

Lizard Crossword

Across

- 3. Short-horned lizards can squirt this from their eyes.
- 4. A predator of the short-horned lizard.
- 5. The study of reptiles and amphibians.
- 6. With a flat, round body, a short-horned lizard might be called this name.
- 8. Another name for reptiles and amphibians.
- 10. Short-horned lizards use this sense to find food.

Down

1. Short-horned lizards do not lay these. They give birth to their young.



WORDS Ants Blood Eggs Herpetology Herps Poikilothermic Rock Shrike

- 2. Another word for cold-blooded.
- 7. A short-horned lizard's favorite snack.
- 9. Short-horned lizards might look like this to a predator.





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WE WOULD LIKE TO HEAR FROM YOU !

If you have a letter, poem or question for Wildlife Express, it may be included in a future issue! Send it to the address printed above!



Cold-blooded

Cold-blooded animals really don't have cold blood. It means they are the same temperature as their surroundings. If a lizard is sitting on sand that is 60 degrees, the lizard will also be 60 degrees. Lizards, turtles, insects, snakes, fish and frogs are cold-blooded animals.

Some people call cold-blooded animals **ectothermic** (ek-to-THER-mik). Ecto means outside, and therm means heat. Ectothermic animals get heat from outside their bodies. You may also hear people call them **poikilotherms** (poi-KEE-lo-therms).

Cold-blooded animals are most active in warm weather. Cold weather slows down their muscles. That's why cold-blooded animals lay or bask in the sun. The sun helps to warm them up. If they get too warm, they need to move to a shady spot. They could also dig down in the dirt to get out of the sun. Colder weather can kill coldblooded animals. They need to migrate to warmer places or move underground. Some cold-blooded animals, like bees and dragonflies, shiver to stay warm.

Cold-blooded animals have a real advantage in deserts. Deserts are warmer and food is often harder to find. Cold-blooded animals don't need to eat as much as warm-blooded animals. Sometimes



they can go months between meals. This is why you often see more cold-blooded animals living in deserts.

CREEPY CRITTERS!

For some wild animals, Halloween seems to be all year long. Nature has designed some strange and clever things critters do to survive. Our own short-horned lizard with its blood squirting eyes might scare even Dracula. In honor of this month's holiday, let's take a look at some creepy and bizarre lizards!

What would want to eat a little prickly ball? Not much is the hope of the armadillo lizard from Africa. This lizard is covered in thick, hard scales. When danger is near, the armadillo lizard puts its tail in its mouth and curls up into a ball. It looks like a big, prickly Cheerio. Predators are going to have a hard time catching this lizard. It rolls! If a predator does grab the lizard, it might be painful. The lizard's scales will give the predator a poke.

South America has a lizard that can run on water! The basilisk lizard has large feet. To keep from sinking in the water, the lizard spreads its toes apart and runs on its back legs. Not many predators want to run into the water to chase a lizard.

One strange lizard is the glass lizard, also called the glass snake. This lizard really looks like a snake. It has no legs and a very long tail. Most glass lizards are two to three feet long, but two-thirds of that length is tail! When this lizard is grabbed, its tail breaks, almost shatters, into many small, wriggling pieces. How frightening! Can you guess why it is called the glass snake? This snake is found in some eastern and southern states.

Australia has a well named lizard - the blue-tongued skink. This lizard startles predators that want to eat it. It sticks out a bright blue tongue and wiggles it from side to side. It may be rude, but it works! A large blue wagging tongue is enough to make anyone run.



Animal Hide and Seek

Sometimes sticks walk, leaves hop and rocks crawl. Of course, these things really can't hop or crawl, but sometimes it sure looks like they're moving. Often when we are seeing a stick crawl, it's actually an animal.

Camouflage (KAM-e-flazh) means to blend in with your surroundings and hide. It is a type of disguise (dis-GIIZ). Camouflage may be a certain color, pattern of colors, or a special shape that fools the eye. Camouflage may help an animal to hide, or it may help a hunter to sneak up on its prey.

Short-horned lizards camouflage themselves very well against the sandy and rocky ground where they live. Looking like rocks and dirt is one way short-horned lizards protect themselves from other animals. Their great camouflage also helps short-horned lizards sneak up on their favorite snack - ants.

Lizards sure have some clever and creepy ways to defend themselves. Can you think of other animals that have bizarre ways to protect themselves?



Many animals change their colors with the seasons. Animals that change color to match their background are using **cryptic** (KRIP-tik) coloration. This is what weasels and snowshoe hares do. When snow starts to fall, their coats gradually turn white to match.

Animals may even change colors and patterns throughout their lives. Deer fawns are born with tan coats that have white spots. The spots match the sun and shade that dapple the tall grasses where the fawns hide. As long as the fawns do not move, predators will have a difficult time seeing them. As deer fawns grow older and can run faster to escape danger, the spots fade away.

Do you think zebras are camouflaged? They are not camouflaged for our eyes. Their black and white stripes stick out against the grasses of Africa, but that is not true for lions' eyes. Lions have a difficult time seeing some colors. Grasses and trees look like shades of gray, so the zebras' stripes help them to blend into the tall grasses. This helps the zebras avoid becoming a lion's meal.

Whether hunter or hunted, camouflage helps animals to survive.

Warm-Blooded

Warm-blooded animals have body temperatures that don't change with the weather. Their temperatures stay about the same in cold weather and in hot weather. Mammals and birds are warm-blooded.

Warm-blooded animals can make heat if they are cold, and cool themselves if they are hot. To make heat, warm-blooded animals turn the food they eat into energy. Only a small amount of the food a warm-blooded animal eats is turned into muscle. The rest is used to keep its body temperature even. Some animals can shiver to help stay warm. You may also hear people call warm-blooded animals **endothermic** (en-do-THER-mik). Endo means inside, and therm means heat. So, an endothermic animal makes heat inside its body.

To keep cool, endotherms sweat, pant or move to a cool place. Only mammals can sweat. People and monkeys have sweat glands all over their bodies. Dogs and cats only have sweat glands on their feet, so they need to pant if they get too hot.

Warm-blooded animal can be found in almost any habitat on Earth. They can be found in arctic regions and hot tropical areas. As long as they can find enough food, a warm-blooded animal probably lives there.





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Name Game

Everything has a name. You do. You have a first name and a last name. Most people also have a middle name.

Animals and plants have two names, too. They have a common name and a scientific name. The scientific name is usually in Greek or Latin, and is made up of two words. The first word is the **genus** (JEE-nus) name. The second part is called the species name. The common name is the name most people use when talking about the animal. Have you ever wondered how animals and plants got their scientific names?

The first part of a scientific name tells us what genus an animal or plant is in. Plants and animals with the same genus name are closely related. They have many things in common with each other. They would be close cousins.

The species part of the scientific name tells us something specific about the plant or animal. Plants and animals are usually given their scientific names by the person that first discovered them and wrote about them. Sometimes people have animals named after themselves. The white-tailed jackrabbit's scientific name is Lepus townsendii. It was named after J.K. Townsend. He was the person that first collected white-tailed jackrabbits. Often animals and plants are named for some special features they have. The short-horned lizard's scientific name is Phrynosoma douglasii. Phrynosoma means "toad body" in Latin. Their bodies look a bit like a toad's body. Have you ever heard horned lizards called horned toads? The mountain lion's scientific name is Puma concolor. Concolor means one color. Mountain lions don't have any spots on their bodies when they are fully grown. Other wild cats in Idaho, bobcats and lynx, do have spots or markings on their bodies when they are fully grown.

Do Lizards Make Good Pets?

Lizards, frogs and snakes are such interesting animals. Many people would like to keep them as pets, but keeping herps as pets may cause problems.

Some herps are bred in cages and are meant to be pets. Others are taken out of the wild. One frog that has been hurt a lot by the pet trade is the endangered painted burrowing frog in Madagascar. Thousands of frogs have been collected to sell as pets. So many have been taken that there are not enough frogs left in the wild to breed and replace the ones taken. People are trying to breed these frogs in cages. If they can breed the frogs in captivity, then maybe people will leave the wild frogs alone.

Although it may be fun to keep herps as pets, it can be tricky keeping them alive. All animals have specially adapted bodies to live in their unique habitats. It is hard to recreate an ecosystem in a cage. Herps are sensitive animals, especially frogs. The smallest change in their habitat can have life threatening effects. There's no change greater than being taking from the wild and put in a cage!

There are also laws about keeping wild animals as pets. All Idaho reptiles and amphibians (except bullfrogs) are protected species. Idaho has put limits on how many herps a person can take from the wild. This will help stop people from taking large numbers of herps out of the wild and selling them to pet stores. In Idaho, a person can have up to four native amphibians and reptiles of a given species. To take the herp out of the wild and keep it, the person must also have a valid Idaho hunting license.

Scientific names can tell us a lot about animals and plants. Next time you see a scientific name, do a little research and find out what the name means. You might be surprised by what you find out! The best place for Idaho's wild animals is in the wild. If you really want a herp, learn as much as you can about what it needs to survive. Design a habitat that closely matches the herp's natural habitat and only keep it for a week. Then put the herp back in the same place you found it. This is best for the animal and will help Idaho have healthy herps for years to come.



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What is a **Reptile?**

When people think of a reptile, they may think of a snake or turtle. Maybe a lizard pops into their minds. Usually they think of an animal that is scaly, coldblooded and lays eggs.

Some scientists that group, or classify, animals are starting to look at reptiles a bit differently. Some divide reptiles into four groups. The first group includes turtles. The second group is lizards and snakes, and the third group would be crocodiles and their relatives. The last group is the birds! Some scientists put birds in this group because bird skulls and eggs are so similar to reptiles. They are not as concerned about the fact that birds are warm-blooded, and all other reptiles are coldblooded.

Believe it or not, when we look at the cells of crocodiles, birds and other reptiles, crocodiles actually have more in common with birds than they do with lizards. You may be wondering about the feathers on birds. They don't look much like scales, but they really are scales that have changed over time to help birds fly.

If we leave birds out of the reptile group, reptiles are found on every continent except Antarctica. Most reptiles have a hard time staying warm. They can't make heat inside their bodies, so Antarctica would just be a giant freezer and graveyard for them. It is too cold! Since Idaho has pretty cold winters, we don't have as many reptiles as some other states. We have one turtle, 10 lizards and 11 snakes.

Reptiles have been on the Earth for a long time. About 250 million years ago, the first reptiles appeared. They ruled the planet for 200 million years. All of our birds and mammals have reptiles as their ancestors. I bet you can guess who their ancestors are. They were the largest land animals ever dinosaurs! Reptiles come in all shapes and sizes. They can be really big. Saltwater crocodiles can grow to be over 23 feet long. Other reptiles are small. A gecko that lives on the British Virgin Islands is less than an inch long! Reptiles may come in different shapes and sizes, but they are all fascinating creatures! Look for Idaho's reptiles next time you are out in nature.

Let's Look At...



© Kelton Hatch

Short-horned Lizard

Right now a little monster is sleeping, buried beneath southern Idaho's sagebrush deserts. It's covered with spikes and horns, and it just might eat you. If you are an ant, that is.

This little monster is really not a monster at all. It is a lizard – the short-horned lizard (Phynosoma *douglasii*). Short-horned lizards can disappear against the sandy desert soil. This helps protect them from predators like longnose leopard lizards and birds like shrikes and jays. They are perfectly camouflaged against the gray, tan and brown colors of the soil. When danger comes close, the short-horned lizard quickly buries itself under the ground. If that doesn't work, it can get some protection from the spiky scales that cover its body. If a predator still grabs the lizard, it has one freakier thing to try. This lizard can squirt blood out of the corner of its eyes! Creepy!

The short-horned lizards' colors also help them to sneak up on their prey. They really love to eat ants, but they also eat other insects, spiders, snails and sowbugs. The most important sense short-horned lizards use to find their food is vision. They cock their heads to the side and look for movement. If the insects don't move, the short-horned lizard might not even notice that lunch is close by.

Short-horned lizards can live in cooler climates than some other lizards. They have been found living in the mountains as high as 9,000 feet above sea level. Even though they tolerate the cold, they can't stay out all year. In Idaho, this lizard is active from mid-April to August. The rest of the time they dig burrows and rest. They do this not only when it is too cold for them, but also when the temperature is

What's **Herpetology?**

Have you ever heard of herpetology (her-pe-TOL-ojee)? In Greek, herp means creeping, so herpetology is the study of creeping things. It is the study of reptiles and amphibians. Many people just call them herps for short.

Amphibians and reptiles may look a bit alike and share a few things in common. They are both cold-blooded, most have legs and most lay eggs. But they really are quite different. In fact, birds have more in common with reptiles than amphibians. Let's look at some of the differences.

Amphibians have thin, moist skin. Reptiles have tough, thick skin covered with scales. Amphibians have different stages in their development – egg, larvae and adult. They go through a metamorphosis. Reptiles do not go through this sort of change. Amphibians need a wet place to lay their eggs. Reptiles lay their eggs in dry places.

With so many differences, how did amphibians and reptiles get grouped together? They were grouped together before people knew much about them. With modern science, people know a lot more about animals than they did in the past. Scientists can look inside cells and see how animals are put together. As we learn more and more about animals, we may discover other ways amphibians and reptiles are different from or similar to each other.

If you want to go "herping" and look for reptiles or amphibians, here are some things to keep in mind. You are more likely to see an amphibian or reptile in the spring during breeding seasons. Use a good sturdy stick to flip things over. Many herps hide under rocks, logs and leaves, so looking under things is a good place to start. Look for amphibians at night and reptiles during the day

too hot.

Male short-horned lizards are territorial. They don't like having other lizards around them. When another short-horned lizard enters their home, they stand high on their legs and bob their heads. This is also how a male and female greet each other before mating.

Another special thing about short-horned lizards is that they give birth to their young! They don't lay eggs. Three to 15 babies are born at a time. The newborn lizards look just like the adults, but they are tiny. They are smaller than your teacher's thumb. Their horns and spikes are also not very big. It will take awhile before the young lizards grow longer, sharper spikes, so they need to be careful. Many short-horned lizards are killed during their first year of life. If they survive, they will be able to breed and have their own young in about two years. This interesting little "monster" won't be out for Halloween, but look for it when spring arrives. This

is definitely a monster you want to see!

If you would like to get a close look at an amphibian or reptile, place the animal in a clear plastic box. Amphibians will probably need a bit of water in the box. Herps can bite! Use a net or wear thick leather gloves when handling animals and never handle a rattlesnake. Once you are done looking at your herp, put it back where you found it. Herpetology can be fun! Read books and watch videos to learn more about amphibians and reptiles. Then go exploring and look for herps around your neighborhood.