GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Pelophylax bedriagae***

Pelophylax bedriagae **System:** Freshwater_terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Amphibia	Anura	Ranidae

Common name

Synonym

Similar species

Summary

The Levant Green Frog (Pelophylax bedriagae) is native to the the Aegean region. The Levant Green Frog is mostly greenish or brownish back (dorsum) with a narrow, light-yellowish mid-dorsal stripe. The species occurs in humid habitats, such as, ponds, rain pools and along streams. The species was introduced to Northern and Western Europe for ornamental purposes, as a laboratory animal or for food trade. Established individuals hybridize with native frog species. Further the species prays on local insect fauna and completes with native species for food. The species is widespread and difficult to control.

view this species on IUCN Red List

Species Description

The Levant Green Frog (Pelophylax bedriagae) has a highly variable, greenish or brownish back (dorsum) with a narrow, light-yellowish mid-dorsal stripe. Large dark spots sometimes cover the body. Males individuals have an average length of 78.8mm. Female individuals are larger with a length of 92.8mm. The species is diurnal, but occasionally active at night (AmphibiaWeb, 2009). Helminth parasites, such as Rhabdias bufonis, Cosmocerca ornata, Oswaldocruzia filiformis (Nematoda), Diplodiscus subclavatus, Haematoloechus breviansa, Gorgoderina vitelliloba (Digenea); Acanthocephalus ranae (Acanthocephala) and Hirudo medicinalis (Hirudinea), infect the lungs, intestine, urinary bladder and skin of P. bedriagae in their native range (Demır et al., 2015). The species is listed in the Red List of Threated Species in the category Least Concern (IUCN, 2018).

Notes

Taxonomy: Until the 1980s the species Pelophylax bedriagae (synonym: Rana bedriagae) was not a distict species, but considered a subspecies of Pelophylax ridibunda (Rana ridibunda). Native populations: Within the native rage the population of the Levant Water Frog is decreasing. Local extinction was observed in several locations in Turkey. Habitat loss and fragmentation of freshwater ecosystems are the major threats of the Levant Water Frog in its native rage. Furthermore, the introduction of alien fish and cray fish species, e.g. Silurus glanis and Astacus leptodactylus, led to inceresed predation on larvae of the Levant Water Frog (Başkale & Kaya, 2012).

Lifecycle Stages

Females lay 5000-10000 eggs in a few clutches in open water or among aquatic plants (Cabi, 2018). The eggs hatch after 3 to 6 days. The metamorphosis is completed in 45 to 75 days (Çiçek and İsmail, 2017). Adults can reach the age of 8 years (Çiçek and İsmail, 2017).

Uses
In Turkey the species is traditionally used as food for hunters. The species is widely traded for frog meat or as a pet in Turkey and neighboring regions (www.akvaryum.com, 2018, Michaels & Preziosi, 2013). Further the species P. bedriagae is traded as a common laboratory animal (Michaels & Preziosi, 2013). The species has been also introduced to Western Europe for ornamental purposes and sold in pet shops (Holsbeek et al., 2010).

Habitat Description
The species occurs in humid area, up to 1500m above sea level (Pappenfuss et al., 2009). The species' s typical habitats include wetlands, ponds, rain pools, streams, rivers, irrigation channels, reservoirs, marshes and springs, as well as modified habitats (Pappenfuss et al., 2009). In its native range it is affected by habitat loss and pollution.

Reproduction
In the native range the breeding season starts in early March and last up to late April, while in Northern Europe the start of the breeding season was observed to start in May and to last until September (Perl et al. 2017). The seasonal breeding takes place in permanent waterbodies (Pappenfuss et al., 2009).

Nutrition
The adult species prays on terrestrial arthropods and small vertebrates. Tadpoles are herbivores and detritivores (CABI, 2018; Simic, Tallósi, Popovic, 1999).

General Impacts
The introduced species threaten native toad species trough hybridization (Holsbeek et al., 2010). Established populations were found in Malta, Belgium, Switzerland and France. The species is often confused with The marsh frog (Pelophylax ridibundus). Established populations may complete with native species for food and mating opportunities (Holsbeek et al., 2008).

Management Info
Currently no prevention measures were undertaken. The prohibition of trading is a recommended measure to prevent ongoing imports of the Levant Green Frog (Pelophylax bedriagae) (Holsbeek et al., 2008, 2010).

Pathway
P. bedriagae is traded for food (frog meat) in large quantities (Michaels & Preziosi (2013).Populations were observed regularly between 2008 and 2010 on the east bank of the Suez Canal.The species was introduced to garden ponds for ornamental purposes. Holsbeek, 2008.P. bedriagae individuals were introduced into the wild of Belgium through commercial trade for ornamental ponds (Holsbeek et al., 2010).The species was introduced to garden ponds for ornamental purposes. Holsbeek, 2008.

Principal source: Orrell T. (custodian), 2018. Başkale & Kaya, 2012. Holsbeek et al., 2008. Holsbeek et al., 2010.

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ALIEN RANGE

[1] BELGIUM
[1] FRANCE
[1] EGYPT
[1] JORDAN

[1] MALTA
[1] SWITZERLAND
[1] STATE OF PALESTINE

Red List assessed species 6: LC = 6;

Anax imperator **LC**
Ischnura genei **LC**
Pelophylax lessonae **LC**
Crocothemis erythraea **LC**
Orthetrum trinacria **LC**
Sympetrum fonscolombii **LC**

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27 references found for **Pelophylax bedriagae**

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