# **American Bullfrog**



#### Habitat

Prefers ponds, lakes, and slow-moving streams large enough to avoid crowding and with sufficient vegetation to provide easy cover.

#### Rana catesbeiana

It is the largest frog in the U.S., green to yellow above with random mottling of darker gray. Large tympanic membrane; hind feet webbed. Belly cream to white.

## Activity

Breeds from February to October. Tadpoles can take almost two years to transform.

#### Discussion

Eat small birds, snakes, insects, crayfish, frogs, and fish.

#### Call



Deep-pitched jug o'rum.

# **Green Frog**



#### Habitat

Lives close to shallow water, springs, swamps, brooks, and edges of ponds and lakes. May be found among rotting debris of fallen trees.

#### Rana clamitans

Green, bronze, or brown frog; large tympanic membrane and prominent dorsolateral ridges that don't meet the groin. Typically green upper lip. Belly white with a darker pattern of lines & spots.

## Activity

Breeds from March to August.

#### Discussion

Primarily nocturnal. Seldom try to escape when caught.

#### Call



Like the twang of a loose banjo string, usually given as a single not, but sometimes repeated rapidly several times.

# Pickerel Frog



## Rana palustris

Smooth-skinned, tan with parallel rows of dark squarish blotches running down back. Jaw has light stripe. Dorsolateral folds yellow. Belly and under surfaces of hind legs are bright yellow to orange.

#### Habitat

Slow-moving water and other damp areas, preferably with low, dense vegetation, streams, swamps, and meadows.

## Activity

Breeds from March to May.

#### Discussion

Nocturnal. An irritating skin secretion makes this frog unappetizing to predators. Hibernate from Oct. - March.

#### Call



Steady low croak. May call in a rolling snore while under water.

# Southern Leopard Frog



## Rana sphenocephala

Slender and narrow-headed; green to brown, with large dark spots between light-colored dorsolateral ridges - continuous to the groin. Light stripe along the upper jaw. Light spot in the center of the tympanic membrane.

#### Habitat

Any freshwater location. Wanders among moist vegetation in the summer return to freshwater ponds and streams to brackish marshes the rest of the year.

## **Activity**

Breeds year-round.

#### Discussion

Primarily nocturnal. Hides in grass or sedges during the day. Dives into water to hide from predators.

#### Call



Series of short throaty croaks. Males will call while afloat or from land.

# Cope's Gray Treefrog



#### Habitat

Trees and shrubs growing in or near permanent water.

## Hyla chrysoscelis

Skin rough/ greenish or brownish to gray with several large dark blotches on the back. Dark-edged light spot beneath the eye. Under surfaces of thighs bright yellow-orange. Large toe pads.

## Activity

Breeds April to August.

#### Discussion

Nearly identical to common gray treefrog. Nocturnal. Live high in trees and descend only at night to chorus and breed.

#### Call



A hearty, resonating trill, usually heard in spring and early summer.

# **Green Treefrog**



#### Habitat

Trees and shrubs growing in or near permanent water. During the day frequently found asleep on the underside of large leaves on in other moist, shady places.

## Hyla cincerea

Bright green, yellow, or greenish-gray. Has sharply defined light strip along upper jaw and side of body. Side stripe sometimes absent. Sometimes has tiny, black-edged gold spots on back. Large toe pads.

## Activity

Breeds March to October.

#### Discussion

Prefers to walk rather than jump. Fleeing a predator, it takes gangly leaps into space.

#### Call



Cowbell-like when heard at a distance. Nearer sounds like *quank, quank*. Males call while clinging to vertical stems 1-2' above the water.

# Spring Peeper



## Pseudacris crucifer

Tan to brown to gray with a characteristic dark X on the back. Large toe pads.

#### Habitat

Wooded areas in or near permanent or temporarily flooded ponds or swamps.

## Activity

Breeds November to March.

## Discussion

Nocturnal. Its chorus is among the first signs of spring. Peepers hibernate under logs and loose bark.

### Call



High-pitched peep repeated over and over. Chorus sounds like the jingle of bells.

# **Upland Chorus Frog**



## Pseudacris feriarum

Brown or gray, with a light line across the upper lip. Dark lateral stripe running through the eye.

#### Habitat

Found throughout throughout the Piedmont in grassy areas, woodlands, wetlands, and bogs.

## **Activity**

Breeds from February to March.

#### Discussion

Adults congregate and call from wetlands, ditches, and slow-moving creeks. Larvae take 2-3 months to complete metamorphosis.

#### Call



The call sounds like a comb when a finger runs down the bristles.

# Northern Cricket Frog



## Acris crepitans

Corloration can vary but has distinct warts. Most have brown, orange, or green stripe down the center of their back. Triangular marking on top of the head.

## Habitat

Found in almost any moist habitat. The most common are along the edges of permanent ponds, lakes, and slow-moving streams. Prefer open, shallow water with much vegetation.

## Activity

Breeds from April to August.

#### Discussion

Do not climb well and are not found high in trees.

#### Call



Repeated, sharp *click* sounds, like two marbles being tapped together.

# **American Toad**



## Habitat

Occupy a variety of terrestrial habitats, including wooded areas, open fields and pastures, and suburban and agricultural areas.

## Bufo americanus

Individuals can range from brown to reddish to olive, tan, or grayish. Dark splotches are sometimes present. Very warty - 1-2 warts per black spot. Postorbital ridges are completely separated from parotid glands.

## Activity

Breeds from January to June.

#### Discussion

Can identify males by a black chin patch.

### Call



High-pitched trill lasting up to 30 seconds.

# Fowler's Toad



## Bufo fowleri

Various shades of brown to gray, to greenish or reddish. Large dark spots with 2-3 warts. Faint white strip usually extends down the center of the back. Cranial crests form a ridge above each eye, touching parotid glands.

#### Habitat

Most habitats include low-elevation mountainous areas, woods, fields, and urban and agricultural areas.

## Activity

Breeds from March to July.

#### Discussion

Can identify males by a black chin patch.

#### Call



1-4 second waaah that is described as a "weird, wailing scream."

## **Eastern Narrow-mouthed Toad**



## Habitat

Can be found in a wide variety of soil types (sand & organic soils) and forest types (pine & hardwood). Can occur in moderately urbanized areas as long as it is moist and there is leaf litter, logs, rocks, or other ground cover.

#### Gastrophryne carolinensis

Pear-shaped body with a pointed nose. Skin is granular and mottled on the underside. Skin fold is found at the back of the head. Color varies from light/dark gray and brown to brownish-yellow/reddish.

## Activity

Breeds from March to October.

#### Discussion

Rarely seen above ground during the day except while calling during warm rains. Forage at night. Abundant during breeding after rains.

#### Call



Whining baaaa that resembles the bleating of a lamb.

# Eastern Spadefoot Toad



#### Habitat

Occupy a variety of upland pine and hardwood forests and bottomlands, agricultural fields and pastures, and open parks in urban areas. They need soft loam or sandy soils for burrowing.

#### Scaphinopus holbrookii

Skin is brown, olive-gray, or black with yellow markings shaped like reverse parentheses that extend the length of the body. Yellow markings may be on the sides. Belly is white or gray. Sharp, dark, elongated spade on the inside of each hind foot.

## Activity

Breeds any time during warm weather.

#### Discussion

Secretive. Can go many weeks without feeding, while staying in burrow.

Nocturnal.

#### Call



Deep, short croak that has been described as a "vomit sound." The explosive *eeehhh* or *wonk* lasts 3-4 seconds.

## Southern Two-lined Salamander



Habitat

Occupy small streams or seepages surrounded by forest habitat. Can occur in urban and suburban streams if rocks and hiding places are abundant.

## Eurycea cirrigera

Usually less than 4". Yellow to brownishyellow with black or dark brown lines that run down the sides. Belly is translucent and plain yellow.

## **Activity**

Breeds most prevalently in March and April. Can be active anytime if habitat, rainfall, and temperature are ideal.

## Discussion

Juveniles and adults spend most of their lives in wooded habitats away from water under moist ground cover/in burrows, moving to streams/pools for mating.



#### Conservation

Local populations are susceptible to excessive stream pollution, heavy siltation, or degradation of terrestrial lanscapes.

## Three-lined Salamander



Habitat

Occur in seepages, stream edges, and river floodplains and swamps. Can also be found in crevices of rock outcrops. Do not go far from aquatic breeding sites. Require moist ground litter, logs and dead bark or rocks.

### Eurycea guttolineata

Body is usually yellow but can be tan, brownish, or orange. Broad, distinct dark brown or black line runs the length of the body and tail on each side. Dark line that may be broken or weakly defined that extends down the center of the upper body from the base of the head to the base of the tail.

## Activity

Very little is known about breeding. Eggs are laid in late fall or winter.

## Discussion

Nocturnal. Active, especially during rain. Otherwise, they hide under ground litter/logs.



#### Conservation

Local populations are susceptible to clearing of bottomland hardwood forests, siltation, and pollution.

## Seal Salamander



#### Habitat

Occur in many cool freshwater streams with well-aerated water in hardwood forest streams with gravel bottoms are preferred over silted-bottom streams.

#### Desmognathus monticola

Stout-bodied, pop-eyed, with a flattened tail that has a sharply defined keel on the last 2/3. Brown to dark gray body has a bold pattern of black or brown markings (net-like or in circles). Belly is plain or grayish cream.

## Activity

Breeds in spring and fall. Eggs hatch in late summer to early fall. Larvae overwinter in the stream.

## Discussion

Adults emerge from water at night and sit on the rocks they hide under to wait for prey. Adults are cannibalistic. Forage a short distance into forests adjacent to streams.



#### Conservation

Acid rain, clear-cutting, and overcollection of this salamander as fish bait has caused a decline of the species

# Spotted Dusky Salamander



#### Habitat

Prefer cool, well-oxygenated streams and seepages.

### Desmognathus conati

Medium-sized (5.5") and thick-bodied with rear legs larger than front. Base of the tail is taller than wide, and the remainder is triangular in cross-section and keel along the top edge. Prominent eye-to-jaw stripe in all but the old. Bold markings on the back and spots may be red to golden.

## **Activity**

Mating occurs in spring and fall; some females don't lay eggs until May or July. Larvae hatch in 2 months.

#### Discussion

Spring through fall, they hide during the day under leaf litter, rocks, and logs in seeps/stream margins and forage/move at night.

#### Conservation



Susceptible to deforestation and loss of wetlands, acid rain, heavy metals, environmental contaminants, and introduced fish.

# Northern Slimy Salamander



### Plethodon glutinosus

Body is black to bluish-black and up to 8" in length. Most have white or brassy flecks on the back and uniformly dark belly.

#### Habitat

Occur in various habitats, including mature hardwood forests, ravines, cove forests, old pine stands, and river floodplains. Hide under rocks, logs, slabs of tree trunks, or back, and leaf litter.

## **Activity**

Mating occurs in spring; females lay eggs July-August in a small cavity underground or under rocks/logs. Juveniles hatch September-October.

#### Discussion

Can be active year-round given appropriate temperatures and rainfall. Otherwise, they will be in burrows and root tunnels. Typically, forage in the first few hours after sunset.



#### Conservation

Conversion of habitats to agriculture, roads, pine monocultures, and urban areas have harmed populations.

## Southern Red-backed Salamander



#### Habitat

Occurs in wide variety of habitats with one or more hardwood species and abundant ground cover (logs, rocks, and leaf litter).

#### Plethodon serratus

Red-back Phase: reddish to orangish or rarely gray stripe down the middle of the back and tail. Lead-back Phase: brownish back; sides and belly have scattered red spots. Both have rounded tail.

## Activity

Mating begins in winter. females lay eggs underground in June/July. Eggs hatch in Agust/September

## Discussion

Stay in very small areas their entire lives. May-Sept. mostly stay underground as it's too dry. Juveniles can be found in Oct. Adults can be found at the beginning of Nov.



#### Conservation

Susceptible to timber harvested for roads, fields, or urban development.

## Spotted Salamander



#### Habitat

Live primarily in hardwood and mixed deciduous forest habitats and mesic floodplains if forest cover is present. WEtlands and upland terrestrial habitats are essential for the survival of this salamander.

### Ambystoma maculatum

large and thick with a black body and distinct yellow or orange spots on the body head, and tail. Belly is uniformly dark gray.

## Activity

Breeds in late winter/early spring rains. Eggs hatch in 1-3 weeks. The larval period lasts about 3 months.

## Discussion

Adults and juveniles hibernate in burrows in the forest and may move below the frost line in winter to avoid freezing. They can be found under logs and other objects after rains.





Susceptible to deforestation and loss of wetlands, acid rain, heavy metals, environmental containments, and introduced fish.

## Marbled Salamander



Habitat

Terrestrial adults and juveniles live underneath leaf litter and small mammal burrows in mature deciduous forests, mixed hardwoods, pine stands, flood plains, and uplands. Females lay eggs under cover objects in dry basins of temporary, fish-free wetlands.

### Ambystoma opacum

Medium-sized and chunky build. Black ground color overlaid with white or light gray crossbands with black belly.

## Activity

Mating occurs in fall on land

## Discussion

Often inactive in summer when it is hot/dry.



#### Conservation

Loss of bottomland hardwoods and associated wetland habitats poses the greatest risk.

## Mole Salamander



#### Ambystoma talpoideum

Chunky with a large, wide head and large feet; tail is short for their size. Skin is light brown, various shades of gray or nearly black with light gray specks on back sides and tail.

#### Habitat

Occur in hardwood forests and mixed hardwoods around pools, ditches, and other ponds. Breeding ponds usually lack fish and dry up in summer.

## Activity

Migrate to breeding ponds during nighttime rains from November to January and then mate.

## Discussion

Adults remain underground or underground litter when not in breeding ponds. Neotic individuals will remain in ponds year-round if water remains.



#### Conservation

Susceptible to urban sprawl, agricultural practices, deforestation, and changes in landscape hydrology.

## Red Salamander



Habitat

Occur in cool streams, springs, and caves. Tends to avoid streams with fish and are abundant in headwater streams/seepages. Hide under rocks/debris in streams.

#### Pseudotriton ruber

Thick bodied with thick tail. Can get up to 6". Body and tail are red but can range from deep or bright red to orangish, purplish, or brownish. Black spotting is present on most. Belly is pink to red and usually has spots. Irises are yellow.

## Activity

Reproduction takes place in water. Mating in fall & spring, sometimes winter. Eggs laid in late spring/summer, hatching summer/fall.

## Discussion

Nocturnal. Move into forested habitats on rainy nights, riding under leaf litter.



#### Conservation

Susceptible to siltation caused by deforestation, urbanization, agricultural activities and construction.

## **Mud Salamander**



Occupy wet areas with sphagnum moss and decaying leaf layers in hardwood forests. Water sources include seepages, small streams, and floodplain

#### Pseudotriton montanus

Thick-bodied with a blunt head. Can get up to 8". Color ranges from bright red or pinkish to reddish brown. Has well-defined, round black spots on body and tail; spots can be fewer or absent. Irises are brown.

## Activity

Mate in late summer/fall. Lay eggs by December/January that hatch by February or March.

## Discussion

Usually stay hidden, burrowing in muddy areas or under ground cover.



swamps.

#### Conservation

Susceptible to habitat degradation affecting stream systems and seepages.

# Red-spotted Newt



## Habitat

Aquatic adults: live in freshwater temporary and permanent ponds, lakes, ditches, swamps, reservoirs, canals, and slow-moving streams, especially with lots of vegetation. Terrestrial juveniles (efts): hardwood forests, fields, and pine forests.

### Notopthalmus viridescens

Adults are brown, greenish-brown, yellowish-brown, olive green, or nearly black with distinct red spots on the back borded with black. Black line runs horizontally through each eye. Normally aquatic. Juvenile terrestrial stage (eft): bright to orangish red with same red spots.

## Activity

Mate in late summer/fall. Lay eggs by December-January that hatch by February-March.

## Discussion

Secrete toxins from skin glands at all stages, although most toxic at eft stage. Toxins makes them unpalatable.



#### Conservation

Susceptible to habitat degradation affecting stream systems and seepages.

## Four-toed Salamander



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Prefer hardwood forests surrounding swamps, freshwater marshes, isolated woodland pools, and other shallow wetlands without fish. Remain hidden under ground cover (rocks, logs, moss).

### Hemidactylim scutatum

Four toes on each rear foot. Usually reddish to rusty brown on head, body, and tail with irregular black spots. Sides have gray pigment. Cream to white belly with black spots. Noticeable constriction at base of fragile tail.

## Activity

Mate on land in fall/early winter. Lay eggs in late winter/early spring in wetlands.

## Discussion

Remain hidden unless moving for reproduction. Has not been seen in Cobb County in over 20 years.



#### Conservation

Susceptible to loss of wetland breeding sites and hardwood forest surrounding them, and commercial moss collection

# Spring Salamander



#### Habitat

Occur in cool streams, springs, and caves. Tends to avoid streams with fish and are abundant in headwater streams/seepages. Hide under rocks/debris in streams.

### Gyrnophilus porphyriticus

Thick-bodied with irregular black streaks/spots on a salmon to yellowish brown to reddish-orange body. Light white to yellow line usually bordered by gray to black extends from the eye to tip of broad snout on either side of head. Belly is pinkish and unmarked. Tail is flattened.

## Activity

Reproduction takes place in water. Mating in fall/spring, & sometimes winter. Eggs laid in late spring/summer, hatching summer/fall.

## Discussion

Nocturnal. Move into forested habitats on rainy nights, hiding under leaf litter.



#### Conservation

Susceptible to siltation caused by deforestation, urbanization, agricultural activities, and construction.