**Photo Credit: Gabriele Bayne*

Spanish, or Iberian Ribbed Newt *(Pleurodeles waltl)*

A Unique Ribbed Defense

The Spanish, or Iberian ribbed newts are a largely aquatic species of newts which can range in color from grayish to grayish brown in color with heavy darker mottling or blotches. The head is fairly large and flattened, skin is granular, and it has pronounced tubercles giving this species its common name. As a defense mechanism, these newts have tubercles which can be extended and puncture through their skin with little to no harm to the newt. This is believed to be a primitive system of envenomation, although these newts are harmless to humans. These unique defensive behaviors are one reason why these large newts have been popular aquarium species to maintain in the pet and reptile and amphibian hobby and communities.

Ribbed newts are the largest of the European newt species, and as with a few other genera, are also highly aquatic, seldom leaving the water unless for space, food, or other resources. Another unique, and noteworthy fact about these newts, are that these species of newts have been utilized in space and astronomical studies in at least six occasions, making them one of the few amphibian species to have been launched into space! These unique and fascinating newts, with their defensive capabilities described above, also have highly resilient immune systems, and their collagen coated ribs are able to heal and regrow quickly without harm or infection!

Taxonomy

Life: All living, physical, and animate entities
Domain: Eukaryota
Kingdom: Animalia
Phylum/Sub Phylum: Chordata/Vertebrata
Class: Amphibia
Order: Caudata/Urodela
Suborder: Salamandroidea
Family: Salamandridae
Genus: Pleurodeles
Species: *Pleurodeles waltl**
**Taxonomy subject to change and revision.*

Lifespan and Longevity

If provided the proper care, Spanish ribbed newts can attain longevity of 5 to 10 years or more.

Distribution and Habitat

Spanish, or Iberian ribbed newts are indigenous to throughout the arid to semi-arid regions of the Iberian Peninsula and Morocco. Being the largest species of newts within their range, ribbed newts occupy primarily aquatic environments with little to no current, and may be found in nearly any standing body of water or wetlands within their range. These habitats may include ponds, ditches, slow moving streams and rivers, marshes, bays and lagoons of larger lakes, and other moist areas in the event the water bodies they occupy dry up or become unsuitable.

Origin/History

Pleurodeles waltl Michahelles, 1830.

Spanish ribbed newts, or Pleurodeles waltl, would be relatively easy to keep newt species in the pet trade, although the exact timing of their first keeping or importation into the U.S. is lacking. Pleurodeles are also widely bred in captivity for laboratory research as well. The first Iberian Ribbed Newts in space may have been in 1985 on board Bion. The ten newts shared their journey with two Rhesus Macaques and ten rats, in an otherwise crewless Soviet Cosmos satellite. In 1992, Bion also carried the newts on board, as did Bion in 1996. P. waltl research was continued later in 1996 by French-led experiments on the Mir space station (Mir Cassiopée expedition, with follow-up studies in 1998 (Mir Pégase expedition) and 1999 (Mir Perseus expedition). Foton-M2 also carried the Iberian Ribbed Newt in 2005 (Bionity.com 2023).

However, in 2016, the U.S. Fish and Wildlife Service would amend its regulations under the Lacey Act to create an interim rule adding all species of salamanders from 20 genera, of which there are 201 species, to the list of injurious amphibians. This was due to efforts to prevent the introduction, establishment, and spread of the chytrid fungus Batrachochytrium salamandrivorans (or Bsal) into ecosystems of the United States.

With this interim rule, both importation into the United States and interstate transportation between States, the District of Columbia, the Commonwealth of Puerto Rico, or any territory or possession of the United States of any live or dead specimen, including parts, of these 20 genera of salamanders would be prohibited, except by permit for zoological, educational, medical, or scientific purposes. This rule would most certainly impact the U.S. herpetoculture industry and pet trade when it came to its reliance on importing this, and many other of its caudate (salamander and newt) species into the U.S.

Experience Level Required

Intermediate/Moderate.

Size

Iberian ribbed newts are a large species of newt that range up to 8.0 to 12.0 inches in total snout-to-tail length. Snout to vent length ranges from about 2.0 to 4.3 inches snout-to-vent length (SVL).

Housing and Enclosure

Enclosure System: Primarily Aquatic. Iberian ribbed newts are almost entirely aquatic and require the appropriate aquatic setup. Housing must be sealed and escape proof with a secured top or aquarium hood. A 30 to 40 gallon aquarium, terrarium, or other enclosure is suitable for these newts. They can also be kept communally in proportionally larger housing. The enclosure should consist of a primarily aquatic setup with a floating platform or other dry area these newts can resort to on a sand or gravel substrate. An appropriate filter can be used to help maintain water clarity and cleanliness. Also provide ample hiding opportunities in the aquarium using live plants and rocks. Enclosures should be spot cleaned, sterilized, and water cleaned and changed

regularly every 1 to 2 weeks.

Temperature, Lighting, and Humidity

Ribbed newts have simple and undemanding heating and lighting requirements in captivity, and do not require additional UVA/UVB lighting, although providing it in moderated amounts can be greatly beneficial for their health, immune system, and overall wellness. These newts otherwise do not require any other special lighting or heating unless live plants are also maintained, although water temperatures should be maintained at around 60 to 75 degrees F. For any supplemental heating that may be needed, use a low wattage incandescent or UVA/UVB bulb, radiant or ceramic heat emitter, submersible water heater, or UTH (under tank heating element).They are susceptible to health and husbandry related issues if water temperatures are too cold or too warm for these unusual amphibians. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well. Humidity is not as applicable for these primarily aquatic species of newts.

Feeding, Diet, and Nutrition

Insectivorous to Carnivorous; Iberian ribbed newts are largely opportunistic feeders in the wild, feeding on small fish, a wide range of invertebrates, and carrion. Food items that are readily accepted by these amphibians can include earthworms, mealworms, waxworms, bloodworms, small feeder crickets and roaches, silkworms, or other feeder insects as well as some commercially available diets. Recommended feeding is two to three times weekly. Feeder insects should also be gut loaded and/or dusted with additional calcium and vitamin D3 supplements as well prior to feeding to ensure optimal nutrition and health. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Handling

As with most amphibians, Iberian ribbed newts are fragile animals, and handling should be done carefully or avoided and kept to a minimum whenever possible. While these newts can eject their lateral tubercles in defense, these spined ribs are not toxic or otherwise overly dangerous to humans. Ideally, an aquarium net of appropriate size can be used to move aquatic caudates whenever necessary. All amphibians breathe and respire through their skin, as well as absorb water through this means. It is therefore important to avoid wearing any chemicals or lotions on your hands, which can be potentially harmful or even fatal to amphibians. It is also important to wash or rinse hands thoroughly, and ensure they are adequately moistened before and after handling any amphibians in order to prevent them from drying out.
Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens

Contact

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