Rana arvalis

Region: 10

Taxonomic Authority: Nilsson, 1842

Synonyms:

Rana terrestris	Andrzejowski, 1832
Rana altaica	Kastschenko, 1899
Rana oxyrrhinus	Steenstrup, 1847

Common Names:

Altai Brown Frog (Altai Mountains p	English
Moor Frog	English
Ostromordaya Lyagushka	Russian
Zaba Moczarowa	Polish

Order: Anura

Family: Ranidae

Notes on taxonomy: The intraspecific systematics of this species need further study. Animals from the Altai Mountains have for a long time been considered as a separate subspecies of Rana arvalis or as the species Rana altaica. This has largely been on the basis of their shorter shins and large inner metatarsal tubercle. Similar frogs have since been found in other parts of the range of Rana arvalis (eg. In the north of European Russia and in the Urals) and in Siberia some animals display transient characters between Rana arvalis and the Altaic taxon. Until this taxonomic issue is fully resolved we include Rana altaica within Rana arvalis.

General Information

Biome ☑ Terrestrial ☑ Freshwater ☐ Marine

Geographic Range of species:

This species is found throughout most of the northern, central and eastern parts of Europe, eastwards to Siberia (Yakutia and Baikal Lake), Russia and Xinjiang Province, China. It is no longer believed to be present in Serbia and the original records were probably in error (Kalezic and Dzukic, 2001). It is typically a lowland species, but can occur at altitudes close to 1,500m asl. (Altai Mountains).

Habitat and Ecology Information:

It occurs in a wide variety of habitats including tundra, forest tundra, forest, forest steppe, steppe, forest edges and glades, semi-desert, swamps, meadows, fields, bush lands, gardens. It has a breeding season, and spawning and larval development takes place in various stagnant water bodies of low acidity, including lakes, ponds, swamps, puddles and ditches. There is some evidence that the species can occur in agricultural landscapes, and in some areas it appears to be adapting to urban conditions (eg. Vershinin, 1997).

Conservation Measures:

It is listed on Appendix II of the Berne Convention and on Annex IV of the EU Natural Habitats Directive. It is protected by national legislation in many countries and has been recorded in a number of national and sub-national Red Data books and lists. It is presumed to be present in a many protected areas. In parts of the species' range, mitigation measures to reduce road kill have been established.

Threats:

It is threatened by the destruction and pollution of breeding ponds (including acidification) and adjacent wetland and terrestrial habitats, especially through urbanisation, recreation, tourism, industry and overstocking of cattle. Additional threats are prolonged drought and predation of spawn by waterfowl. Chytrid fungus was detected in this species in Berlin, Germany.

Species population information:

It is generally common, and is abundant in central-eastern Europe. It is extinct in Switzerland in the extreme southwestern part of its wide range. It is considered to be rare and declining in China.

Country Distribution

	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Austria	☑	☐	☐	☐	☐	☐
Belarus	☑	☐	☐	☐	☐	☐
Belgium	☑	☐	☐	☐	☐	☐
China	☑	☐	☐	☐	☐	☐
Croatia	☑	☐	☐	☐	☐	☐
Czech Republic	☑	☐	☐	☐	☐	☐
Denmark	☑	☐	☐	☐	☐	☐
Estonia	☑	☐	☐	☐	☐	☐
Finland	☑	☐	☐	☐	☐	☐
France	☑	☐	☐	☐	☐	☐
Germany	☑	☐	☐	☐	☐	☐
Hungary	☑	☐	☐	☐	☐	☐
Kazakhstan	☑	☐	☐	☐	☐	☐
Latvia	☑	☐	☐	☐	☐	☐
Lithuania	☑	☐	☐	☐	☐	☐
Moldova	☑	☐	☐	☐	☐	☐
Netherlands	☑	☐	☐	☐	☐	☐
Norway	☑	☐	☐	☐	☐	☐
Romania	☑	☐	☐	☐	☐	☐
Russian Federation	☑	☐	☐	☐	☐	☐
Slovakia	☑	☐	☐	☐	☐	☐
Slovenia	☑	☐	☐	☐	☐	☐

	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	
Switzerland	☐	☐	☑	☐	☐	☐
Ukraine	☑	☐	☐	☐	☐	☐

FAO Marine Habitats

Major Lakes

Major Rivers

Upper Level Habitat Preferences	Score
1.1 Forest - Boreal	1
1.2 Forest - Subarctic	1
1.4 Forest - Temperate	1
3.1 Shrubland - Subarctic	2
3.3 Shrubland - Boreal	1
3.4 Shrubland - Temperate	1
4.1 Grassland - Tundra	2
4.2 Grassland - Subarctic	2
4.4 Grassland - Temperate	1
5.1 Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	1
5.2 Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	1
5.4 Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands	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
5.9 Wetlands (inland) - Freshwater Springs and Oases	2
5.10 Wetlands (inland) - Tundra Wetlands (incl. pools and temporary waters from snowmelt)	2
5.13 Wetlands (inland) - Permanent Inland Deltas	1
11.1 Artificial/Terrestrial - Arable Land	1
11.2 Artificial/Terrestrial - Pastureland	1
11.4 Artificial/Terrestrial - Rural Gardens	1
11.5 Artificial/Terrestrial - Urban Areas	1
12.1 Artificial/Aquatic - Water Storage Areas (over 8ha)	1
12.2 Artificial/Aquatic - Ponds (below 8ha)	1
12.3 Artificial/Aquatic - Aquaculture Ponds	1
12.5 Artificial/Aquatic - Excavations (open)	1
12.6 Artificial/Aquatic - Wastewater Treatment Areas	1
12.7 Artificial/Aquatic - Irrigated Land (includes irrigation channels)	1
12.8 Artificial/Aquatic - Seasonally Flooded Agricultural Land	1
13 Introduced vegetation	2

Lower Level Habitat Preferences	Score
Broadleaf Forest	1
Cold Grassland	2
Conifer Boreal Forest	1
Conifer Forest	1
Cool Broadleaf Forest	1
Cool Conifer Forest	1
Cool Crops and Towns	2
Cool Fields and Woods	2
Cool Grasses and Shrubs	2
Cool Irrigated Cropland	2
Cool Mixed Forest	1
Deciduous Broadleaf Wood	1
Deciduous Coniferous Forest	1
Dry Woody Scrub	1
Fields and Woody Savanna	2
Grass Crops	2
Low Sparse Grassland	1
Marsh Wetland	1
Mire, Bog, Fen	1
Narrow Conifers	2
Shrub Deciduous	1
Upland Tundra	3
Urban	1
Woody Savanna	1

Major threats

Code	Description of threat	Past	Present	Future
1	Habitat Loss/Degradation (human induced)	☑	☑	☑
1.1	Agriculture	☑	☑	☑
1.1.1	Crops	☑	☑	☑
1.1.1.3	Agro-industry farming	☑	☑	☑
1.1.4	Livestock	☑	☑	☑
1.1.4.3	Agro-industry	☑	☑	☑
1.4	Infrastructure development	☑	☑	☑
1.4.1	Industry	☑	☑	☑
1.4.2	Human settlement	☑	☑	☑

Conservation Measures

Code	Conservation measures	In place	Needed
1	Policy-based actions	☑	☐
1.2	Legislation	☑	☐
1.2.1	Development	☑	☐
1.2.1.1	International level	☑	☐
1.2.1.2	National level	☑	☐
1.2.2	Implementation	☑	☐
1.2.2.1	International level	☑	☐
1.2.2.2	National level	☑	☐
1.2.2.3	Sub-national level	☑	☐

3	Harvesting (hunting/gathering)	☑	☑	☑	3	Research actions	☐	☑
3.2	Medicine	☑	☑	☑	3.1	Taxonomy	☐	☑
3.2.1	Subsistence use/local trade	☑	☑	☑	3.2	Population numbers and range	☐	☑
3.2.2	Sub-national/national trade	☑	☑	☑	3.5	Threats	☐	☑
6	Pollution (affecting habitat and/or species)	☑	☑	☑	3.8	Conservation measures	☐	☑
6.3	Water pollution	☑	☑	☑	3.9	Trends/Monitoring	☐	☑
6.3.1	Agriculture	☑	☑	☑	4	Habitat and site-based actions	☑	☑
6.3.3	Commercial/Industrial	☑	☑	☑	4.1	Maintenance/Conservation	☑	☑
					4.4	Protected areas	☑	☑
					4.4.2	Establishment	☑	☐
					4.4.3	Management	☑	☑

Utilisation of Species

Purpose/Type of Use	**Subsistence**	**National**	**International**	***Other purpose:***
3. Medicine - human and veterinary	☑	☑	☐	

Primary forms removed from the wild	**100%**	**>75%**	**51-75%**	**26-50%**	**<25%**	***Other forms removed from the wild:***
1. Whole animal/plant	☑	☐	☐	☐	☐	

Source of specimens in commercial trade	**100%**	**>75%**	**51-75%**	**26-50%**	**<25%**	***Other source of specimens:***
Wild	☑	☐	☐	☐	☐	

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: Least Concern (LC) ☐ Possibly Extinct

Red List Criteria:

Rationale for the Red List Assessment: Listed as Least Concern in view of its wide distribution, tolerance of a broad range of habitats, presumed large population, and because it is unlikely to be declining fast enough to qualify for listing in a more threatened category.

Current Population Trend: Stable **Date of Assessment:** 4/5/2004

Assessor(s): Sergius Kuzmin, David Tarkhnishvili, Vladimir Ishchenko, Boris Tuniyev, Trevor Beebee, Brandon Anthony, Benedikt Schmidt, A

Notes on Red listing:

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