

# Rana catesbeiana

**Taxonomic Authority:** Shaw, 1802

**Synonyms:**

**Region:** 10

**Common Names:**

Bullfrog	English
Grenouille-taureau	French
rana toro	Italian
Rana Toro	Spanish
Ushigaeru	Japanese
American Bullfrog	English

**Family:** Ranidae

**Order:** Anura

**Notes on taxonomy:**

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## General Information

**Biome**

Terrestrial

Freshwater

Marine

### **Geographic Range of species:**

This is a very wide-ranging species. Its native range is from Nova Scotia and New Brunswick, southern Quebec, Canada, south to eastern North America, except southern Florida, United States, then southward through Veracruz, Mexico. It is probably also found in other areas in Mexico (these are not shown on the map). This species was introduced to Mexico at the beginning of last century. It is also introduced in Cuba, Puerto Rico (introduced 1935), Hawaii (introduced mid- to late 1800s, now on all main islands), Isla de la Juventud, Hispaniola (only confirmed in northern and eastern Dominican Republic, not in Haiti) and Jamaica. Its range is increasing in some areas. It is introduced to South America, in Venezuela, there is an expanding population near La Azulita, in Mérida state, at the Andean versants facing Lake Maracaibo basin. In Colombia it is known from the Middle Magdalena Valley, north to the lowlands on the Caribbean coast. In Peru it has become established around Iquitos in central Loreto Department in the Amazon Basin, and also around Lima on the Pacific coast. There are also a number of populations established in Ecuador and Brazil. In Europe, where it is introduced, the largest population occurs within the Po River Valley (Italy) where formal introductions continued at least until 1937. Other populations have been reported from Belgium (recorded from several sites in Wallonia and at least one population is known in Flanders), the Netherlands, central and southwestern France, Germany (in the vicinity of Bonn and also in Baden-Württemberg), Greece (Crete), Spain (Gran Canaria in the Canary Islands [only a few individuals observed and not mapped here], Villasbuenas de Gata in Cacerés [not recently observed and not mapped here] and Sierra de Collserola, Cataluña Province [only a few individuals observed and not mapped here]) and the United Kingdom (possibly now eradicated). It has possibly been introduced to Switzerland, although this requires further confirmation. In Asia, where it is also introduced, it is found in several localities in the Philippines, Malaysia, Indonesia, Thailand [not mapped here] and Singapore [not mapped here]. It has been introduced to mainland China and Taiwan for raising in farms for human consumption. Feral populations have become established in Taiwan, Kunming in Yunnan province, Sichuan, Xinjiang and possibly other places in China as a result of escape or deliberate release. Individuals have been found in the wild in Hong Kong probably from releases of market animals. However, there is no evidence to suggest that this species is now established in Hong Kong. It is found widely from southern Hokkaido to Ishigakijima in Japan.

### **Conservation Measures:**

There are no measures required to conserve this species. Instead, eradication of this species from its introduced range is a conservation priority. In Asia, this species is believed to have a negative impact on the native amphibian fauna. It should be monitored and controlled. Farming activities should concentrate on native *Rana rugulosa*. Farming of *Rana catesbeiana* should at least be strictly contained, including water discharges from farms that should be carefully controlled or prevented. Ideally, the farming of the species outside its range should be prohibited. Studies of actual and potential ecological impacts should be conducted, perhaps leading to an elimination programme. Awareness of the potential threat posed by this species to native biodiversity must be raised. The Venezuelan government has taken actions to avoid the spread of this species. There has been an eradication program, with participants

### **Habitat and Ecology Information:**

This species inhabits ponds, swamps, lakes, reservoirs, marshes, brackish ponds (in Hawaii), stream margins and irrigation ditches. It is sometimes found in temporary waters hundreds of metres from permanent water. It winters at the bottom of pools. It may disperse from water in wet weather. Eggs and larvae develop in permanent slow or non-flowing bodies of water.

### **Threats:**

There are no threats to this species. Outside of its native range, this species is considered a pest. It has been observed predated on native species in Puerto Rico, including on *Leptodactylus albilabris*, and is a potential predator of other native species throughout its introduced range. It is a possible vector of pathogens.

from the University of Los Andes at Mérida, the Venezuelan Institute of Scientific Research (IVIC) and the Ministry of Environment, started at the beginning of 2002.

**Species population information:**

There are thousands of occurrences of this species. It is highly abundant and its global population is increasing. Although some of the populations in Europe of this species are increasing, other introductions may not have become fully established. In Asia, it is only present in isolated pockets. Animals have been deliberately introduced to northern Thailand in the hope of augmenting native frog production. Farmed animals are exported alive to East Asia (Pariyanonth and Daorerk, 1995; Lim and Lim, 1992) and may escape or be released to become established. A growing population is now established in the Venezuelan Andes (Carlos Gottberg and Amelia Diaz, pers. comm.), near the town of Jají, in Mérida State.

<b>Country Distribution</b>	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Belgium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Brazil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Canada	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
China	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Colombia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cuba	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dominican Republic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ecuador	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
France	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Germany	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Greece	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Indonesia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Italy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Jamaica	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Japan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Malaysia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mexico	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Netherlands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Peru	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Philippines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Puerto Rico	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Singapore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Taiwan, Province of China	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Thailand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
United Kingdom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
United States of America	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Venezuela	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<b>FAO Marine Habitats</b>	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced
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**Major Lakes**

**Major Rivers**

<b>Upper Level Habitat Preferences</b>	Score	<b>Lower Level Habitat Preferences</b>	Score
1.4 Forest - Temperate	1	Broadleaf Crops	3
3.4 Shrubland - Temperate	1	Cool Fields and Woods	3
4.4 Grassland - Temperate	1	Cool Irrigated Cropland	1
5.1 Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	1	Crops, Grass, Shrubs	3
		Fields and Woody Savanna	3
		Grass Crops	3

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	1
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
12.7	Artificial/Aquatic - Irrigated Land (includes irrigation channels)	1
12.8	Artificial/Aquatic - Seasonally Flooded Agricultural Land	1
12.9	Artificial/Aquatic - Canals and Drainage Channels, Ditches	1

### Major threats

#### Code Description of threat

13 None

#### Past Present Future

### Conservation Measures

#### Code Conservation measures

3 Research actions

3.2 Population numbers and range

4 Habitat and site-based actions

4.1 Maintenance/Conservation

4.4 Protected areas

4.4.2 Establishment

4.4.3 Management

#### In place Needed

### Utilisation of Species

#### Purpose/Type of Use

1. Food - human

#### Subsistence

#### National

#### International

#### Other purpose:

#### 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

Ranching - in situ

Trend in wild offtake/harvest in relation to total wild population numbers over last five years:

Increasing

Trend in offtake/harvest produced through domestication/cultivation over last five years:

Increasing

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: Increasing

Date of Assessment: 12/17/2004

Assessor(s): Georgina Santos-Barrera, Geoffrey Hammerson, Blair Hedges, Rafael Joglar, Sixto Inchaustegui, Lue Kuangyang, Chou Wenha

#### Notes on Red listing:

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