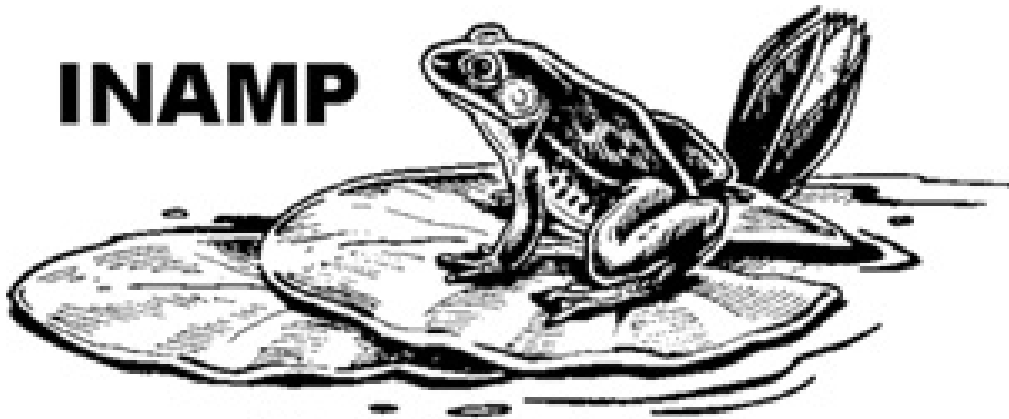


Frogs & Toads of Indiana

INAMP



Indiana Amphibian Monitoring Program



Indiana Amphibian Monitoring Program
Wildlife Diversity Section
553 East Miller Drive
Bloomington, IN 47401
WWW.IN.gov/dnr/fishwild/endangered



Eastern Spadefoot

Scaphiopus holbrookii

Description: 1 $\frac{3}{4}$ -3 $\frac{1}{4}$ " (4.4-8.3cm). Large protuberant eyes with vertical pupils. Stout, plump body that is brown or yellowish brown. Two yellow stripes run from eye down back, forming a rough hourglass shape. Belly gray to white, without spots. Each hind foot has a long digging spade.

Call Description: Single, loud, brassy note sounding like "Whar". Very loud, especially in large choruses.

Indiana Range: Southern third of state. Occur in flood plains of lower Wabash and White rivers and in barrens or relic prairies of Harrison Co. **Species of Special Concern.**

Habitat: Areas of loose or sandy soil including cultivated fields and forested areas.

Breeding Habitat: Shallow, temporary pools sometimes located in flooded lawns, agricultural fields, or other open areas.

Breeding Season: March to September, initiated by heavy rainfall.

Diet: Insects, caterpillars, spiders, snails, and earthworms.

Eggs: Deposited in bands approximately an inch wide and up to a foot long. Can hatch in as little as 24 hours in hot weather, otherwise may take 2-3 days.

Tadpoles: Dark brown to bronze with fine orange dots. Tail has orange stripe, fins are transparent with dark rims. Metamorphoses in 2-9 weeks.

American Toad

Bufo americanus / *Anaxyrus americanus*

Description: 2-3.5" (5-9 cm). Usually brown in color, may also be shades of gray, red, olive or tan. Warty, dry skin. Dark spots on back typically containing one or two warts per spot. Belly white or cream-colored with mottled black spots. May have light-colored line down back. Parotoid glands (bean-shaped structure behind eyes) does not touch ridge (cranial crests) behind eye, or only touch by small spur.

Call Description: High-pitched trill lasting approximately 10-20 seconds.

Indiana Range: Statewide, with the exception of the lower Wabash Valley.

Habitat: Found in many different habitats, ranging from backyards, agricultural fields, grasslands and sparse woods.

Breeding Habitat: Quiet waters, such as temporary wetlands, ditches, swamps, lakes, and backwaters of rivers and streams.

Breeding Season: Late March through June

Diet: Land-dwelling (terrestrial) invertebrates, including insects and their larvae, spiders, earthworms and millipedes

Eggs: Up to 2,000 eggs are laid in long strands, which hatch in about a week.

Tadpoles: Small, black tadpoles form schools in shallow water. Metamorphosis occurs in six to ten weeks.

Fowler's Toad

Bufo fowleri / *Anaxyrus fowleri*

Description: 2-3" (5.1-7.5 cm). Usually brown, gray, greenish, or brick red in color. Belly white with single dark spot on chest. Warty dry skin, three or more warts in each large dark spot on back. Parotoid gland touches cranial ridge behind eye.

Call Description: Short bleat, nasal w-a-a-a-h, lasting three to four seconds, like the sound of a lifeguard whistle.

Indiana Range: Statewide

Habitat: Areas with loose or sandy soil such as wooded country, lake margins, streambeds, flood plains, and gardens.

Breeding Habitat: Fairly open warm, shallow waters, including woodland and farm ponds, lake edges, stream backwaters, marshes, sloughs, and natural pools.

Breeding Season: Early May – Mid June

Diet: Variety of insects, spiders, worms, centipedes, millipedes, etc.

Eggs: Strings of 7,000 – 10,000 eggs, attached to vegetation in shallow water. Hatch in 2-3 days.

Tadpoles: Small and dark, attach to underwater vegetation, swim in dense groups. Similar to American toad tadpoles. Transform in 4-5 weeks, reach maturity by 2 years of age.

Northern Cricket Frog

Acris crepitans

Description: 5/8-1 1/2" (1.6-3.8cm). Dark triangle between eyes. Somewhat warty with dark stripe on rear surface of thigh. May have green or reddish stripe on back. Slightly blunt snout, relatively short legs, heavy webbing of hind foot reaching tip of first toe and next to last joint on longest toe. Vocal pouch on males is yellowish. Diurnal.

Call Description: Gick-gick-gick. Like two steel balls, or marbles, clicked together, slowly at first, and then faster. Continues for 20-30 or more beats. Full chorus sounds like sleigh bells. Males call day and night.

Indiana Range: Almost statewide. Rare in northern quarter of state.

Habitat: Vegetated shorelines of reasonably permanent wetlands including ponds, lakes, gravel pits, rivers, and creeks.

Breeding Habitat: Quiet, reasonably permanent wetlands and streams with abundant emergent vegetation.

Breeding Season: Mid-April to late July. Can be heard after thunderstorms even after the calling season is over.

Diet: Aquatic larvae, insects.

Eggs: Attached to submergent vegetation or other submerged objects. Clusters of 200-400 eggs singly or in small clusters. Hatch within a few days.

Tadpoles: Identified easily by dark tail tip. Metamorphosis occurs mid July – Sept. Mature within one year.

Western Chorus Frog

Pseudacris triseriata

Description: $\frac{3}{4}$ - 1 $\frac{1}{2}$ " (1.9-3.8cm). 3 dark longitudinal stripes on back. Smooth skin, brown to gray, belly is cream colored. Light line along upper lip, dark stripe from snout to groin and passing through eye. No webbing between toes. Males smaller than females.

Call Description: Sounds like running a finger over the teeth of a comb. Lasts 2-3 seconds.

Indiana Range: Mostly statewide.

Habitat: Almost any type of wet habitat, including damp meadows, marshes, swamps, temporary ponds, agricultural fields, and urban settings.

Breeding Habitat: Temporary ponds, flooded fields, ditches, floodplain depressions, even in wet areas next to highways.

Breeding Season: Mid-Feb to Mid-May

Diet: Small insects, spiders, small snails, and worms.

Eggs: Females deposit clumps of up to 300 eggs to sticks and vegetation. Eggs hatch within one week.

Tadpoles: Dark brown to gray, belly is bronzy with light flecks, tail fins clear with dark flecks. Metamorphose in three months, mature within one year.

Spring Peeper

Pseudacris crucifer

Description: $\frac{3}{4}$ - 1 $\frac{3}{8}$ " (1.9-3.5cm). Dark 'X' on back. Light tan to dark brown. Belly white, sometimes with dark flecks. Narrow bar or dark spot between eyes. Large toe pads with a little webbing between toes.

Call Description: "Peep-peep-peep-peep". High pitched, short notes that last about one second and are repeated every second, sometimes with a short trill. A large chorus of peepers can be so loud its almost deafening and may sound like the jingle of sleigh bells.

Indiana Range: Statewide.

Habitat: Wooded areas that are in or near permanent or temporarily flooded areas such as swamps, ponds, lakes, and bogs.

Breeding Habitat: Fishless temporary wetlands that are near or in wooded areas, including shallow ponds, flooded fields, swamps, and flooded ditches.

Breeding Season: Early March to May. Males will sometimes call during the summer and have been heard in winter.

Diet: Spiders, ants, and beetles, but will also eat mites, ticks, small caterpillars, and small snails.

Eggs: Eggs are laid singly or in clusters of 2-3, attached to vegetation. A single female can deposit 800-1,000 eggs. Hatch within 3-15 days.

Tadpoles: First few weeks spent in leaf litter on bottom of pond. Very small, olive brown to dark green with metallic gold flecks. Belly cream and iridescent. Edges of tail fins blotched or mottled with purplish black.

Cope's Gray Treefrog

Hyla chrysoscelis

&

Eastern Gray Treefrog

Hyla versicolor

Description: 1 ¼ -2" (3.2-5.1cm). Color varies from green, brown, gray, to almost black. Bright yellow on underside of hind legs. Dirty white belly and dark band from snout through eye to shoulder. Light spot beneath the eye. Enlarged toe pads. In the field, the two species can only be distinguished by their calls.

Call Description: *H. chrysocelis* has short, loud, flute-like trill that lasts 1-3 seconds and repeated several times per minute. Faster and harsher than *H. versicolor*. *H. versicolor* has short, loud, flute-like trill that is slower and more melodic than *H. chrysocelis*.

Indiana Range: *H. chrysocelis* is found in southern Indiana, but reported as far north as Delaware Co. *H. versicolor* is found in northern Indiana, not known south of Indy.

Habitat: Highly arboreal, found in trees or shrubs in woodlands and swamp forests, adapts well to farmlands and edges of cities.

Breeding Habitat: Flooded ditches or fields, shallow wetlands including marshes or ponds.

Breeding Season: Mid-April to end of July, males may call after breeding season is over when humidity is high.

Diet: Flying insects, insect larvae, spiders, ants, small insects. Forages near lights.

Eggs: Light colored, gray above and white below. Deposited in a cluster of 20-40 eggs, loosely attached near surface of water. Females may deposit up to 2,000 eggs. Hatch in 2-5 days.

Tadpoles: Both species identical in appearance, cannot be distinguished in the field. ¼ inch in length, light yellow color, full-sized tadpoles have olive green body and may have brick red tail. Transform within two months, adult reaches maturity within two years.

Green Treefrog

Hyla cinerea

Description: 1-2" (3.2-5.7cm). Bright green, yellowish green, olive green, or lime green, may have gold or white flecking. Pale yellow stripe from upper lip to groin. Large toe pads.

Call Description: Call resembles that of a rising 'cowbell' and can be expressed by a nasal queenk-queenk-queenk. Call may be repeated up to 75 times within a minute.

Indiana Range: Extreme southwestern Indiana.

Habitat: Cypress swamps, sloughs, cattail marshes, lakes, and ponds.

Breeding Habitat: Permanent marshes, swamps, or sloughs.

Breeding Season: Mid-May to Early August

Diet: Insects

Eggs: Found in small packets under the surface of the water, attached to floating vegetation or its roots.

Tadpoles: Long pointed tail. Green with a yellowish or ivory stripe on side of head from snout to eye.

Green Frog

Rana clamitans / *Lithobates clamitans*

Description: 2 ¼ - 3 ½" (5.7-9cm). Light olive brown to dark olive green. Dorsolateral folds (ridges) extend from eye to groin. Large external eardrum that is larger than eye in males and same size in females. Large head, blunt snout, small warts, and long legs. Webbing on toes extends to tips on all but fourth toe. During breeding season, males develop bright yellow throat.

Call Description: Low pitched twanging that sounds like a plucked banjo string or a tight rubber band. Sometimes doubled and repeated at irregular intervals.

Indiana Range: Statewide

Habitat: Permanent bodies of water, slow sections of streams. Avoids warm, muddy, or transient bodies of water.

Breeding Habitat: Permanent bodies of water.

Breeding Season: May - Aug

Diet: Will eat just about anything they can swallow including insects, insect larvae, crayfish, spiders, mollusks, fish, and other frogs.

Eggs: Laid in a mass of 1,000-5,000 in a thin film that touches the surface of the water.

Tadpoles: 3-4 inches total length, yellowish brown to olive green with black flecks and a creamy colored belly. Plump with long tail and high fins. Similar to bullfrog tadpole. Most will overwinter the first year and transform the following summer. Mature approximately one year after metamorphosis.

Bullfrog

Rana catesbeiana / *Lithobates catesbeiana*

Description: 3 ½-6" (9-15.2cm). Dark brown, greenish gray, light olive, or yellowish green. No continuous dorsolateral ridges; ridge begins behind eye and curves around external eardrum, down to front leg. Large external eardrum. Feet fully webbed except longest toe. Belly cream colored. Males have yellow throats during breeding season.

Call Description: "Brr-wum" sound slowly repeated at intervals of several minutes. Deep bass sound.

Indiana Range: Statewide

Habitat: Ponds, lakes, stock ponds, strip mine ponds, permanent marshes, and backwaters of larger streams.

Breeding Habitat: Permanent bodies of water.

Breeding Season: May-end of July.

Diet: Anything it can swallow including, crayfish, insects, worms, and snails. Large frogs will eat other frogs, small snakes, mice, and birds.

Eggs: Deposited in a large surface film containing 10,000 or more eggs. Mass may cover up to five square feet. Hatch in 2-5 days.

Tadpoles: Olive green with a white or cream belly. Similar to green frog tadpoles. Most tadpoles overwinter and transform the next summer, some may take two years.

Crawfish Frog

Rana areolata / *Lithobates areolatus*

Description: 2 1/4-4 1/2" (5.7-11.4cm). Large and stubby body with distinct humped lower back when at rest. Irregular dark spots crowded together and surrounded by light borders. Belly white without spots.

Call Description: Loud, deep, resonant snore repeated at irregular intervals. Large choruses sound like hogs at feeding time.

Indiana Range: Southwestern and west-central Indiana. Isolated population in the southeast region. Very uncommon. **Endangered in Indiana.**

Habitat: Low, wet areas including moist meadows, prairies, woodlands, and brushy fields. Can be found in crawfish holes.

Breeding Habitat: Flooded fields, fish-free ponds, and small lakes.

Breeding Season: Mid-March to mid-April

Diet: Nocturnal beetles, crayfish, small amphibians and reptiles.

Eggs: Masses of 3,000 - 7,000 eggs attached to vegetation.

Tadpoles: Grayish brown to greenish with small black dots on body and tail. Belly is whitish with internal organs faintly visible through skin. Similar to green frog and bullfrog, but has more dark pigment on mouth.

Northern Leopard Frog

Rana pipiens / *Lithobates pipiens*

Description: 2-3" (5.1-9cm). Dark spots on back with white margins. Spots mostly larger than eye. Dark spot on snout, no spot on external eardrum. Green, tan, or brown with a white belly. Dorsolateral ridge extends to groin. Slender with a narrow head.

Call Description: Deep rattling snore that lasts 2-3 seconds, followed by a chuckling sound, like a heavy creaking door slowly opening. Also sounds like two balloons being rubbed together. Difficult to distinguish from southern leopard frog unless heard on the same night.

Indiana Range: Northern, central, and extreme southeastern Indiana. This is a **Species of Special Concern**.

Habitat: Marshes, bogs, moist fields, lakes, streams, and ponds surrounded by wet meadows.

Breeding Habitat: Marshes, wetlands, fishless ponds, and roadside ditches.

Breeding Season: Mid-March to May

Diet: Insects, earthworms, spiders, centipedes, snails, beetles, and smaller frogs.

Eggs: Females may deposit 3,000-5,000 eggs in globular clusters. Usually laid in shallow water and attached to submerged vegetation a few inches below the surface of the water. Hatch in 1-2 weeks.

Tadpoles: Olive brown to green with dark spots. Belly iridescent with visible internal organs. Tail lighter than body, transparent tail fins with dark lines.

Southern Leopard Frog

Rana sphenocephala / *Lithobates sphenocephalus*

Description: 2-3 ½" (5.1-9cm). Dark rounded spots on back rarely have white margins, and are usually smaller than the eye. Light spot on external eardrum. No dark spot on snout. Head is narrow and pointier than northern leopard frog. Green, brown, or a mix of the two. Dorsolateral ridge extends from eye down back.

Call Description: Series of low pitched, throaty, guttural notes that are chuckle-like. Last 2-3 seconds or an explosive croak. Hard to distinguish from northern leopard frog.

Indiana Range: West-central and southern Indiana.

Habitat: Broad array of areas including, floodplain swamps, woodland ponds, sloughs, marshes, wet meadows, and streams.

Breeding Habitat: Marshes, wetlands, fishless ponds, and roadside ditches.

Breeding Season: Early March to May

Diet: Insects, earthworms, spiders, centipedes, snails, beetles, and smaller frogs.

Eggs: Females may deposit 3,000-5,000 eggs in globular clusters. Usually laid in shallow water and attached to submerged vegetation a few inches below the surface of the water. Hatch in 1-2 weeks.

Tadpoles: Olive brown to green with dark spots. Belly iridescent with visible internal organs. Tail lighter than body, transparent tail fins with dark lines.

Plains Leopard Frog

Rana blairi / *Lithobates blairi*

Description: 2-3 ½" (5.1-9.5cm). Dorsolateral ridge starts at the eye and interrupts near back end. Snout spot usually present. External eardrum has light center. Gray or brown with dark round spots on back. Belly is white, groin is often yellow.

Call Description: "Chuck-chuck-chuck". Guttural sound.

Indiana Range: Poorly known. **Species of special concern.**

Habitat: Marshes, along creeks, farm ponds, sluggish streams, wet meadows.

Breeding Habitat: Marshes, wetlands, fishless ponds, and roadside ditches.

Breeding Season: Mid-March to Mid-May

Diet: Grasshoppers, beetles, crickets, earthworms, snails

Eggs: Females may deposit 3,000-5,000 eggs in globular clusters. Usually laid in shallow water and attached to submerged vegetation a few inches below the surface of the water. Hatch in 1-2 weeks.

Tadpoles: Olive brown to green with dark spots. Belly iridescent with visible internal organs. Tail lighter than body, transparent tail fins with dark lines.

Pickereel Frog

Rana palustris / *Lithobates palustris*

Description: 1 ¼-3" (4.4-7.5cm). Square black spots in two rows down the back, in between both dorsolateral ridges. Ridges occur from eye to hip uninterrupted. Undersides of thighs bright yellow. Gray or tan with a white belly.

Call Description: Low-pitched, steady snore with little carrying power. 1-2 seconds in duration. Similar to leopard frog, but more regular.

Indiana Range: Statewide except northwestern prairie and lower Wabash valley. Not common.

Habitat: Wet areas with vegetation including streams, spring-fed lakes, farm ponds, meadows, and swamps.

Breeding Habitat: Marshes, wetlands, fishless ponds, and roadside ditches.

Breeding Season: April to May

Diet: Insects, spiders, worms, and insect larvae.

Eggs: Globular mass of 700 – 2,900 eggs attached to submerged vegetation.

Tadpoles: Olive brown to green with dark spots. Belly iridescent with visible internal organs. Tail lighter than body, transparent tail fins with dark lines.

Wood Frog

Rana sylvatica / *Lithobates sylvaticus*

Description: 1 3/8 – 2 3/4" (3.5-7cm). Dark mask on side of face. Tan to reddish brown in color. Dorsolateral ridges same color as body and extends from eye to hip. External eardrum smaller than eye. Smooth skin and white belly.

Call Description: Often described as sounding like a flock of ducks. Short, raspy, quack-like sound that doesn't carry very far.

Indiana Range: Statewide except northwest prairie region.

Habitat: Mature moist forests, forested bottomlands, and swamp forests. Adults are land-dwelling and will venture far from water when they aren't breeding.

Breeding Habitat: Woodland ponds, bogs, ditches, shallow temporary ponds, ditches, and backwaters of streams.

Breeding Season: End of February to March

Diet: Insects, spiders, worms, and snails.

Eggs: Deposited in large globular masses attached to aquatic vegetation. Mass may contain up to 3,000 eggs. Hatch in 2-3 weeks.

Tadpoles: Dark green to dark reddish brown to blackish with gold flecks. Belly iridescent and internal organs are visible. Plump body with short tail and high fins. Metamorphoses in 6-15 weeks.

References & Additional Information

References:

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Additional Information:

NAAMP

<http://www.pwrc.usgs.gov/naamp/>

Indiana Department of Natural Resources, Wildlife Diversity Section

<http://www.in.gov/dnr/fishwild/5102.htm>