



Reaching adult sizes of three to seven inches, the eastern mud salamander has a short tail and short legs. Its general coloration is bright red, pinkish or salmon and it has scattered black spots on the back, sides and belly. The belly is reddish or yellowish and lighter than the colors on the back and sides. The costal grooves number 16 or 17.

The female lays 75 to nearly 200 eggs in late fall or early winter. The larvae hatch during late winter and transform in one to three years.

Species Descriptions



Eastern Hellbender

Cryptobranchus alleganiensis alleganiensis

General characteristics. The hellbender, a member of the Giant Salamander family, is one of two large salamanders inhabiting Pennsylvania. The other is the mudpuppy, although it belongs to a different family than the hellbender. Hellbenders attain adult sizes of just over 11 inches to as much as 20 inches in length. The hellbender is a harmless amphibian; it does not inflict a poisonous bite as many people believe. In fact, this bizarre-looking creature is seldom seen except by anglers who might catch a hellbender while bottom fishing. It can easily and safely be removed from the hook. It is a completely aquatic animal, nocturnal in its habits and hides under rocks or submerged logs where, again, anglers searching for bait may encounter this large salamander.

Although something less than attractive in appearance—some would say downright ugly—Indians once used the hellbender for food. Even though it is no longer a food source for man, the hellbender nonetheless continues to fill an important niche in the aquatic ecosystem.

Identification. The hellbender is more commonly gray, but some specimens could be an olive brown to almost black above. Some dark mottling over the back and upper sides also is possible. The belly is lighter. Though not always present, irregular, scattered black spots sometimes pepper the back and sides. The body and head of the hellbender are flattened. Several



loose flaps of thick, wrinkled skin hang along the lower sides. Tiny eyes are almost missed in proportion to the large, broad head.

The hellbender loses its external gills by the time it reaches four or five inches in length, although gill openings may be seen on each side of the neck. The legs are short and stout with four toes on the hindlegs. The tail is flat and rudderlike, useful in navigating around the hellbender's aquatic environment.

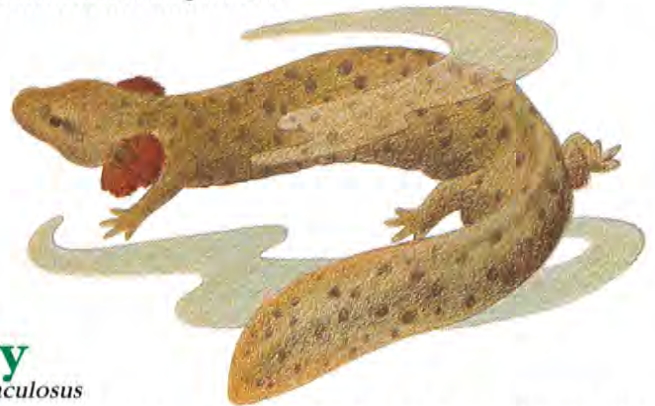
Range. The eastern hellbender is found in Pennsylvania's Susquehanna and Ohio River watersheds; it does not reside in the Delaware River drainage. Outside of Pennsylvania, its range extends south-westward to southern Illinois, continuing to the northern edges of Mississippi, Alabama and Georgia.



Habitat. The hellbender favors fast-moving, mid-sized streams and the channels of rivers with clear water. The hellbender prefers habitat with plenty of bottom shelter in the form of boulders, large stones, snags and other large, loose debris. It takes refuge beneath this cover by day, coming out to forage for food at night.

Reproduction. The hellbender breeds in August or September when the male prepares a saucer-shaped cavity on the stream bottom. Normally dug out under a rock or submerged log, most of the work preparing the nest is done at night. The female settles over the nest and deposits from 200 to 500 eggs. The eggs are fertilized by the male as they emerge from the female and settle into the nest. This external fertilization of the eggs by the hellbender is rare and unique among Pennsylvania's salamanders. The eggs are yellowish and are contained in long strings. The male guards the nest and eggs until the larvae hatch in eight to 10 weeks.

Food. The hellbender has a particular fondness for crayfish and snails. It also eats aquatic insects. Worms, when they can be found, add variety to the diet of this large carnivorous amphibian.



Mudpuppy

Necturus maculosus maculosus

General characteristics. Only one other salamander in Pennsylvania, the hellbender, grows to a larger size than the mudpuppy. As an adult salamander, the mudpuppy reaches an impressive eight to 13 inches. It is a large, permanent larva, using external gills through its entire life. The mudpuppy is thoroughly aquatic and nocturnal, although it may be active even during the day in muddy or turbid water.



body. This broad stripe is bordered with narrower black or dark brown stripes that begin at the eyes and end on the tail where occasionally they break up into small spots. The sides are mottled, and although they may tend to be tan, they still show the characteristic yellow. The belly is bright yellow. There are 13 to 16 costal grooves.

Range. The northern two-lined salamander is distributed statewide. Its range extends from Quebec to Virginia and the Tennessee River Valley, westward to Illinois.



Habitat. The northern two-lined salamander is often found in abundant numbers, depending to a large extent on the habitat. It likes rock-bottomed brooks, preferring small streams to larger waters, although swampland and flood plains have their share of this colorful creature as well. When not in the water, this amphibian takes refuge among the rocks and tree roots lining the water's edge. During wet weather, the northern two-lined salamander may strike out, heading well into the damp forest surrounding its home, exploring, foraging, but always returning to its small, rock-strewn brook.

Reproduction. Courting by the northern two-lined salamander commences in late winter to April and is carried on in the water. The female lays an average of 30 eggs which she may guard. The eggs are sticky and adhere to the underside of submerged rocks and logs or cling to the stems of aquatic plants. They hatch in May or June and the larvae are about a half-inch long. They remain in the larval stage for one to three years, transforming when they are nearly two inches in length.

Food. Following the same pattern of most other salamanders, the northern two-lined salamander prefers a diet comprised mainly of invertebrates. Insects and their relatives are the main staple.



Longtail Salamander

Eurycea longicauda longicauda

General characteristics. The longtail salamander is one of the so-called "brook" salamanders, usually residing in or near small waters where fish are at a minimum at best. This lungless salamander attains adult sizes of four to just over six inches. Most of this length is "tail," because it accounts for much more than half the total length. The longtail salamander is nocturnal, although it may be seen moving about during the day following a heavy rainfall.

Identification. The descriptive common name provides a clue to identifying this colorful amphibian. Much longer than the body, the tail is slender but continues the coloration and pattern that begin on the head. This salamander is yellow to bright red-orange and is marked with contrasting black



spots. The spots are heavier on the sides than they are across the back, and on the tail the spots may combine to form vertical bars. The salamander has 13 or 14 costal grooves.

Range. The longtail salamander is a statewide resident except for the small area of the Commonwealth that drains into Lake Erie. There have been no reported sightings of the longtail salamander from Pennsylvania's 42 miles of Lake Erie shoreline or the inland Lake Erie Plain. Its range includes southern New York to northern Alabama and west to the southern tip of Illinois.



Habitat. This amphibian is known to inhabit caves and abandoned mine tunnels, but more often is at home near small streams, seeps and springs. The longtail salamander waits for nightfall, hidden under rotting logs, stones and streamside boulders. It is also known to reside in banks of shale that overlook a watery environment, where it darts among the numerous cracks and crannies in search of food.

Reproduction. The longtail salamander locates a mate to begin courtship from mid-autumn to early spring. Breeding occurs in or near the water sometime between October and March when the female lays up to nearly 100 eggs. The eggs may be deposited directly in shallow water, or sometimes near the water's edge under stones or in small openings in the ground. The eggs produce aquatic larvae in six to eight weeks and transformation follows after four to as much as seven months. The longtail salamander is sexually mature at one to two years of age.

Food. Most of its hunting is done at night when this agile salamander preys on resident invertebrates. It especially likes to spend evenings during a warm rain looking for a meal that could include grubs and any number of insects.

Northern Spring Salamander

Gyrinophilus porphyriticus porphyriticus



General characteristics. The northern spring salamander is the largest of several lungless salamanders that occur in Pennsylvania. Adult lengths range from nearly five inches to 7½ inches. It is sturdily built and nimble. This amphibian is at least partly nocturnal.

Identification. The basic coloration of the northern spring salamander is salmon although variations occur through tints of reddish brown, yellowish brown or light orange. The back and sides sometimes have markings, and even then are often nearly obscured, appearing as a very subdued mottling.



stage and the hatchlings are about seven-eighths-inch long. The incubation process may at times be difficult because the eggs are attached in strands to the upper surfaces of narrow cracks in the salamander's rocky home. Sometimes they may even be deposited in the confined space where bark has separated from the solid inner wood of a tree.

Food. Small insects make up most of the green salamander's diet. Sure-footed and hunting at night, the green salamander scales sheer rock walls in search of beetles, ants and even mosquitoes.



Northern Dusky Salamander

Desmognathus fuscus fuscus

General characteristics. The northern dusky salamander is a member of a large group of salamanders, the lungless salamanders, and as an individual species is found in abundance in Pennsylvania. The northern dusky salamander also is the more common of our three dusky salamanders. Its average adult size ranges from 2½ inches to 4½ inches.

Identification. The northern dusky salamander is gray to tan or dark brown on the back becoming a bit lighter on each side. Although usually plain, a close inspection may sometimes show mottling not much darker than the background color. Larvae and juvenile specimens have pairs of oval blotches on each side that often fuse together to form streaks running the length of the body. Even then, this pattern may be obscured or disappear as the salamander gets older. The underside is pinkish with blue-gray speckles. The tail is triangular and less than one-half the total length of the salamander. It has 14 costal grooves.

Range. The northern dusky salamander lives statewide and is an abundant amphibian in most counties. It stretches from New England to the Carolinas and westward to Indiana.

Habitat. It seldom is found far from running water and seems to have a special fondness for spring seeps and small rivulets. It likes woodland streams where rock-strewn banks provide ample shelter. More often than not, the summer months find the northern dusky salamander submerged, taking advantage of the cooling waters. It also hibernates under water, escaping the worst of winter's rigorous cold.





Reproduction. The northern dusky salamander conducts a courting ritual that results in successful breeding during June to September. A cluster of one to three dozen eggs is left by the female who guards them until they hatch in six to 13 weeks. The eggs are deposited near water, sheltered beneath rocks or rotting logs commonly strewn along the stream bank. The nest consists of a cavity carved out of the damp soil or decaying matter. After the eggs hatch, the larvae quickly move into the water. It remains aquatic for the balance of the larval period, transforming in six to 13 months to spend its adult life along the stream.

Food. Spending much of its time in the water allows the northern dusky salamander to feed on sow bugs and other aquatic organisms. Insect larvae and earthworms make up the balance of the diet.

Appalachian Seal Salamander

Desmognathus monticola monticola



General characteristics. The Appalachian seal salamander is a member of the lungless salamander family, which, it is thought, evolved in what is now the eastern portion of North America. This family of salamanders is not equipped with lungs and thus needs to take in oxygen through its thin, moist skin. The Appalachian seal salamander averages 3 1/4 to five inches as an adult.

Identification. The Appalachian seal salamander has a robust body similar to its cousin, the northern dusky salamander. The tail makes up approximately one-half the total length of this salamander. The tail is compressed, and the tip is knife-edged on the upper side. The very tip of the tail is pointed.

Although the body can be variably patterned, it is mainly light brown or grayish above with dark-brown or black wavy streaks or reticulations that stand out markedly. Sometimes these markings take on the appearance of worm-like blotches and may be surrounded by paler areas. The belly is light and usually plain, although specimens may be found with blotches on the underside. The sides of the Appalachian seal salamander are dark above but lighter and speckled as they approach the belly line. There are 14 costal grooves in the skin on each side.

Range. In Pennsylvania the Appalachian seal salamander resides in an area in the southwestern part of the state, west of the Allegheny Mountains. Its range does not reach the Ohio border, however, and Clarion County just about marks its northern limits. It is an animal of mountainous and hilly regions, and its natural





Northern Red Salamander

Pseudotriton ruber ruber

General characteristics. The northern red salamander is medium-sized and another of the lungless salamanders. Adults reach sizes ranging from $4\frac{3}{4}$ inches to six inches. It is found only in the eastern portion of North America.

Identification. For the most part, this amphibian remains true to its name—red is the primary body color. Even so, variations occur and it can be reddish brown to orange-brown. The adults tend to be darker than the young. The sides shade toward a lighter tone as they approach an even lighter belly. The back and the upper portion of the sides are dotted with numerous and irregularly shaped jet-black spots. Small dark spots may appear on the belly. The body is stocky and the legs and tail are proportionately shorter in comparison with other salamanders. Sixteen to 17 costal grooves mark the sides.

Range. The northern red salamander can be found in all of the state's 67 counties. It extends from southern New York and Ohio to northern Alabama.

Habitat. Preferring small streams and spring runs with bottoms of sand or gravel and rock, the northern red salamander likes water that is clear and cool.

It avoids stagnant ponds or pools while seeking out bubbly springs and seepages. In part a terrestrial animal, the adult northern red salamander may roam some distance from the water. Woodlands, swamps and meadows offer refuge to this amphibian. It likes to dwell beneath logs, stones and clumps of moss.

Reproduction. Mating occurs in early fall when the female seeks a suitable nesting site. Laid in the water, the eggs are attached to the underside of stones. From 50 to 70 eggs are laid. They hatch in late autumn or early winter and the aquatic larvae measure less than an inch in length. The larvae are dark gray, turning red at the time of metamorphosis. Transformation takes place in two to three years. They are five years old before attaining sexual maturity.

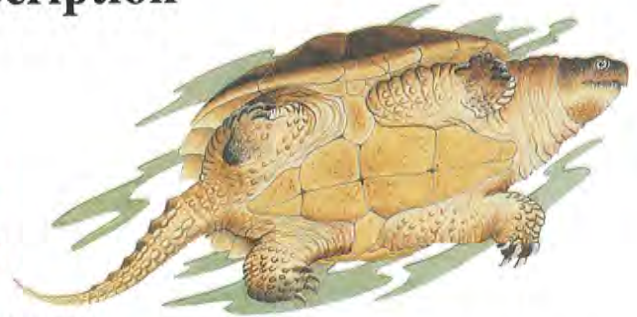
Food. The northern red salamander preys on a wide selection of invertebrates. Its somewhat larger size allows it to take food that some other salamanders would be unable to handle. It shows a special preference for earthworms.



Species Description

Common Snapping Turtle

Chelydra serpentina serpentina



General characteristics. The common snapping turtle is sometimes referred to as the freshwater “loggerhead,” and is the only turtle in Pennsylvania with any economic value. This turtle is commonly sought for its meat, which is considered a delicacy and a base for snapper soup. In Pennsylvania a fishing license is required to take snapping turtles and traps or set lines may be used.

Many people think the snapping turtle is ugly, both in appearance and disposition. Although on land it may lash out viciously, it is generally inoffensive when submerged in water where it spends most of its time. It does not bask in the sun nearly as much as many other turtles do. The snapping turtle is a good swimmer but more often than not prefers to walk across the bottom of its watery habitat, which it does quite well. Confronted on land, the common snapping turtle is quick to assume its offensive stance, in which the hind quarters are elevated above the rest of the body, and the jaw is opened wide, at which time the turtle may lunge forward repeatedly. During such shows of strength, the snapper may emit a loud hissing sound to discourage further any would-be adversary. The common snapping turtle is one of our largest turtles. Its carapace may measure up to 12 inches in length.

Identification. The snapping turtle is easily recognized by its large head, a plastron smaller in relation to the rest of the body compared to other turtles, and a tail proportionately longer than on other turtles. The tail is at least as long as the carapace and supports a series of large saw-toothed keels on its upper side. The neck is covered with loose, warty skin. The strong jaws end in a distinct hook. The carapace of the common snapping turtle is tan to dark brown, sometimes nearly black. The carapace is quite rough, serrated along its rear margin, and has three rows of keels running its length. These keels may be difficult to discern in older specimens. The unpatterned plastron is yellow to tan and it is cross-shaped and relatively small. It does not cover nearly as much of the underside as plastrons do on most other turtles.

Range. This large turtle resides in a broad area of the country. Its natural range extends from southern Canada to the Gulf of Mexico, and from the east coast to the Rocky Mountains. Thus, the common snapping turtle is distributed throughout Pennsylvania.





Habitat. An aquatic reptile, the snapping turtle has little preference for the type of water in which it resides. Snappers have been found in small streams as well as large rivers, in the smallest ponds to the largest lakes. It likes soft mud bottoms, especially if abundant vegetation is convenient. Rarely seen basking, the snapper prefers to rest in shallow water with just the eyes and nostrils exposed. The snapping turtle hibernates beneath the water. It ends its hibernation in April, emerging from an overhanging mud bank, muskrat hole or from under a collection of vegetative debris.

Reproduction. For the snapping turtle, the peak time for laying eggs is June. A usual clutch includes 25 to 50 eggs. The eggs are round and just over one inch in diameter. The nest, a cavity four to seven inches deep, might be dug some distance from the water (See Figure IV-7). Depending on the weather and locale, nine to 16 weeks could be needed to incubate the eggs. When the eggs finally break open, young snappers barely more than an inch long emerge.



Figure IV-7
The round eggs of the common snapping turtle are laid in a cavity four to seven inches deep.

Food. To some extent, the snapping turtle is considered a scavenger because it feeds on a certain amount of carrion. But the snapper does not limit itself to that. It eats a variety of invertebrates as well as fish, small mammals and even birds. Ducklings, for instance, have been known to fall prey to a snapping turtle. Walking casually along the bottom of a lake, eyes alert, the snapping turtle could surface quickly to snatch a feathery meal. Omnivorous in its feeding habits, the snapping turtle also consumes a variety of aquatic plants.




Eastern Mud Turtle

Kinosternon subrubrum subrubrum

General characteristics. Now believed extirpated, this turtle was recently removed from the List of Endangered Species in Pennsylvania. In most cases, its decline in numbers can be attributed to loss of habitat. It is more an aquatic animal, so draining wetlands and filling in swamps and marshlands has had a predictable adverse effect on the population. A small turtle, the eastern mud turtle reaches an upper shell length of only three to four inches.

Identification. The eastern mud turtle has few, if any, distinctive field marks. The carapace may range from an olive to a dark brown or almost



areas that now encompass Pymatuning Lake were included in the original habitat of the Blanding's.

Habitat. It is primarily an aquatic reptile. Still, the Blanding's likes to bask in the sun on land, although it will not wander far from the water's edge. Wetlands are a favorite of the Blanding's turtle, and marshes, ponds and similar watery environments are potential habitats for this animal. It especially favors areas covered with a dense growth of aquatic vegetation.

Reproduction. The Blanding's turtle lays its eggs in June or July. The clutch consists of about eight oval, dull-white eggs, approximately 1½ inches in length. They are hard-shelled and hatch in August or September. When hatched, the young Blanding's turtle is barely more than one inch long.

Food. The diet of the Blanding's turtle is varied. It is a carnivore and feeds primarily in the water. Crayfish make up most of its diet. It may come ashore in search of food, prowling through the undergrowth to seek out insects and snails. It also eats wild berries and the tender shoots of plants. When it is able to catch them, frogs are also added to the Blanding's menu.



Map Turtle

Graptemys geographica

General characteristics. A moderately large turtle, though certainly not the largest found in Pennsylvania, the map turtle reaches an average seven to 11 inches in shell length. It is fairly common throughout its Pennsylvania range. Perhaps due to limited basking sites, individual turtles often pile on top of one another while basking on rocks or logs, which is a favorite pastime. But it also is a shy animal and if disturbed will slip quickly into the water to avoid a potential predator.

Identification. The carapace of the map turtle is greenish to olive-brown. Its irregular pattern of thin, yellow-orange lines networking randomly across the upper shell like roads on a map give this turtle its name. The carapace is somewhat flattened and marked with a distinct keel. The plastron is yellowish and bears no markings of any significance. Its head, neck and tail are accented with narrow yellow lines. A yellow, somewhat triangular spot appears behind each eye.

Range. The distribution of the map turtle in Pennsylvania is scattered into one larger and two smaller portions of the state. It is found along Lake Erie and in a small portion of the Ohio River Drainage.

Its largest range encompasses a major portion of the Susquehanna River Basin and the lower Delaware River Basin. An interesting, recently developed theory suggests that the map turtle reached the lower Delaware by way of a series of canals. According to some experts, the map turtle was



able to leave its native Lake Erie home and travel through canals to the Hudson River, which in turn gave it access to the Delaware River through a similar system of canals. In any event, the distribution of the map turtle in Pennsylvania is scattered and broken into several sections. Elsewhere, this turtle is found across upper New York to Wisconsin and then south into Louisiana.

Habitat. The map turtle prefers slow-moving, large rivers over smaller, faster waters. Lakes, rather than ponds, are considered choice habitat. Mud bottoms with profuse stands of vegetation top its list of preferred habitat. It is not in any hurry to hibernate and comes out of hibernation sooner than other species of turtles.

Reproduction. The map turtle may have two or more clutches of eggs a year, depending on just how far north it is living. The female lays 12 to 14 eggs in May to mid-July in a nest about four inches deep. The eggs hatch mid-August to September. In some cases, the hatchlings do not leave the nest until May or June of the following year.

Food. The map turtle includes some vegetative matter in its diet, but the mainstays probably are mollusks and crayfish. The female, equipped with powerful jaws, can crush freshwater clams and large snails to feast on an even wider array of food.

Red-Eared Slider *(Trachemys scripta elegans)*

General characteristics. Red-eared sliders are non-native to Pennsylvania. They are included in this book because they have gained a foothold in Pennsylvania waters and wetlands and are seen with increasing frequency. Red-eared sliders from Pennsylvania have been recorded with shell lengths of up to 10 inches. This species is native to the southcentral and southeastern United States. However, for decades these turtles have been sold in pet stores in Pennsylvania and other states outside of its natural range. People have illegally released their pet turtles into the wild in Pennsylvania, thereby creating self-sustaining populations. This is ecologically undesirable because these turtles compete with native species for food, basking areas and nesting areas.

Identification. Red-eared sliders could be confused with map turtles, red-bellied turtles and even painted turtles because they exhibit some characteristics common to each of these species. However, only the red-eared slider contains, as its name suggests, a bright-red patch or stripe immediately posterior to the eye on the side of its head.

Range. New information comes in each year regarding the distribution of red-eared sliders in Pennsylvania. They are well-established in many waters of the Delaware River drainage, around some of the larger cities in the state and in several isolated locations. Their clustered distribution in areas around cities is directly related to the release of former pets into neighboring parks, lakes and rivers.

Habitat. This turtle prefers areas that offer slow-moving water, soft, muddy bottoms and an abundance of aquatic vegetation. These habitats can be found in large rivers, canals, ponds and lakes. Basking sites are important for proper thermoregulation and may cause sliders to congregate.

Reproduction. Depending on the growth rates of an individual, the age of first reproduction can range from two to eight years, with age three to four a typical average. Little is known about the specifics of reproduction in Pennsylvania populations, but elsewhere, egg laying occurs during May, June

Midland Painted Turtle

Chrysemys picta marginata



General characteristics. The attractive painted turtle is the most widespread of any in North America. One subspecies with intergrades, which may show characteristics from other subspecies in adjoining areas, is found in Pennsylvania. Not a particularly large turtle, it attains adult sizes of four to six inches along the upper shell, or carapace.

Identification. The carapace is olive or black, oval, smooth, and somewhat flattened. Red and black markings on the edges of the shell, in the form of bars or crescent-shaped patterns, are good identifying characteristics. The plastron is an unmistakable yellow or red with a dark blotch in its center. Each side of the head is marked with bright-yellow spots and stripes (See Figure IV-9), and yellow and red stripes define the neck, legs and tail. The upper jaw is notched.

Range. Its range extends from southern Quebec and Ontario in Canada southward to Tennessee. It misses most of Virginia and North Carolina. In Pennsylvania, the painted turtle is found from border to border in all directions.

Habitat. It is fond of basking and often is observed sunning itself on a large rock beside a slow-moving stream or river. Shallow areas of lakes or ponds also attract the painted turtle. It particularly likes streams with soft bottoms, generously sprinkled with vegetation and dotted with submerged logs.

Reproduction. The male painted turtle is sexually mature at two to five years of age. The female matures from four to eight years of age. One to two clutches, consisting of two to 20 elliptically shaped eggs, are laid in May to July on land in a flask-like nest about four inches deep. The eggs incubate for 10 to 11 weeks before splitting open to reveal hatchlings an inch or less in shell length. The young may spend the first winter in the nest.

Food. While young, the painted turtle is basically carnivorous but becomes more herbivorous with age. It eats insects, crayfish and mollusks in the beginning, then turns to a variety of aquatic plants.



Figure IV-9

Bright yellow spots and stripes mark the side of the head of the painted turtle.





black. There is no definitive pattern or markings. The upper shell is smooth and the scales, or scutes, have no keels. The plastron is yellow to brown and may be marked at times with black or brown. The lower shell is double-hinged and contains 11 scutes. The head of the eastern mud turtle is brown and marked with numerous widespread yellow spots or streaks. On the male, the tail ends in a well-developed blunt spine.

Range. In Pennsylvania, the eastern mud turtle inhabited the extreme southeastern corner of the state, particularly in the lower Delaware River Valley. In this heavily populated area much of its habitat has been destroyed, accounting for its dwindling numbers. Its natural range extends south from here to the Gulf Coast, and north to Connecticut.



Habitat. Even though it is essentially aquatic, the mud turtle travels some distance over land in search of a new home if that becomes necessary. It prefers shallow, slow-moving water, either fresh or brackish, and it likes streams with a soft bottom. Marshes, ditches and even wet meadows satisfy the mud turtle's need for a water-based environment.

Reproduction. The eastern mud turtle is sexually mature at five to seven years old and breeds in mid-March to May. Its nest is a three- to five-inch cavity carved from either a pile of vegetative debris or sandy or loamy soil commonly found in its habitat. In June, the mud turtle lays one to six eggs that are elliptical and hard-shelled. About one inch long, the shell is pinkish or bluish white. When hatched, the young mud turtle has a rough carapace that becomes smooth as it matures.

Food. The eastern mud turtle is carnivorous, preferring to search beneath the water for its meals. Insects are the main diet staples.

Stinkpot Turtle

Sternotherus odoratus



General characteristics. The stinkpot is the only musk turtle inhabiting Pennsylvania. Although abundant in many waters within its range, it often is not seen because it is primarily an aquatic animal. Nonetheless, it likes to leave the water to bask in the sun, and quite mobile, often climbs slanted trees or logs to find a resting place. An apparent ability over other turtles to climb steeper surfaces is provided by a smaller plastron, which allows greater movement of the legs. The carapace measures three inches to just over four inches in adults. In clear water the stinkpot might be observed walking across the bottom in search of food. It often is caught by a surprised angler. When disturbed, it is liable to secrete a foul-smelling yellowish fluid. This fluid, which acts in many cases as a deterrent to would-be attackers, is discharged from two pairs of musk glands located under the



border of the upper shell. Some have described the stinkpot as pugnacious, almost vicious. It is said to have a short temper and strong jaws.

Identification. The stinkpot's carapace is smooth, highly domed and elongated. It is normally olive-brown to dark gray and may be marked with irregular streaks or spots of a darker color. The small plastron has 11 scutes with small patches of skin visible between them. There is a single hinge that is difficult to locate on most specimens. The female's tail is very short. The male's tail tends to be a bit longer and ends in a blunt, horny nail. Small fleshy barbels protrude from the chin and throat. On most individuals, two light stripes stand out on an otherwise black head.

Range. Although thought at one time to be distributed statewide, recent studies show that the stinkpot does not inhabit the Allegheny Mountains. These same studies indicate that the stinkpot dwells in two separate ranges in opposite corners of the state. In the northwest, it is found in the swampy areas of the Shenango River Watershed and Lake Erie. It also is found in a larger area of southeastern Pennsylvania and particularly in the more centrally located counties where prosperous populations of stinkstone streams. The stinkpot is distributed from New England, southern Ontario and Wisconsin, south to Texas and Florida.

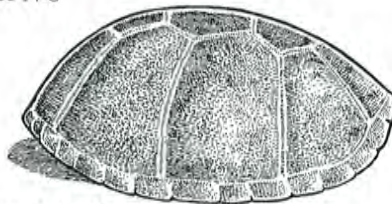


Habitat. The stinkpot prefers quiet, slow-moving, shallow streams and rivers, preferably with a mud bottom. In early spring the stinkpot seeks out waters shallow enough so that it can bask with the center of its carapace exposed to the warm sun.

Reproduction. The stinkpot is one of the first turtles to nest, beginning in May but going as late as August. Mating occurs under water. Then, leaving the water, the female lays one to nine eggs in a shallow nest dug under a rotting stump or within the confines of an old muskrat hole. The eggs are off-white but circled with a stark-white band. They are thick-shelled, elongated and just a bit more than one inch long. The eggs take nine to 12 weeks to incubate. The carapace of the newly hatched turtle is black, three-quarters to one inch in length, and it has a rough texture.

Food. The stinkpot is carnivorous and seems to eat nearly anything it is able to catch. A sampling of the stinkpot's diet includes small fish, snails, aquatic insects, clams, worms and fish eggs. Apparently hungry a large portion of the time, the stinkpot has been known to forage for a meal day and night.

Figure IV-8



Stinkpot Turtle



Other Turtles

The upper shell of the stinkpot is raised in the shape of a high dome. Others tend to be only slightly raised or rounded.