bosch, Miguel Tejedo, Paul Edgar, David Donaire-Barroso, Miguel Lizana, Iñigo Martínez-Solano, Alfredo Sal
Notes on Red listing:

Bibliography

- Alberch, P. and González, D., 1973, Notas sobre distribución, biotopo, morfología y biometría del Pleurodeles waltli Michahelles en el NE. De la península ibérica. (Amphibia, Salamandridae), Misc. Zool., , 3, 71-82, ,
 Arnold, E.N., 2003, , Reptiles and amphibians of Europe, , 288, Princeton University Press,
 Ferrand de Almeida, N., Ferrand de Almeida, P., Gonçalves, H., Sequeira, F., Teixeira, J. and Ferrand de Almeida, F., 2001, , Guia FAPAS Anfibios e Répteis de Portugal, , , FAPAS-Câmara Municipal de Porto, Porto
 Alvarez, A. and Martin, L., 2000, Fish elimination by Pond Drainage to Preserve a Toad Population in Spain, FrogLog, , 41, ,

- Malkmus, R., 1999, Zur Verbreitung von *Pleurodeles waltl* in Nord-Portugal [On the distribution of *Pleurodeles waltl* in northern Portugal], Zeitschrift für Feldherpetologie, , , 6, 226-229, ,
- Martínez-Solano, I. and Bosch, J., 2001, Peligro para los anfibios de las canteras madrileñas de Alpedrete, *Quercus*, , , 188, 54-55, ,
- Salvador, A., 1996, Amphibians of northwest Africa, Smithsonian Herpetological Information Service, , , 109, 1-43, ,
- Thorn, R., 1968, Les Salamandres d'Europe, d'Asia, et d'Afrique du Nord, , , , 376 pp, Éditions Paul Lechevalier, Paris
- Bons, J. and Geniez, P., 1996, , , Amphibiens et reptiles du Maroc (Sahara Occidental compris) Atlas Biogéographique, , , 319 pp, Asociación Herpetológica Española, Barcelona, Spain
- Mateo, J.A., Pleguezuelos, J.M., Fahd, S., Geniez, P. and Martínez-Medina, F.J., 2003, , , Los Anfibios, los Reptiles y el Estrecho de Gibraltar. Un ensayo sobre la Herpetofauna de Ceuta y su entorno., , , 388 pp, Instituto de Estudios Ceuties, Ceuta
- Godinho, R., Teixeira, J., Rebelo, R., Segurado, P., Loureiro, A., Álvares, F., Gomes, N., Cardoso, P., Camilo-Alves, C. and Brito, J.C., 1999, Atlas of the continental Portuguese herpetofauna: an assemblage of published and new data, *Revista Española de Herpetología*, , , 13, 61-81, , 1997, , , *Atlas of Amphibians and Reptiles in Europe*, Gasc, J.-P., , 494, Societas Europea Herpetologica & Museum National d'Histoire Naturelle, Paris
- Reques, R., 2000, , , Anfibios. Ecología y Conservación, , , Diputación de Córdoba, Córdoba
- 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-Associación Herpetológica Española, Madrid
- Díaz-Paniagua, C., 1992, Variability in timing of larval season in an amphibian community in SW Spain, *Ecography*, , , 15, 267-272, ,
- Díaz-Paniagua, C., 1990, Temporary ponds as breeding sites of amphibians at a locality in southwestern Spain, *Herpetological Journal*, , , 1, 447-453, ,
- Mellado, J. and Mateo, J.A., 1992, New records of Moroccan Herpetofauna, *Herpetological Journal*, , , 2(2), 58-61, ,
- Salvador, A., 2002, Gallipato - *Pleurodeles waltl*, , Enciclopedia Virtual de los Vertebrados Españoles. <http://www.vertebradosibericos.org/>, Carrascal, L.M. and Salvador, A., , , Museo Nacional de Ciencias Naturales, Madrid
- Pleguezuelos, J.M., 1997, , , Distribucion y Biogeografia de los Anfibios y Reptiles en España y Portugal, , , , Asociacion Herpetologica Española, Las Palmas de Gran Canarias
- Hernández, A., Herrero, B., Parra, J.J., Sáez, F.J., Santiago, M.N., Valladares, L.F. and Zaldívar, M.P., 2000, *Pleurodeles waltl* (Gallipato) y *Triturus helveticus* (Tritón Palmeado), Nuevos datos sobre la distribución en la Provincia de Palencia, *Boletín de la Asociación Herpetológica Española*, , , 11(1), 23, ,
- González de la Vega, J.P., 1998, , , Anfibios y Reptiles de la Provincia de Huelva, , , 238pp., Ed. Ertisa, Huelva
- Griffiths, R.A., 1996, , , *Newts and Salamanders of Europe*, , , 188 pp, Poyser Natural History, London
- García-Cardenete, L., González de la Vega, J.P., Barnestein, J.A.M. and Pérez-Contreras, J., 2003, Consideraciones sobre los límites de distribución en altitud de anfibios y reptiles en la Cordillera Bética (España), y registros máximos para cada especie, *Acta Granatense*, , , 2(3-4), , ,
- García-París, M., 1985, , , Los Anfibios de España, , , Ministerio de Agricultura, Pesca y Alimentacion, Madrid
- Pasteur, G. and Bons, J., 1959, Les Batraciens du Maroc, *Trav. Inst. Scient. Chérifien*, Rabat, Ser. Zool., , , 17(14), 1-241, ,
- Böhme, W., Grossenbacher, K. and Thiesmeier, B., 1999, , *Handbuch der Reptilien und Amphibien Europas*, band 4/I:Schwanzlurche (Urodela)., , , , Aula-Verlag, Wiesbaden, Germany.
- Malkmus, R., 2004, , , *Amphibians and reptiles of Portugal, Madeira and the Azores-Archipelago*, , , 448p, A.R.G. Gantner Verlag K.G., Ruggel (Germany)