



## Northern Green Frog

Kingdom: Animalia  
 Phylum: Chordata  
 Subphylum: Vertebrata  
 Class: Amphibia  
 Order: Anura  
 Family: Ranidae  
 Genus: *Rana*  
 Species: *clamitans melanota*



Photo courtesy of Janet Wisneski

### Habitat

- **In the Wild:** Northern green frogs are native to North America. Their range covers the Maritime Provinces in eastern Canada and most of the eastern United States. In the U.S., green frogs occur almost everywhere east of a line drawn from central Minnesota south through central Iowa, southeast through Missouri, and south through central Oklahoma and eastern Texas. Northern green frogs are found in most permanent aquatic habitats, such as springs, swamps, streams, and edges of ponds and lakes.
- **Exhibit Location:** USS Antiquities

### Characteristics

- Northern green frogs are between 2 1/8 to 3 1/2 inches in size.
- They look similar to small bullfrogs, with two parallel ridges or folds along their backs, as well as to bronze frogs (*Rana clamitans clamitans*), the second of two *Rana clamitans* subspecies.
- Northern green frogs range in color from green or brown to olive-brown, with a white underside and darker spots/lines where belly meets the green/brown side. Males typically have bright yellow throats.
- **Lifespan: In the Wild** Unknown; **In Captivity** Up to 10 years

### Behaviors

- Northern green frogs are primarily nocturnal, but are also sometimes active during the day.
- During non-breeding, green frogs are solitary.
- Males are territorial during the breeding season, and defend their territories using vocalizations, posturing, and physical combat.
- Green frogs produce as many as 6 different calls. Males trying to attract a mate start calling at the beginning of May and continue into August. The call is a single, 1 syllable “gungk”, often described as the sound made by plucking a loose banjo string.
- Northern green frogs have excellent vision and hearing. Their eyes bulge out giving them a wide range of vision that helps in catching prey, and their large external eardrums are sensitive.
- **Enrichments at the Zoo:** live food

### Reproduction

- Northern green frogs usually mate first between the ages of 1 and 2 years.
- The mating period extends from early spring to late August, with intense periods during May and June.
- Female green frogs choose their mates based on the desirability of the males’ territories for egg laying.
- Females lay clutches of about 3,000 eggs in a filmy or foamy clump (<12 inches in diameter) that floats on the water's surface. Eggs are usually deposited in shallow water among emergent vegetation.
- Eggs hatch 3-7 days after they are laid. Tadpoles are dark brown or gray, with some darker spots.
- It can take tadpoles anywhere from 3-22 months to begin metamorphosis, or transformation, into full grown frogs. Some undergo this transition before the winter, but many tadpoles go into hibernation and wait until the spring to transform.

- During metamorphosis the tadpole develops hind legs first, absorbs its tail, then loses gills and begins to form lungs and other internal organs. The tadpole's mouth, adapted for consuming algae, begins to develop a sticky, projecting tongue for catching insects.

### **Diet**

- **In the Wild:** insects, mollusks, crustaceans, fish, other frogs, vegetable matter, and shed skins; juveniles eat plant matter in water
- **At the Zoo:** crickets, wax moth larvae

### **Conservation Status**

- **IUCN status:** Least Concern; **CITES Appendix:** not listed
- Northern green frog populations are considered abundant and stable.
- Some populations are threatened locally by habitat loss and/or degradation, particularly by shoreline development. Frogs are also very sensitive to toxins and pollutants.
- Northern green frogs have different predators during the different life cycles. *Eggs* are eaten by turtles. *Tadpoles* are eaten by aquatic insects, fish and birds. *Adult green frogs* are preyed upon by birds such as ducks, herons and crows as well as other frogs and snakes. People catch green frogs for food and sport.

### **Did You Know?/Fun Facts**

- The northern green frog is one of over 5,200 species of frogs that have been identified.
- Frogs are important bioindicators, which means that the abundance and health of a given frog species can indicate or predict the status of the ecosystem it lives in.
- Adult frogs breathe on land with their lungs, but oxygen also enters through their thin skin, which is netted with a system of blood vessels. Underwater frogs breathe only through the skin.

### **Sources:**

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