



# PLAY

Fall  
2012

Pennsylvania • League • of • Angling • Youth

by Amidea Daniel and Allan Schreffler



Eastern  
Fence Lizard

## Pennsylvania's League of Lizards

When you hear the word "lizard," what comes to mind? Do you think of tropical rain forests and deserts? What about Pennsylvania's woodlands, gardens, rocky outcrops or old fencerows? There are four species of lizards found in Pennsylvania, representing two families. The *Iguanidae* family is represented by the eastern fence lizard, and the *Scincidae* family is represented by the northern coal skink, broadhead skink and five-lined skink.

### Facts About Lizards

**Skin:** Lizards are covered with scales or plates made of keratin. It's the same material as human fingernails.

**Senses:** Most lizards have great eyesight, with some even having colored vision. Lizards are able to smell and taste. They use an organ called the Jacobson's organ to smell. This organ helps them smell the air by "tasting" it with their tongue.

**Communication:** Geckos are the only lizards that use vocal cords to communicate. All other lizards use body language.

**Survival:** A lizard's best defense is camouflage. They are also able to shed their tails to escape predators. This action is called autonomy.

**Ectothermic:** Mammals and birds are **endothermic**. This means they have adaptations that helps regulate their body temperature. This includes shivering, panting and sweating. Lizards are **ectothermic**. They lack internal adaptations like panting or shivering to maintain stable body temperature. The body temperature of an ectotherm can vary with the surrounding environment.



Northern Coal Skink



Broadhead Skink



Five-lined Skink

# Lizard or Skink: What do you think?



Eastern Fence Lizard



Northern Coal Skink (juvenile)

Is a lizard a skink or is a skink a lizard? The truth is that a skink is a type of lizard. However, they differ in a few ways.

Unlike other lizards, skinks have shorter legs and elongated bodies. They appear snake-like and are often described as a snake with legs. Yet, their external ear openings, moveable eyelids and four legs set them apart from snakes. Their smooth, shiny scales make them appear wet and slimy, similar to salamanders, but skinks are reptiles and not amphibians.

All lizards have the capability to lose their tail when a predator bites down on it, but the skink goes one step further. When they are young, they have a bright blue tail, which draws attention away from their body. Predators will attack the blue tail. When they do, the tail will detach, allowing the skink to escape unharmed.

## Vocabulary *(Watch for these words!)*

- Candidate species
- Endangered species
- Ectothermic
- Metamorphosis
- Endothermic
- Venomous

## Who has Reptile Style?

Are lizards and salamanders the same? Not quite. Although the untrained eye commonly confuses adult lizards and salamanders, they are very different.



salamander front foot



lizard front foot

	Lizards and Skinks	Salamanders
<b>Reptiles or Amphibians?</b>	Lizards and skinks are reptiles. They do not go through <b>metamorphosis</b> . When hatched, the young are fully developed and resemble their parents.	Salamanders are “amphibians,” which means “double life.” They live part of their life in water and part of their life on land. To become adults, they transform through a series of life stages called <b>metamorphosis</b> .
<b>Skin</b>	Dry, rough skin covered in scales.	Smooth slimy skin with no scales. Some salamanders can absorb oxygen through their thin skin.
<b>Feet</b>	Five fingers and toes with claws.	Four fingers in the front and five toes on the back without claws.
<b>Eggs</b>	Eggs have a hard or nearly hard leathery shell. They are laid on land.	Eggs have a soft, gel surrounding them. Usually found in water or in damp areas.
<b>Ear openings</b>	Have ear openings.	Do not have ear openings.

# Defense on a Fence

## Eastern Fence Lizard

(*Sceloporus undulatus*)

The eastern fence lizard, sometimes referred to as “spiny,” has pointed scales that are jagged and rough to the touch. They are the only species of the *Iguanidae* family found in Pennsylvania. Over 40 different species of the *Iguanidae* family live in North America. Most of them live in warm, dry areas.

The eastern fence lizard lays one clutch of three to 13 eggs. The eggs usually hatch sometime in July. When they hatch, eastern fence lizards measure about 2-inches long. Other than length and minor coloration differences, young eastern fence lizards look identical to adults. Adults measure about 4- to 7-inches long.

These lizards prefer to make their home in sunny areas of grassy or open woodlands and on dry, steep hillsides. Eastern fence lizards love to sit on logs, rock piles and fences while basking in the sun. These areas provide the perfect height for them to survey and protect their territory. As territorial animals, they defend their land by bobbing their head and opening their mouth. To threaten intruders, they will sometimes do push-ups with their two front legs while inflating their chest and throat.

The eastern fence lizard’s favorite food is beetles. That’s right. They like to sit still and wait for something yummy to come nearby to eat. They like to eat beetles, spiders and even snails. Once they see something to eat, they will move quickly to get it. Eastern fence lizards are diurnal, which means their hunting and activity occurs during the day.



A male eastern fence lizard displays blue patches near the base of its throat and belly.



Crossbars are more prominent on female eastern fence lizards.

The eastern fence lizard lays one clutch of three to 13 eggs.



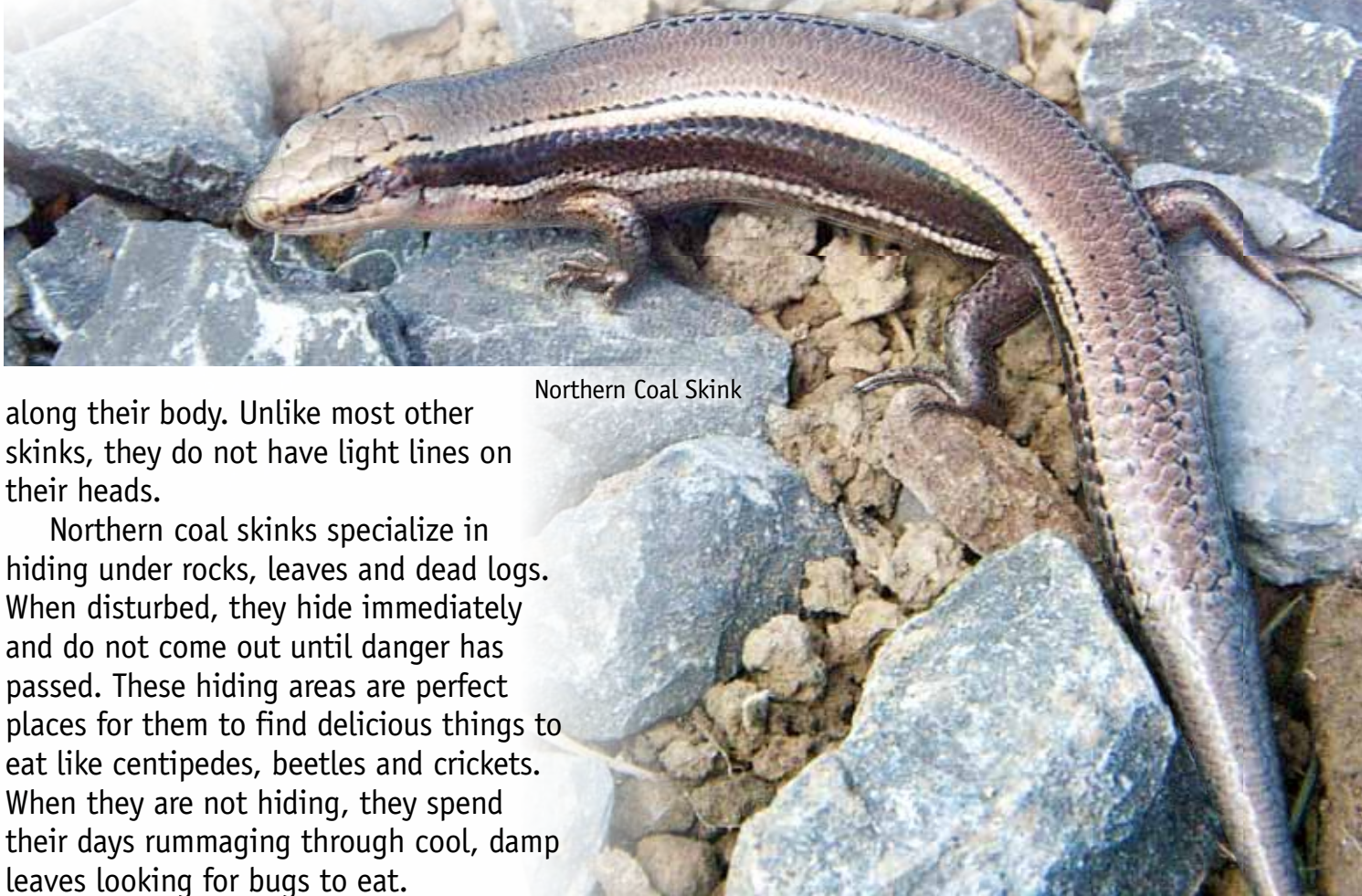
# Don't blink or you may miss this "COOL" skink

## Northern Coal Skink

*(Plestiodon anthracinus anthracinus)*

Looking "cool" with a dark band beginning around its eyes and extending all the way to its tail, the northern coal skink may remind you a bit of "Zorro" or another masked hero. This skink can be found throughout parts of Pennsylvania's bituminous coal or soft coal region. So, you may think that the word "coal" originated from this region. However, its name actually refers to the "coal" colored band that runs the length of its body. Though they are not found in great numbers, they can be found from northcentral to northwestern Pennsylvania.

When mature, northern coal skinks measure about 7-inches long. Their body is brown and has two pairs of light stripes that enclose the dark band extending



Northern Coal Skink

along their body. Unlike most other skinks, they do not have light lines on their heads.

Northern coal skinks specialize in hiding under rocks, leaves and dead logs. When disturbed, they hide immediately and do not come out until danger has passed. These hiding areas are perfect places for them to find delicious things to eat like centipedes, beetles and crickets. When they are not hiding, they spend their days rummaging through cool, damp leaves looking for bugs to eat.

# Reading between the lines



## Five-lined Skink

(*Plestiodon fasciatus*)

A five-lined skink has skin that is brown to black in color, appears smooth and shiny and is blanketed with five broad, light-colored stripes running the length of their body. They look like the “referee” of the lizard world. With a range covering nearly two-thirds of Pennsylvania, these skinks can be found from the northwest corner in Crawford County to the southeast corner in Bucks County.

In some adults, the lined pattern may fade. People sometimes confuse the five-lined skink with the broadhead skink, but the five-lined skink is much smaller. During mating season, the male five-lined skink will display a similar bright-red or orange-colored head as the broadhead skink.

Young five-lined skinks have tails that are an amazing bright blue color. This tail helps them avoid becoming dinner. Predators will attack the brightly colored tail, and it will detach and wiggle around while the young skink escapes, leaving the predator with only the tail. The tail will grow back in time, but it will be shorter and gray in color.



Five-lined Skink

Home gardens are ideal habitat for five-lined skinks. However, they favor humid woodlands with plenty of decayed matter. Like other skinks, they spend most of their time under the cover of rocks and logs. When they hatch in July, they are only about 2-inches long but will grow 5- to 8-inches long.

Although many people think they stay on the ground (terrestrial), this skink will climb a decayed tree to find an insect meal. They also enjoy meals of spiders, larvae, worms and small mice.

# Another Tall “Tail”?

## The Red-Headed Scorpion

### Broadhead Skink

(*Plestiodon laticeps*)

Many animals inspire tall tales. The broadhead skink is not an exception, as its nickname “red-headed scorpion” implies. Broadhead skinks earn this nickname, because they dwarf all other Pennsylvania lizards and skinks by measuring up to 12-inches long. They also have a very broad head that turns fire-engine red during mating season. These two characteristics make some people think that they are venomous predators. However, broadhead skinks are not **venomous**. They eat insects, spiders and other small lizards or mammals.

The best way to identify a broadhead skink is by their size. No other lizards in Pennsylvania compare to their size. Juveniles usually have five white or yellowish lines, two on each side and one in the middle of their back. These lines fade as they mature. Adults are a uniform gray or brown color.

In Pennsylvania, they are found only in the southeast corner of the state. If you are trying to spot one, don't look on the ground. They are arboreal, live in trees, and spend their days lounging in tree branches. If you do find one, do not touch it. If they are handled improperly, they may lose their tail. When a broadhead skink loses its tail, it makes it harder for them to survive.

Considered a **candidate species**, their survival is very important. There are very few broadhead skinks left in Pennsylvania, so please be careful and observe them from a distance.



Broadhead Skink

### Candidate species

are species that could become an endangered or threatened species in the future.

# Scales vs. Slime—Who's Who?

Take a look at the facts below to discover the differences and similarities between lizards and salamanders.

Choose a fact from the numbered list below and place its number on the correct line at right. Your choices are "Lizard," "Salamander" or "Both."

**1** Is a reptile and does not go through **metamorphosis**. When hatched, the young are fully developed and resemble their parents.

**2** Four fingers in the front and five toes on the back without claws.

**3** Is **ectothermic**, meaning the body temperature is the same as the surrounding environment.

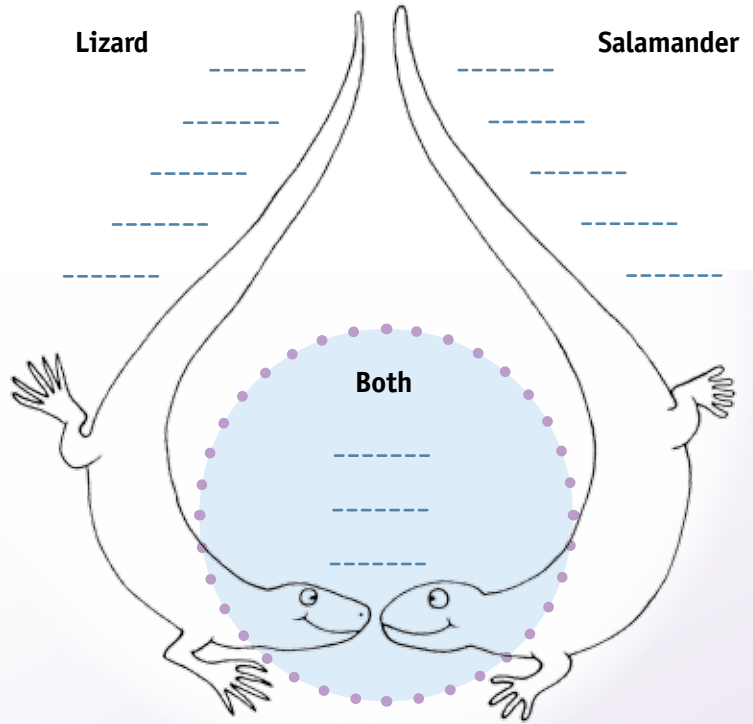
**4** Is an amphibian, which lives part of its life in water and part of its life on land.

**5** Eggs have a soft gel surrounding them. Usually found in water or in damp areas.

**6** Some can absorb oxygen through their thin skin.

**7** Eggs have a hard or nearly hard, leathery shell. They are laid on land.

**8** Lay eggs.



**9** Ear openings.

**10** Dry, rough skin covered in scales.

**11** Smooth slimy skin with no scales.

**12** Five fingers and toes with claws.

**13** Carnivorous (meat eating), diet consists of small insects, worms and other small critters.

See Summer 2012 PLAY's "Pennsylvania's Secret Salamander Treasures" for more on salamanders.

ANSWER KEY:  
Lizard 1, 7, 9, 10, 12; Salamander 2, 4, 5, 6, 11; Both 3, 8, 13.

## PLAY

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