

Pelobates varaldii

Taxonomic Authority: Pasteur and Bons, 1959

Synonyms:

Region: 10

Common Names:

Pélobate de Varaldi French
Pélobate Marocain French
Varaldi's Spadefoot Toad English

Order: Anura

Family: Pelobatidae

Notes on taxonomy:

General Information

Biome Terrestrial Freshwater Marine

Geographic Range of species:

This species is known only from fragmented localised areas on the coastal plains of northwestern Morocco. The northernmost location is the town of Larache, while the southernmost population is known from the northeastern part of the salt marshes of Oualida. The species may range further south than Oualidia, and this possible range extension requires further investigation. Yus Ramos and Cabo Hernandez (1986) mentioned the presence of *Pelobates cultripes* in the Melilla region (Spain), might refer to *Pelobates varaldii*, though this record is far outside the known range of any *Pelobates* species. This species is not found above 350m asl.

Habitat and Ecology Information:

The species is generally fossorial in habitat, occupying lowland sandy uncultivated soils, sometimes in the vicinity of cork woodlands. The species spawning sites are most often still temporary waterbodies (such as dayas and rain puddles). The species does not occur in anthropogenically-modified habitats.

Conservation Measures:

It is not known whether the species occurs in any protected areas. The species is not protected by national legislation.

Threats:

The species is severely threatened by intensification of livestock pasturing, including the pollution of stagnant waters with livestock droppings (Schleich et al., 1996). Additionally, arable agriculture may be leading to the loss or disturbance of the sandy substrate soil habitat, which the species is strongly associated with. Populations of the species are now often restricted to temporary ponds, and those remaining in permanent waterbodies are being eliminated through the presence of predatory fishes (*Gambusia holbrooki*).

Species population information:

The species is declining; further details of abundance are needed.

Country Distribution

	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Morocco	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spain	<input type="checkbox"/>	<input checked="" 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	<u>Lower Level Habitat Preferences</u>	Score
3.5 Shrubland - Subtropical/Tropical Dry	1	Cool Grasses and Shrubs	1
5.1 Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	1	Dry Woody Scrub	1
5.2 Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	1	Hot and Mild Grasses and Shrubs	1
5.7 Wetlands (inland) - Permanent Freshwater Marshes/Pools (under 8ha)	1	Mediterranean Scrub	1
5.8 Wetlands (inland) - Seasonal/Intermittent Freshwater Marshes/Pools (under 8ha)	1	Shrub Evergreen	1
		Succulent and Thorn Scrub	1

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"/>

Conservation Measures

Code	Conservation measures	In place	Needed
2	Communication and Education	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.2	Awareness	<input type="checkbox"/>	<input checked="" type="checkbox"/>

1.1.1	Crops	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	Research actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.1.1.2	Small-holder farming	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.2	Population numbers and range	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.1.4	Livestock	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.3	Biology and Ecology	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1.1.4.3	Agro-industry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.4	Habitat status	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Invasive alien species (directly affecting the species)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.5	Threats	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.2	Predators	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.8	Conservation measures	<input 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"/>	4	Habitat and site-based actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.3	Water pollution	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4.1	Maintenance/Conservation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.1	Agriculture	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4.4	Protected areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Unknown	<input checked="" type="checkbox"/>	<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 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: Endangered (EN) Possibly Extinct

Red List Criteria: B2ab(iii)

Rationale for the Red List Assessment: Listed as Endangered because its Area of Occupancy is probably less than 500km², its distribution is severely fragmented, and there is a continuing decline in the extent and quality of its habitat in Morocco.

Current Population Trend: Decreasing

Date of Assessment: 12/17/2004

Assessor(s): Alfredo Salvador, David Donaire-Barroso, Slimani Tahar, El Hassan El Mouden, Philippe Geniez

Notes on Red listing:

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