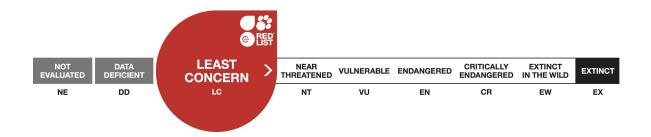


# Bufo gargarizans, Zhoushan Toad

# Assessment by: Sergius Kuzmin, Wang Yuezhao, Masafumi Matsui, Yoshio Kaneko, Irina Maslova



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**Citation:** Sergius Kuzmin, Wang Yuezhao, Masafumi Matsui, Yoshio Kaneko, Irina Maslova. 2004. *Bufo gargarizans. The IUCN Red List of Threatened Species 2004*: e.T54647A11180910. http://dx.doi.org/10.2305/IUCN.UK.2004.RLTS.T54647A11180910.en

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## **Taxonomy**

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Amphibia	Anura	Bufonidae

Taxon Name: Bufo gargarizans Cantor, 1842

#### Common Name(s):

• English: Asiatic Toad, Miyako Toad, Zhoushan Toad

#### **Taxonomic Notes:**

Further taxonomic research is needed as this might be a complex of three species.

#### **Assessment Information**

Red List Category & Criteria: Least Concern ver 3.1

Year Published: 2004

Date Assessed: April 30, 2004

Annotations: Needs Updating

#### Justification:

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.

# **Geographic Range**

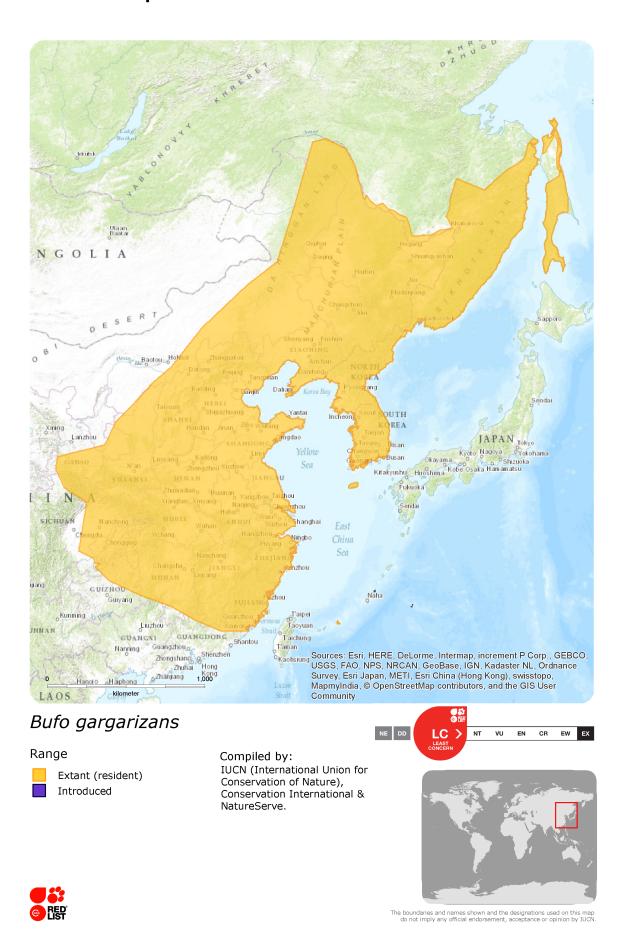
#### Range Description:

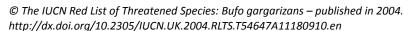
This species is known from Russia, China, the Democratic People's Republic of Korea, the Republic of Korea and Japan. It is found in the Russian Far East (including East Siberia) northwards to the Amur River valley; most of central, southeastern and northeastern China, throughout the Korean Peninsula and on Miyakojima and adjacent islands in the Ryukyu Archipelago of Japan. The subspecies, Bufo gargarizans miyakonis is endemic to Japan. It was originally distributed on Miyakojima and its adjacent islands, and was introduced to other islands in Ryukyu Archipelago including Okinawajima, Minami Daitojima and Kita Daitojima. In Okinawajima, Bufo gargarizans miyakonis have been captured since the early 1990's and it is now possibly eradicated. The altitudinal range of this species is from 20-800m asl.

#### **Country Occurrence:**

**Native:** China; Japan (Nansei-shoto - Introduced); Korea, Democratic People's Republic of; Korea, Republic of; Russian Federation

# **Distribution Map**





# **Population**

This species is very common in China and in the Primorye and Khabarovsk regions of Russia; it is however, rare in both the Democratic People's Republic of Korea and the Republic of Korea. In Japan the population is decreasing (especially on Miyakojima) but is not in significant decline.

**Current Population Trend: Stable** 

## Habitat and Ecology (see Appendix for additional information)

The main habitats of this species are coniferous, mixed and deciduous forests (and their glades), grasslands and meadows. It is also present in flood lands and river valleys. Although the species prefers habitats with high humidity, it is rare in very shaded or saturated coniferous forests. Breeding and larval development takes place in rivers, streams, ponds and pools. The species is generally tolerant of habitat modification and may be found in cultivated areas, villages and even parks and gardens in large cities (e.g. Khabarovsk, Russia).

Systems: Terrestrial, Freshwater

### Threats (see Appendix for additional information)

Localized threats to this species include a general loss of suitable habitat through increasing urbanization and water pollution, mortality on roads and prolonged drought. The species is also captured for laboratory research, and has been gathered for traditional medicine by Chinese and Korean citizens in the Primorye Region of Russia over the last 10 years. In Okinawajima in Japan, the species has been captured since the early 1990's and is now possibly eradicated.

# **Conservation Actions** (see Appendix for additional information)

This species occurs in many protected areas in both China and Russia. The possible eradication of the species on Okinawajima in Japan needs confirmation, with surveys are needed for several years.

#### **Credits**

Assessor(s): Sergius Kuzmin, Wang Yuezhao, Masafumi Matsui, Yoshio Kaneko, Irina Maslova

**Reviewer(s):** Global Amphibian Assessment Coordinating Team (Simon Stuart, Janice Chanson

and Neil Cox)

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#### Citation

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### **External Resources**

For <u>Images and External Links to Additional Information</u>, please see the Red List website.

# **Appendix**

# **Habitats**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.1. Forest - Boreal	-	Marginal	-
1. Forest -> 1.4. Forest - Temperate	-	Suitable	-
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland	-	Suitable	-
3. Shrubland -> 3.4. Shrubland - Temperate	-	Suitable	-
3. Shrubland -> 3.6. Shrubland - Subtropical/Tropical Moist	-	Marginal	-
4. Grassland -> 4.4. Grassland - Temperate	-	Suitable	-
4. Grassland -> 4.6. Grassland - Subtropical/Tropical Seasonally Wet/Flooded	-	Suitable	-
5. Wetlands (inland) -> 5.1. Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	-	Marginal	-
5. Wetlands (inland) -> 5.4. Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands	-	Marginal	-
5. Wetlands (inland) -> 5.5. Wetlands (inland) - Permanent Freshwater Lakes (over 8ha)	-	Suitable	-
5. Wetlands (inland) -> 5.7. Wetlands (inland) - Permanent Freshwater Marshes/Pools (under 8ha)	-	Marginal	-
5. Wetlands (inland) -> 5.8. Wetlands (inland) - Seasonal/Intermittent Freshwater Marshes/Pools (under 8ha)	-	Suitable	-
13. Marine Coastal/Supratidal -> 13.4. Marine Coastal/Supratidal - Coastal Brackish/Saline Lagoons/Marine Lakes	-	Marginal	-
14. Artificial/Terrestrial -> 14.1. Artificial/Terrestrial - Arable Land	-	Suitable	-
14. Artificial/Terrestrial -> 14.3. Artificial/Terrestrial - Plantations	-	Suitable	-
14. Artificial/Terrestrial -> 14.4. Artificial/Terrestrial - Rural Gardens	-	Suitable	-
14. Artificial/Terrestrial -> 14.5. Artificial/Terrestrial - Urban Areas	-	Marginal	-
15. Artificial/Aquatic & Marine -> 15.1. Artificial/Aquatic - Water Storage Areas (over 8ha)	-	Suitable	-
15. Artificial/Aquatic & Marine -> 15.2. Artificial/Aquatic - Ponds (below 8ha)	-	Marginal	-
15. Artificial/Aquatic & Marine -> 15.3. Artificial/Aquatic - Aquaculture Ponds	-	Suitable	-

Habitat	Season	Suitability	Major Importance?
15. Artificial/Aquatic & Marine -> 15.5. Artificial/Aquatic - Excavations (open)	-	Suitable	-
15. Artificial/Aquatic & Marine -> 15.7. Artificial/Aquatic - Irrigated Land (includes irrigation channels)	=	Suitable	-
15. Artificial/Aquatic & Marine -> 15.8. Artificial/Aquatic - Seasonally Flooded Agricultural Land	-	Suitable	-

# **Use and Trade**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

End Use	Local	National	International
Food - human	Yes	No	No
Medicine - human & veterinary	Yes	Yes	Yes
Research	No	Yes	No

# **Threats**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score
Residential & commercial development -> 1.1.  Housing & urban areas	Ongoing	-	-	-
	Stresses:	1. Ecosysten	n stresses -> 1.1. Ecos	system conversion
	1. Ecosystem stress			system degradation
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.1. Intentional use (species is the target)	Ongoing	-	-	-
	Stresses:	2. Species St	tresses -> 2.1. Species	s mortality
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.3. Trend Unknown/Unrecorded	Ongoing	-	-	-
	Stresses:	1. Ecosysten	n stresses -> 1.2. Ecos	system degradation
9. Pollution -> 9.1. Domestic & urban waste water -> 9.1.3. Type Unknown/Unrecorded	Ongoing	-	-	-
	Stresses:	1. Ecosysten	n stresses -> 1.2. Ecos	system degradation
9. Pollution -> 9.2. Industrial & military effluents -> 9.2.3. Type Unknown/Unrecorded	Ongoing	-	-	-
	Stresses:	1. Ecosysten	n stresses -> 1.2. Ecos	system degradation
9. Pollution -> 9.3. Agricultural & forestry effluents -> 9.3.4. Type Unknown/Unrecorded	Ongoing	-	-	-
	Stresses:	1. Ecosysten	n stresses -> 1.2. Ecos	system degradation
11. Climate change & severe weather -> 11.2. Droughts	Ongoing	-	-	-

### **Conservation Actions in Place**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

#### **Conservation Actions in Place**

In-Place Land/Water Protection and Management

Conservation sites identified: Yes, over entire range

Occur in at least one PA: Yes

#### **Research Needed**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

#### **Research Needed**

- 1. Research -> 1.1. Taxonomy
- 1. Research -> 1.2. Population size, distribution & trends
- 1. Research -> 1.3. Life history & ecology
- 1. Research -> 1.5. Threats
- 1. Research -> 1.6. Actions
- 3. Monitoring -> 3.1. Population trends

#### **Additional Data Fields**

#### **Population**

Population severely fragmented: No

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