



Frogs and Toads of Pennsylvania



NORTHERN SPRING PEEPER



NORTHERN LEOPARD FROG



WOOD FROG



BULLFROG

Other Pennsylvania species to see:

- FROGS**
 Northern Cricket Frog
 Eastern Gray Treefrog
 Mountain Chorus Frog
 Western Chorus Frog
 Northern Green Frog
 Pickerel Frog

- TOADS**
 Eastern Spadefoot Toad
 Fowler's Toad



EASTERN AMERICAN TOAD

Want to know more about these Pennsylvania amphibians? Check out these PFBC resources:

PUBLICATIONS:
Pennsylvania Amphibians & Reptiles
Seeing Spots: The Northern Leopard Frog

NON-GAME SPECIES PATCH:
 1999: Northern Leopard Frog

WALL CHART:
Frogs and Toads of Pennsylvania



Eastern Spadefoot Toad

Scaphiopus holbrookii holbrookii

Identification: The primary key to identifying the eastern spadefoot toad is the hard sickle-shaped spade on each hind foot. This horny, sharp-edged tubercle can be found at the base of the shortest toe; there is only one spade. On the true toads, each foot has two enlarged tubercles, only one of which is sometimes hardened and spade-like. Also, unlike true toads, the spadefoot toad has teeth on the upper jaw.

The skin of the spadefoot toad is relatively smooth and covered on the back and sides with tiny, scattered tubercles. The body color can range through various shades of brown to yellowish or grayish to nearly black. The lighter shades frequently are mottled with darker pigments. There may be two light lines starting at the eye and continuing down the back. These lines, if present, are irregularly shaped and yellowish. Sometimes a light line also runs along each side of the body. The underside of the eastern spadefoot is white to grayish and unmarked.

The tympanum, or external eardrum, is distinct and obvious. The parotoid glands, on the other hand, are inconspicuous and appear to be absent. The eyes are prominent, elevated well above the upper surface of the head; the iris is golden. The pupil is black and vertically shaped, not horizontal, as in the case of the toads.

Range: In Pennsylvania, the eastern spadefoot toad resides in a split range. Populations are found in southcentral Pennsylvania in the Susquehanna River Valley from the Maryland border to the northcentral part of the state. The range becomes more narrow as it moves northward. The spadefoot also occurs along the extreme eastern edge of the state, beginning in the southeast corner where it follows the Delaware River Valley north to Monroe County.

Eastern American Toad

Bufo americanus americanus

Identification: Various patterns or patches in light colors, usually buff or yellowish, mark the eastern American toad. These patterns occur over a background color that usually is brown, but that also can be olive to brick red. In some specimens, a light stripe runs down the center of the back. The forward part of the belly, or abdomen, and the chest are spotted, compared to the plain underparts on Fowler's toad. Dark spots in brown or black range over the back. Each of these larger spots contains only one or two warts; Fowler's has three warts in each. These warts

are red, yellow, orange or sometimes dark brown. The warts on each thigh are enlarged, bigger than on Fowler's toad. The parotoid gland (located behind the eye) is more kidney-shaped than the elongated gland of the Fowler's toad. On the eastern American toad, this gland does not touch the cranial crest (a bony ridge) behind the eye, or if it does, it is connected only with a slight spur. On the other hand, the gland on Fowler's toad comes in direct and full contact with this crest.

The eyes of the eastern American toad are elevated well above the head. The pupils are horizontally shaped and black; the iris is golden on this toad, compared to Fowler's bright yellow.

Range: Distributed statewide in Pennsylvania, the eastern American toad is a wide-ranging amphibian residing east of the Rocky Mountains.

Fowler's Toad

Bufo woodhousii fowleri

Identification: The skin of Fowler's toad is dry, a common trait among toads. Its general coloration is brown or gray with an occasional greenish specimen showing up in the population. A light, nearly white stripe runs down the middle of the back. Large dark spots or blotches, more or less arranged in pairs, cover the back. Each of the largest spots contains at least three warts. On the underside of this toad, the belly is white and unmarked although a dark spot sometimes is found on the chest. Warts cover the thighs, but they are small compared to those found on the eastern American toad.

The parotoid, or shoulder, glands are elongated (compared to kidney-shaped ones on the American toad). They come in contact with the cranial crests just behind each eye. The throat of the male is black; the female's throat is a very light shade. The underside of each hind foot of the Fowler's toad bears two tubercles. These tubercles should not be confused with the single, stiff spade protruding from each hind foot of the spadefoot toad. The eyes of the Fowler's toad have horizontally oval pupils with bright-yellow irises.

Range: Except for populations in the Lake Erie Watershed in the northwest, Fowler's toad in Pennsylvania is restricted to the southern two-thirds of the state.

Northern Cricket Frog

Acris crepitans crepitans

Identification: The skin of the northern cricket frog is rough and warty. The ground color is usually gray, accented with darker stripes that run down each side of the back. The dark triangular patch located between the eyes is a major identifying mark.

A dark stripe, usually with an irregular edge, runs along the rear portion of the thigh, and also helps identify this species. The legs of the northern cricket frog are short with extensive webbing on the hind feet. The toe discs also can help sort this frog from other treefrogs and chorus frogs. The head is slightly rounded, almost blunt; the pupils of the eyes are horizontal.

Range: The northern cricket frog occupies a little less than one-fourth of the state. Found in the

southeast corner, its range falls within an arc beginning in Franklin County, then curving north and east to the southern edge of the Pocono Mountains.

Northern Spring Peeper

Hyla crucifer crucifer

Identification: The most recognizable feature identifying the northern spring peeper is the large, dark, irregularly X-shaped mark in the middle of the back. A dark, modified V appears between the eyes, and the legs are barred with a dark color. The slender body is tan to light brown or grayish on the upper surface; the belly is light, becoming yellowish toward the rear but otherwise is unmarked.

The feet are moderately webbed and end in toes with the large, sticky pads characteristic of treefrogs.

Range: Each of Pennsylvania's counties has populations of the northern spring peeper, available to signal the start of the spring season.

Eastern Gray Treefrog

Hyla versicolor versicolor

Identification: The eastern gray treefrog is greenish to brownish or, perhaps more often, grayish. The back is marked down the center with an irregularly outlined blotch; it stands out dark and large. The thighs of the hind legs are a bright yellow-orange on their insides and undersides, areas usually concealed from view. A light spot, edged in a darker color, appears below each eye. The eyes have shiny black pupils with gray-green irises criss-crossed by a network of fine black lines.

The eastern gray treefrog has a blunt snout resembling a toad, but it has the narrow waist and long legs of a frog. Its toes end in large pads or discs. These discs are adhesive on their lower surfaces to aid in climbing. The skin of the eastern gray treefrog is rough and the back is covered with numerous warts, although they are not as prominent as those on toads.

Range: The eastern gray treefrog is believed to be distributed statewide in Pennsylvania, missing perhaps from the Allegheny Mountains where documented sightings are sketchy at best.

Mountain Chorus Frog

Pseudacris brachyphona

Identification: The small mountain chorus frog is light brown to green with some overtones of gray. The belly and undersides of the legs are yellowish. A key mark in identifying the mountain chorus frog is the pair of dark stripes on the back. These two stripes run lengthwise and curve inward and toward each other. The effect is two crescent-shaped marks that sometimes touch each other near their centers to form a crude "X."

A dark, broad, lateral stripe traverses each eye, beginning near the tip of the snout and ending a short distance behind the eye. The area on top of the head between the eyes is accented with a dark, modified triangle. The upper lip is margined with a white line. The toes are slightly webbed and have small, round tips that are miniaturized discs compared to other treefrogs. The

smaller discs, or pads, prohibit this amphibian from reaching heights equal to the peeper or eastern gray treefrog.

Range: Pennsylvania marks the northernmost extremity of the mountain chorus frog's range. It ranges west of the Allegheny Mountains in counties in the southwestern corner of the state.

Western Chorus Frog

Pseudacris triseriata

Identification: The smooth skin of the western chorus frog can be greenish gray to light brown or tan. The belly is off-white and usually plain, showing a lack of any markings. Three stripes, a gray or brown darker than the body color, divide the back. Another dark stripe begins on each side near the nostril, runs backward through the eye, along the side, and ends near the groin. A narrow, white band outlines the upper lip.

Range: In Pennsylvania the western chorus frog is restricted to the area west of the Allegheny Mountains. It appears in the counties situated between the mountain ridges and the Ohio state line.

Bullfrog

Rana catesbeiana

Identification: The body of the bullfrog is broad and full. In a crouched position, the body is nearly parallel to the ground, rather than in the more-or-less upright position assumed by most other frogs. The head is broad and flat with large, protruding—almost bulbous—eyes. There is no outer ear as we know it in most mammals, which is typical of the frogs and toads. However, the external eardrum is present and is flush with the surface of the head; on the male adult bullfrog, the diameter of the eardrum is larger than the eye. In the bullfrog, the folds of skin, referred to as dorsolateral ridges, begin at the eye, run around the eardrum and down to the forelegs. Its legs are long and well-muscled, suited to providing powerful swimming strokes. Except for the last joint of the longest (fourth) toe, the hind feet are fully webbed, which also aids its underwater mobility.

The bullfrog is green to yellowish above with a random mottling of dark gray. The belly is cream to white and also may be mottled with gray. The throat of the male, especially, may have a mottling of gray or yellow. The legs are often spotted or marked with dark bars.

Range: The bullfrog is a statewide resident with populations in many of Pennsylvania's rivers and streams and hundreds of lakes and ponds. At one time, the Pennsylvania Fish and Boat Commission raised and planted bullfrogs throughout the state, and this may account, in part at least, for the bullfrog's widespread distribution.

Northern Green Frog

Rana clamitans melanota

Identification: The green frog appears in an assortment of colors and patterns. It may be a brilliant metallic green, or vary from greenish brown, or brownish to tan. Dark-brown or gray

spots, some large enough to be called blotches, appear on the back, frequently in large numbers. The head and upper lip are green, which is especially noticeable in the adult male. A yellowish band runs along the jaw to the shoulders. The belly is white with dark lines or spots under the legs. The throat of the male is yellow, often brilliantly colored; the throat of the female is white with dark spots. Close examination of the eyes reveals a black, oval pupil with a gold iris.

The forward part of the head ends in a blunted point. The external eardrum is large, and on the male, bigger in diameter than the eye. The tympanum is flat, brown and covered with a thin, moist layer of skin.

Folds of skin, called dorsolateral ridges, help separate the green frog from the bullfrog. In the green frog, these folds extend from above the eardrum along the back; in the bullfrog they do not. Unlike many frogs, however, the folds on the green frog do not extend all the way back to the groin, but stop about midway along each side.

Range: The green frog is distributed statewide and is found in all Pennsylvania counties, many with abundant populations.

Pickerel Frog

Rana palustris

Identification: The pickerel frog is a spotted frog similar in appearance to the leopard frog, but with distinctly different markings. The pickerel frog has two rows of squarish spots down the back, but the leopard frog's spots are rounded and usually not in rows as well-defined as are those on the pickerel frog. Also, the leopard frog's wide head is more blunt than the pickerel's somewhat pointed snout.

The skin of the pickerel frog is smooth with an almost metallic-like lustre. The background color is tan or a light grayish to light brown. The two rows of parallel spots of blotches down the back are contained between the dorsolateral folds. The spots are squarish and although irregularly shaped with uneven lines, clearly are not round. They are black to dark brownish or reddish brown. Small, square-like spots also appear on the sides of the pickerel frog. The belly is whitish up front, becoming bright yellow to orange toward the rear. Dark bars mark the upper surface of the hind legs, which are bright yellow to orange underneath. The leg markings also help distinguish this frog from the leopard frog. The folds of skin, the dorsolateral ridges, are prominent and extend to the groin. They are yellowish or creamy to a golden color. A light streak outlines the upper lip or jaw.

Range: In Pennsylvania, each of the 67 counties has its share of pickerel frogs.

Northern Leopard Frog

Rana pipiens

Identification: The leopard frog is slender with relatively smooth skin, although small tubercles cover much of the body. The head is wide, ending in a more or less blunt snout.

The leopard frog resembles the pickerel frog, although the body color is not tan as is usually the case with the pickerel frog. The leopard frog is brownish or green. Its dark spots are round,

not the squarish shape of the pickerel frog's spots. The spots appear in two or three rows between prominent dorsolateral folds. The spots are black or reddish brown, and are edged with a lighter color that produces a halo effect around them. The wide dorsolateral ridges are creamy to yellowish or bronze. Dark spots also appear on the sides below the folds of skin.

The belly is white to yellowish and the throat is white. Each of the legs is clearly marked with dark bars. The under surface of the legs is whitish, not yellow or orange as on the pickerel frog. The upper jaw, which protrudes over the lower, is marked with a light spot or line. A yellowish band streams from the end of the muzzle backward to the shoulder.

Range: Populations of the leopard frog occupy a large portion of Pennsylvania. It is apparently absent from the northeast, in a general sense the Pocono Mountains; from a small corner in the southeast; and from the extreme northcentral part of the state, encompassing parts of the Allegheny Mountains.

Wood Frog

Rana sylvatica

Identification: The body of the wood frog appears more flat than most other frogs. The head is broad, but ends in a pointed snout. Its skin is relatively smooth and moist to the touch. Although usually a shade of tan, the body also can be pinkish to an occasional dark brown. An important identifying mark is a prominent, dark mask that covers each eye and extends along the side of the head to just behind the eardrum (tympanum). A light line or stripe marks the edge of the upper lip. The chest is marked with a dark spot located near the base of the forelimbs. The white belly sometimes is mottled with darker pigment.

In some specimens, dark bars break up the tan color of the legs, which on the undersides are yellow-white to greenish white. The toes are webbed but only slightly. The dorsolateral ridges are distinctly evident and extend all the way to the groin. They are a lighter shade than the rest of the body. The wood frog has protruding large eyes, bigger than the tympanum. The gold iris of each eye is darker on its lower half than on the upper half.

Range: The wood frog can find suitable habitat throughout the entire state.



For more information, contact:

Publications Section

PA Fish & Boat Commission

P.O. Box 67000

Harrisburg, PA 17106-7000

or visit our web site at:

www.fish.state.pa.us