Bombina bombina

Taxonomic Authority: (Linnaeus, 1761) Synonyms:

Order: Anura Notes on taxonomy:

General Information

Biome

Geographic Range of species:

This species is found in central and eastern Europe ranging from Denmark, southern Sweden and northern Germany eastwards to the Ural Mountains of Russia, southwards to the Danube floodplain, Turkey (Thrace and the vicinity of Adapazari [B.b. arifiyensis] in northwestern Anatolia), and the northern slopes of the Caucasus Mountains. It has been introduced to the United Kingdom (one colony in Surrey). It is a lowland species that occurs from sea level up to a maximum of 730m asl (in western Bohemia).

Terrestrial

Conservation Measures:

This species is listed on Appendix II of the Berne Convention and on Annexes II and IV of the EU Natural Habitats Directive. It is protected by national legislation in many countries, occurs in many protected areas, and is listed in many national and sub-national Red Data books and lists. This species has been reintroduced to some sites in Sweden (Arnold, 2002), and in parts of this species range, mitigation measures to reduce road kill have been established.

Species population information:

This species remains fairly abundant over much of its range (for example it is extremely common along the Danube floodplain and parts of the delta where it has benefited from increased irrigation), although many northern populations have declined (e.g., in Poland). The populations of this species in both Denmark and Sweden are low. Individual populations of this species may show significant fluctuations in numbers. There are no recent records from Greece, but its range in this country has not been surveyed for many years.

Region: 10

Freshwater

Common Names:

Fire-Bellied Toad Krasnobrykhaya Zherlyanka Kumak Nizinny Ululone dal Ventre Giallo Bombinatoridae Family:

English Russian Polish Italian

Marine

Habitat and Ecology Information:

Within Europe this species is associated with lowland areas of marshy or grassy wetlands, often along river valleys, with small, shallow, oftentemporary lakes and ponds. In the former Societ Union it has been reported from steppe, forest steppe, broad-leaved and mixed leafed coniferous forests, but it also inhabits open landscapes, using drainage channels as pathways for dispersal. At the southeastern margin of its distribution, the species lives in permanent freshwaterbodies in river valleys surrounded by an arid saline landscape (solonetz-solonchak complex). It is primarily an aquatic animal living in shallow (less than 50 - 70cm depth) stagnant lakes, ponds, pools, swamps, peat bogs, ditches, flooded rice fields and quarries. It may occasionally be found in semi-flowing waters: springs, irrigation channels, rivers and stream pools and the water must generally be clear (for example in the Carpathian region, B. bombina lives in wetlands with clearer water than the congeneric Bombina variegata); however, near the southern margin of the range (such as southeastern Ukraine and the Krasnodar Region) the species often occurs in waters that have been polluted with industrial and agricultural chemicals such as settling and sedimentation reservoirs, rice fields, polluted ponds in rural and urban areas. The species breeds by larval development in pools with a good growth of sub-aquatic vegetation. Hybrid populations of this species with B. variegata have been recorded.

Threats:

In western and northern Europe the species is threatened by the loss of habitat through modernisation of agricultural methods, most significantly the drainage and/or pollution of suitable wetland areas. Recent declines in northwestern Europe may also be related to climate change. In Turkey it is threatened by urban development. Within the former Soviet Union destruction of wetlands is also the most serious threat, although industrial pollution and recreational activities also impact populations. Additional localised threats to this species include mortality on roads, entrapment in open wells with vertical walls, hybridisation and replacement by Bombina variegata and collection for the pet trade. However, at a global scale this species is not significantly threatened.

Country Distribution	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Austria	\checkmark					
Belarus	\checkmark					
Bosnia and Herzegovina	\checkmark					
Bulgaria	\checkmark					
Croatia	\checkmark					
Czech Republic	\checkmark					
Denmark	\checkmark					

Germany	\checkmark				
Greece	\checkmark				
Hungary	\checkmark				
Kazakhstan	\checkmark				
Latvia	\checkmark				
Lithuania	\checkmark				
Moldova	\checkmark				
Poland	\checkmark				
Romania	\checkmark				
Russian Federation	\checkmark				
Slovakia	\checkmark				
Slovenia	\checkmark				
Sweden	\checkmark		\checkmark		
Turkey	\checkmark				
Ukraine	\checkmark				
United Kingdom				\checkmark	
Serbia and Montenegro	\checkmark				

Native -Native -

FAO Marine Habitats

Presence Presence

Confirmed Possible Extinct Reintroduced Introduced

Major Lakes

Major Rivers

Upper Level Habitat Preferences	Sco	re	Lower Level Habitat Preferences	Score				
1.4 Forest - Temperate		1	Broadleaf Forest	1				
4.4 Grassland - Temperate		1	Cold Grassland	3				
5.4 Wetlands (inland) - Bogs, Marshes, Swamps, F	ens, Peatlands	1	Conifer Boreal Forest	3				
5.7 Wetlands (inland) - Permanent Freshwater Marshes/Pools			Conifer Forest	3				
 (under 8ha) 5.8 Wetlands (inland) - Seasonal/Intermittent Freshwater Marshes/Pools (under 8ha) 11.1 Artificial/Terrestrial - Arable Land 			Coniferous Forest	2				
			Cool Broadleaf Forest	2				
			Cool Conifer Forest	2				
11.2 Artificial/Terrestrial - Pastureland		1	Cool Fields and Woods	2				
11.5 Artificial/Terrestrial - Urban Areas212.2 Artificial/Aquatic - Ponds (below 8ha)112.6 Artificial/Aquatic - Wastewater Treatment Areas2			Cool Grasses and Shrubs	3				
			Cool Irrigated Cropland	3				
			Cool Mixed Forest	2				
12.7 Artificial/Aquatic - Irrigated Land (includes irriga	· ·	_	Cool Southern Hemisphere Mixed Forest	3				
12.8 Artificial/Aquatic - Seasonally Flooded Agricultural Land			Deciduous Broadleaf Wood	1				
			Evergreen Broadleaf Forests	3				
			Fields and Woody Savanna	2				
			Grass Crops	1				
			Hot Irrigated Cropland	3				
			Low Sparse Grassland	1				
			Mixed Forest	1				
			Moist Eucalyptus	3				
			Montane Tropical Forest	3				
			Rain Green Tropical Forest	3				
		Rice Paddy and Field	1					
			Urban	1				
Major threats			Conservation Measures					
			Code Conservation measures	In place Needed				
1 Habitat Loss/Degradation (human induced)			1 Policy-based actions					
1.1 Agriculture			1.1 Management plans					
1.1.1 Crops			1.1.1 Development					
1.1.1.3 Agro-industry farming			1.1.2 Implementation					
1.1.4 Livestock			1.2 Legislation					
1.1.4 LIVESLUCK		♥		\checkmark				

1.4 1.4.1 1.4.2 6 6.3	Agro-industry Infrastructure development Industry Human settlement Pollution (affecting habitat and/or specie Water pollution Agriculture Domestic Commercial/Industrial		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	✓ 1.2 ✓ 1.2 ✓ 1.2 ✓ 1.2 ✓ 1.2 ✓ 1.2 ✓ 1.2 ✓ 1.2	 2.1.1 Interna 2.1.2 Nation 2.1.3 Sub-na 2.2 Implen 2.2 Interna 2.2.1 Interna 2.2.2 Nation 2.2.3 Sub-na 2.2.3 Sub-na 2.2.3 Sub-na 2.2.4 Nation 2.2.5 Sub-na 2.2.5 Sub-na 3.3 Conse 3.4 Conse 4.4 Dita 4.5 Threat 4.6 Threat 4.7 Threat 4.8 Conse 4.1 Threat 4.1 Threat 4.2 Estable 4.3 Manage 4.3 Specie 	tional level al level ational level nentation ational level ational level ational level ational level unication ar ness rch actions ation numbe y and Ecolo t status s and harvest rvation mea s/Monitoring t and site-ba enance/Cons- ration ted areas ishment	nd Education rs and range gy levels isures ased actions servation	$\mathbf{X} \mathbf{X} \mathbf{X} \mathbf{X} \mathbf{X} \mathbf{X} \mathbf{X} \mathbf{X} $				
Utilisat	ion of Species											
Purpose/Type of Use 13. Pets/display animals, horticulture		Sul	osistence	Natio		rnational	Other purpose:					
	y forms removed from the wild le animal/plant	100% ✓	>75%	51-75%	% 26-50%	% <25% <u>■</u>	Other forms removed from	n the wild	d:			
Source Wild	of specimens in commercial trade	100% ✓	>75%	51-75	% 26-50%	% <25% 	Other source of specimer	IS:				
	n wild offtake/harvest in relation to to n offtake/harvest produced through de Not listed						Unknown Unknown					
	isting st Assessment: Least Concern (LC) st Criteria:			[Possibly	Extinct						
Rationa	ationale for the Red List Assessment: Listed as Least Concern in view of its wide distribution, presumed large population, and because it is unlikely to be declining fast enough to qualify for listing in a more threatened category.											
	Uk	RUSSIA -The species is common in many areas of the former Soviet Union (European Russia, Ukraine and Moldavia). It unlikely to be declining on this territory in general, although many local populations are declining.										
Current Assess	., .		•	boom, Is	•	s, David Ta		o, Boris Ti	uniyev,			
Notes o	on Red listing: The Turkish subspeci	es B.b. a	rifiyensis m	night qual	ify for listing	in a threate	ened category.					

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