

Amphibian Eggs

Species: *pipiens*

Genus: *Rana*

Family: Ranidae

Order: Anura

Class: Sacropterygii

Phylum: Chordata

Kingdom: Animalia

Genus and species may vary.



Conditions for Customer Ownership (per USDA Permits)

We hold permits allowing us to transport these organisms. To access permit conditions, [click here](#).

Never purchase living specimens without having a disposition strategy in place.

A USDA permit is required to ship all vertebrates to Ohio. This organism must be housed in an escape-proof habitat. In order to protect our environment, never release a live laboratory organism into the wild.

Primary Hazard Considerations

- Always wash your hands thoroughly before and after handling frogs, for your protection and theirs. Chemicals and toxins can be absorbed through their skin and can poison your frog.

Availability

- Grass frog eggs are available April and May.

How Will Animals Arrive and Immediate Requirements

- Your frog eggs will arrive in a 16 oz. jar with water.
- Unpack the eggs immediately upon arrival; open the containers and allow eggs to gradually come to ambient temperature. They should be placed in the coolest part of your lab or classroom, away from heaters and sunlit windows. The eggs can be introduced to your containers (aquaria or culture dishes) within several hours. Note: It is important that the eggs be placed in fresh water as soon as possible.
- Eggs are black and white.

Captive Care

Habitat:

- If you wish to develop the entire mass, rather than study development of the eggs in culture bowls, we recommend placing the eggs in a clean aquarium which has a gravel bottom and growing plants to which the developing tadpoles can cling. Siphon filters should not be used as the small tadpoles may get sucked into the filter tube. Use a pair of gently bubbling air stones to aerate the water.
- Avoid rapid temperature changes. Cooler temperatures suppress development, and development will be more synchronous.
- Raising Tadpoles: About 3 –5 days after hatching, the tadpoles are ready to feed. They should be placed in an aquarium filled with fresh pond water or tap water that has been standing overnight (to dechlorinate). Place an air stone in the water and keep the [air pump](#) constantly running. The number of tadpoles per liter of water may be as high as 100 immediately after hatching. As metamorphosis approaches (2 –3 months), the number must be gradually reduced to about five tadpoles per liter of water.
- As metamorphosis proceeds, a provision must be made so that the young frogs (now air-breathing) may climb from the water. This occurs very shortly after the front legs erupt from under skin flaps that have been concealing them during their development.

Care:

- Feeding Tadpoles: Since tadpoles are omnivorous, many types of food have proved suitable. Prepared fish food works well, as does ground dry dog food, mashed hardboiled egg, chopped liver (raw or cooked), and boiled lettuce leaves. The diet should be varied from time to time. Only those foods which the tadpoles readily consume should be given. As with any aquarium set-up, overfeeding must always be avoided. If the normally clear water starts to turn cloudy, the tadpoles are either being overfed or have not consumed the particular type of food they are being fed. This is a dangerous condition. If this happens, do a partial water change and add dechlorinated tap water to replace the water that was removed. Be sure that the food given is being eaten and use only that amount of food which can be consumed in a short time.
- After the tadpoles metamorphose into air-breathing young frogs, they will be strictly carnivorous.
- Please see Grass Frog literature for information on how to care for your young frogs.

Life Cycle

- Mating occurs from March to June, but peaks in April. Females lay from 300 to 6,500 eggs in globular clusters in breeding ponds. After metamorphosis, sexual maturity is reached in 1 to 3 years, depending on conditions.
 - **Egg:** When laid, 1.7 mm; in water, 5 mm.
 - **Tadpole:** Hatches after 1-3 weeks..
 - **Froglet:** Metamorphosis occurs after 70-110 days as a tadpole.
- Grass frogs can live up to 9 years in the wild, but most do not survive this long.

Wild Habitat

- Grass frogs are found in marshlands, brush lands, and forests. They are well-adapted to cold and can be found at elevations up to 3,350 meters. Grass frogs are found throughout much of North America.
- Predators of grass frogs include fish, herons, other frogs, snakes, raccoons, mink, and otters. Grass frog eggs are preyed on by leeches, newts, and turtles. Tadpoles are preyed on by insects and many of the same animals that predate upon adult frogs.

Special Notes

- Grass frogs are used as test subjects in many biomedical research projects, both as adults and as tadpoles.
- Grass frogs are also known as leopard frogs.

Disposition

- We do not recommend releasing any laboratory animal into the wild. As a laboratory animal, it has not encountered or learned wild survival skills and is therefore likely to come to an inhumane end.
- Adoption is the preferred disposition for a vertebrate.
- If the animal cannot be adopted by a capable owner, it may be surrendered to your local humane society.
- If the animal must be euthanized, we recommend consulting the AVMA guidelines on euthanasia ([American Veterinary Medical Association, http://www.avma.org/issues/animal_welfare/euthanasia.pdf](http://www.avma.org/issues/animal_welfare/euthanasia.pdf)). According to these guidelines, acceptable methods of euthanasia for an amphibian include exposure to CO₂ at >60% or treatment with tricaine methane sulfonate (also known as TMS, MS-222 and Biocalm [947-2100](#)). TMS is an anesthetizing agent that will cause fish and amphibian death due to central nervous system depression and hypoxia with overexposure. Wear personal protective equipment (gloves, safety glasses, lab coat) when handling this substance. The fish or amphibian is placed in a solution of 5 g per 5 gallons of water for 30 minutes or until all motion has ceased. To make sure the animal is dead, check for reflexive movement when the eye is touched. If movement occurs, replace the animal in the TMS solution for another 30 minutes.
- A deceased specimen should be disposed of as soon as possible. Consult your school's recommended procedures for disposal. In general, a dead vertebrate should be handled with gloves, and wrapped in an absorbent material (e.g., newspaper), wrapped again in an opaque plastic bag, then placed inside a opaque plastic bag that is sealed (tied tightly) before being placed in a general garbage container away from students.