

Lithobates catesbeianus



Taxon	Family / Order / Class / Phylum
<i>Lithobates catesbeianus</i> (Shaw, 1802)	Ranidae / Anura / Amphibia / Vertebrata

COMMON NAMES (English only)

American Bullfrog

SYNONYMS

Rana catesbeiana Shaw, 1802

SHORT DESCRIPTION

It is the largest North-American ranid. In its natural range, adults can reach at most a 184 mm snout-vent length (Louisiana), while in Europe (southwestern France), adults may exceed a 195 mm snout-vent length, with an average weight of approximately 430 grams. It is likely to feed on a wide range of prey: amphibians, fishes, small mammals, ducklings and small bird species, molluscs, crustaceans and insects. In southwestern France, the adult diet consists of a wide range of prey, with amphibians and insects most prominent.



BIOLOGY/ECOLOGY

Dispersal mechanisms

Introductions by humans. Natural spread of juveniles and adults is terrestrial or via rivers.

Reproduction

In southwestern France, the breeding period begins in May and lasts until early September, and tadpole development takes one to two years.

Known predators

In southwestern France, larval and young frog stages seem to undergo significant predation. Known predators include carnivorous fishes, in particular *Micropterus salmoides* introduced from North America, and probably some Mustelidae and Ardeidae. The main source of predation, in high-density areas, appears to be cannibalism.

Resistant stages (seeds, spores etc.)

None.

HABITAT

Native (EUNIS code)

C: Inland surface water habitats

Habitat occupied in invaded range (EUNIS code)

C: Inland surface water habitats, D: Mire, bog and fen habitats

Habitat requirements

In its native range, it usually lives in lakes or large ponds. Where introduced, it occupies any type of habitat that is lentic or with slowly moving water, especially if aquatic and bank vegetation are abundant.

DISTRIBUTION

Native Range

The American Bullfrog is autochthonous in the eastern part of North America, from Vera Cruz north to the Great Lakes and New Brunswick.

Known Introduced Range

It is currently established in the western part of North America, between California and southern British Columbia, as well as in several countries of South America, some islands of the Greater Antilles, Asia, Hawaii and Europe. In Europe, it has been introduced in Germany, Italy, United Kingdom, Spain, the Netherlands, Greece, Belgium and France.




Trend

Although it is presently illegal to import this species to the EU, it can still be ordered on the Internet and shipped worldwide. Farming could increase its distribution area by escapes.

MAP (European distribution)



Legend

	Known in country		Known in CGRS square		Known in sea
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INTRODUCTION PATHWAY

It has been introduced in many parts of the world, often for farming purposes but also as a predator of unwanted species like insect pests in Hawaii, and sometimes as a pet.

IMPACT

Ecosystem Impact

Where introduced, it has the ability to occupy a whole range of habitats and to feed on many species. A negative impact on native ranids has been notably stressed. American Bullfrogs carry an emerging pathogenic fungus, *Batrachochytrium dendrobatidis*, which has been implicated in global amphibian decline.

Human Health and Social Impact

Unknown.

Economic Impact

Not documented but the cost of eradication has been US\$29 000 in the UK.

MANAGEMENT

Prevention

Unknown.

Mechanical

Except for a limited area in the United Kingdom and France, no eradication strategy has been formulated in Europe. Only few control operations have been attempted (i.e. in Germany). In southwestern France, a long-term regional program was started in May 2003, conducted by Cistude Nature (environment protection

organization). It aims at the development of strategies and management tools (in particular egg collection, tadpoles trapping, and juvenile and adult shooting) before early 2007, to try to limit American Bullfrog populations, or even to eradicate them.

Chemical

Unknown.

Biological

Unknown.

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