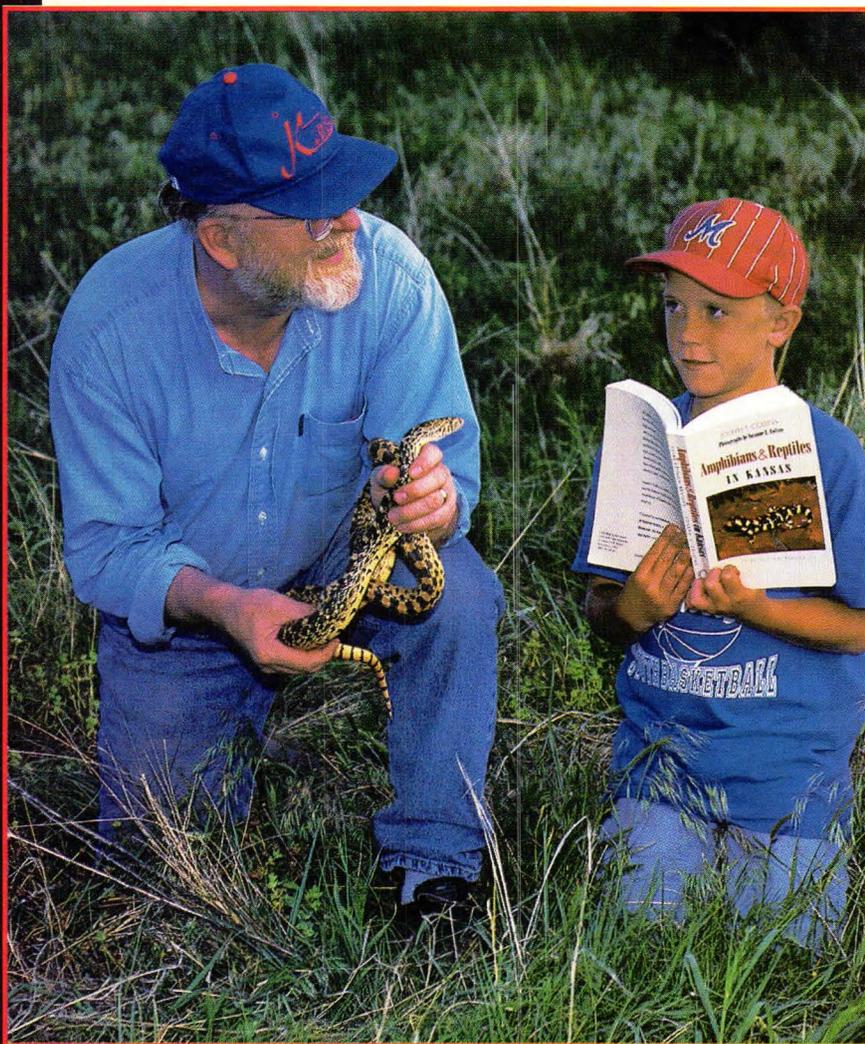


TURNING OVER ROCKS



You can discover a hidden cast of colorful characters in nature if you know where to look.

By John Rakestraw



Visit enough parks and nature preserves and you begin to recognize the types of outdoor hobbyists who frequent them. Birders, for instance, carry binoculars and spotting scopes. Students of butterflies and other insects wield nets and hand lenses. You might see landscape painters at their easels, or fossil hunters crawling along rocky hill-sides scanning for signs of prehistoric life.

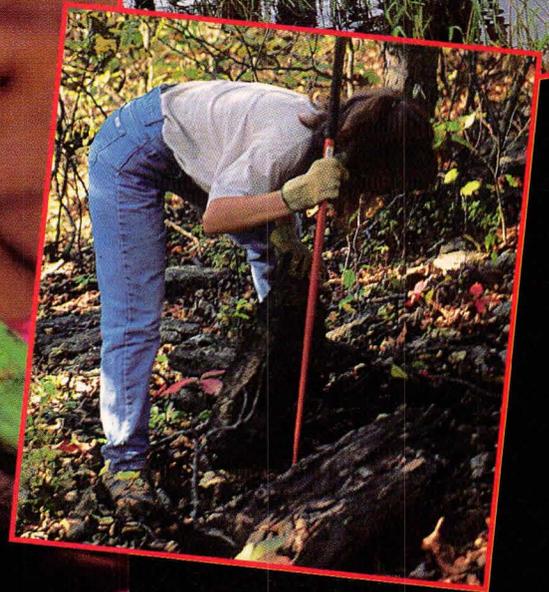
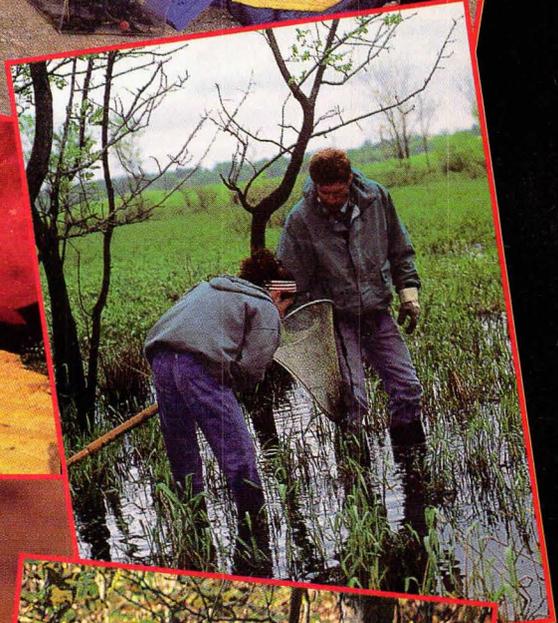
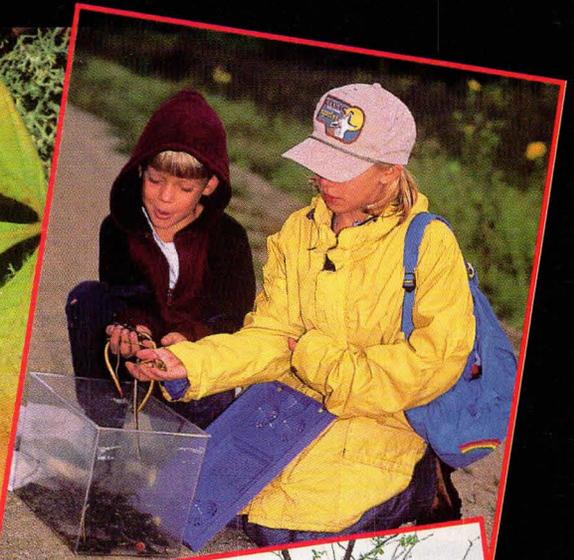
But what about those people walking along the edge of the marsh? They're not carrying equipment except for an occasional cassette recorder. They move quietly, periodically stopping to squat down and look at the ground or turn over rocks. Who are they?

Herpers. Herpetology is the study of reptiles and amphibians: turtles, lizards, snakes, frogs, toads, salamanders and their cousins. Herping is the hobby of looking for these animals in the wild, and increasing numbers of outdoorspeople are pursuing it.

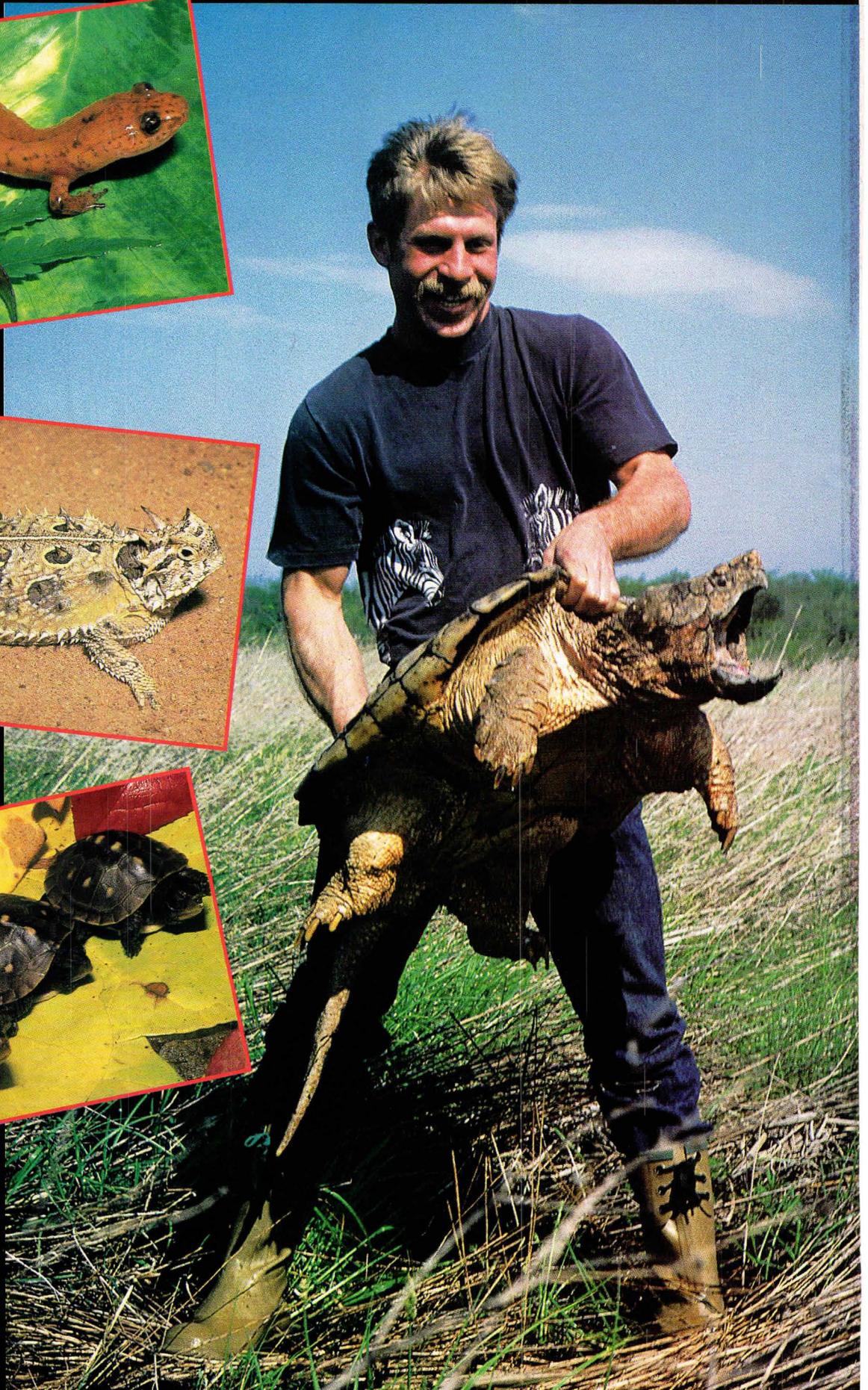
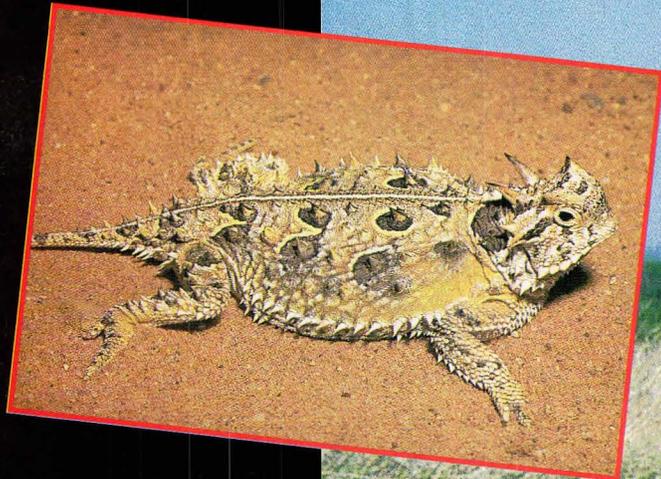
Herp Habitats

Frogs and turtles are most numerous around wetlands, but for sheer variety of species, the best territories are dry habitats. You may find herps in your own yard (see "Attracting Herps to Your Garden," page 67), or in woods around your house. But a trip to a nearby park can also prove fruitful.

You'll want to bring along a good field guide to the animals in your area. National



Opposite: Herping inspires kids to study the natural sciences. Clockwise from left: the green anole is a chameleon known for falling from trees; American toads live in backyard lawns and gardens; studying snakes at a nature center in Kansas; marshlands make excellent herping grounds; always roll rocks toward yourself.



Clockwise from above:
Baby eastern box turtles;
the Texas horned lizard is
often taken illegally by
tourists to the South-
west; spring salamanders
live in mountain springs;
a brave herper lifts an
alligator snapping turtle.

Handling Herps

guides are widely available, but the more specific the book is to your region, the easier it will be to identify the herps you find. If your bookstore can't offer a local guide, call your state's department of natural resources for a recommendation.

Herps are cold-blooded; their bodies don't self-regulate temperature. So their body heat fluctuates with their environment. If the weather is cool, you may find herps basking in the sun or lying under a sun-warmed rock. If the weather is hot, the animals seek shelter under rocks or in the water. During the winter, herps hibernate deep under ground.

Rules of the Roll

Hiding under objects not only helps herps regulate their body temperature, it also provides safety from predators. So, a good place to look for many herps is under logs, rocks, and pieces of debris like boards and sheet metal. There are three important rules for rolling objects that every herper should follow:

1) Never put your hand where you can't see it. Place your hands on top of the object you are rolling. If you reach

under an object, you might encounter a black widow spider, scorpion or something equally dangerous.

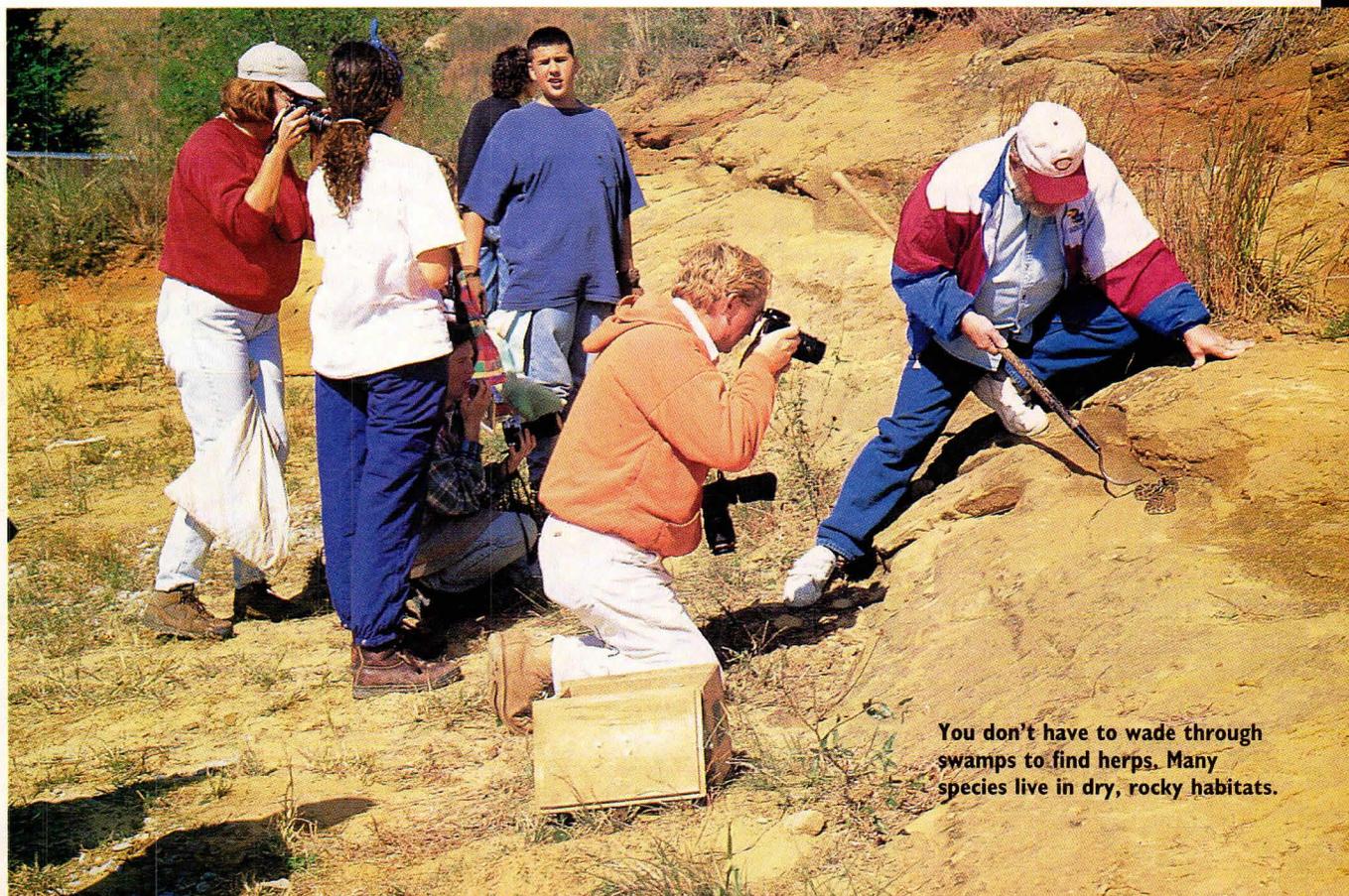
2) Roll objects toward you. This keeps the rock or log between you and whatever might be underneath.

As you can see from the photos on these pages, herping is a hands-on hobby. Many species cannot be identified without inspecting their undersides. Field guides go into great detail about how to catch salamanders, turtles and such. And kindergartners bring tadpoles back to the classroom to watch them grow into frogs.

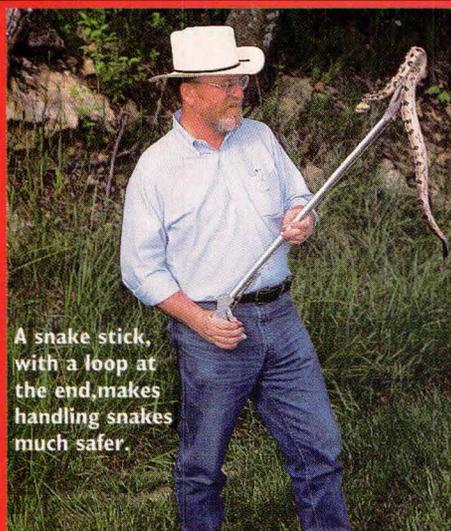
But inexperienced herpers can accidentally kill or injure their subjects. The warmth of a child's hands can raise a herp's body temperature too high. Scaring certain salamanders and lizards can cause them to lose their tails—a self-defense mechanism that protects them from prey, which hopefully get only a tail for their meal. A new tail will grow, but it won't be as big or as effective at protecting them from the next threat.

Meanwhile, amphibian and reptile populations are waning, perhaps because of global warming or the depletion of the ozone layer. (These cold-blooded animals are so sensitive to temperature changes and ultraviolet light, it's possible that climatic shifts are killing them off.) Whatever is causing the depopulation, some naturalists are calling for a look-but-don't-touch approach to hobby herping.

Herpers say, though, that gently and skillfully handling most herps causes them no harm. Also, because handling herps makes people more comfortable about reptiles and amphibians, it's good for the animals' long-term survival. To touch or not to touch herps is a question you'll have to answer for yourself, but first-time herpers can get an education in herping at nature centers and state parks. (Contact state wildlife agencies for more information.) And despite the controversy, most scientists agree that bringing wild animals home as pets is a bad idea. —The Editors



You don't have to wade through swamps to find herps. Many species live in dry, rocky habitats.



A snake stick, with a loop at the end, makes handling snakes much safer.

A Word about Snakes

Mention the word reptile and poisonous snakes immediately come to mind. This is unfortunate, since the danger from snakes in North America is greatly exaggerated.

There is no such thing as a poisonous snake, by the way. All snakes are edible. However, some species of snakes are venomous, which means they are capable of injecting venom into their prey. These include several species of rattlesnakes, copperheads, cottonmouths and coral snakes. In most areas of the United States, venomous snakes are not common. (Contrary to common belief, though, rattlesnakes are not limited to the southwestern desert. They are actually quite common in the Northeast, too.)

Everyone (not just herpers) should learn which species of snakes, if any, in their area are venomous. Learn to recognize these species. If you do find a venomous snake while herping, keep your distance and leave it alone. Many snake bites occur when a person attempts to capture or kill the animal. These animals are an important part of the ecosystem and should be respected as such.

If you are bitten, do not panic. About half of all bites from venomous snakes are "dry bites"—the animal does not actually inject any venom. Do NOT apply a tourniquet or make any incisions near the bite. Simply remain calm and seek immediate medical attention.

3) Always replace the object in its original position after you have looked under it. The microhabitats under rocks take years to develop and provide homes for a wide variety of wildlife. If you flip objects and don't replace them, you destroy habitat.

Wildlife Watch

Herpers look for a wide range of reptiles and amphibians, and track what they see by making lists, like birders do. Here are a few herps you might encounter:

Turtles are easy to find. Aquatic turtles bask in the sun along lakes, ponds, and rivers, but they are often difficult to approach, since they'll slip into the water at the first sign of danger. A good pair of binoculars will enable you to identify many turtles from a distance. In the spring and summer, aquatic turtles venture out onto land to find a suitable sandy area in which to lay their eggs. Box turtles are much easier to approach and observe because they spend their entire lives in woods and grasslands (they cannot swim). Beware: Any turtle can produce a serious bite, and some have very long necks.

Salamanders have smooth or warty skins and are clawless. They spend most of their time under logs and rocks. Depending on the species, these harmless little amphibians range in length from less than an inch to more than 8 inches. A hand lens will make identifying small salamanders easier.

Lizards are often confused with salamanders, but lizards have scales on their bodies and claws on their toes. They live in woods, grasslands, or rocky areas, depend-

ing on the species. Most are very quick. To increase your chances of getting a look at a lizard, search for them on cool mornings when they're hiding under rocks and logs or basking in the sun. Lower temperatures slow them down.

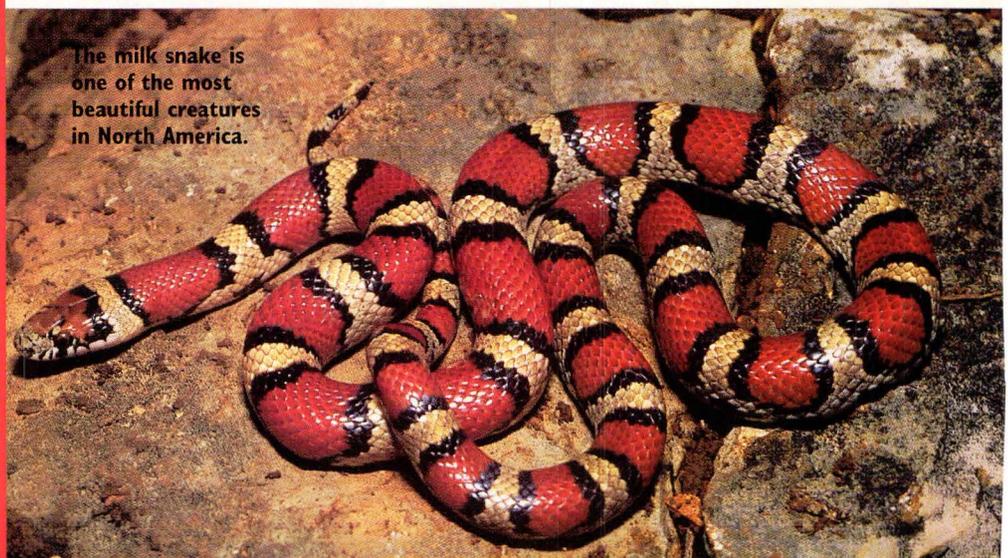
Frogs tend to have smooth skin and long back legs. They can cover a lot of ground quickly, making them hard to approach. While a few species of frogs, such as leopard frogs, tree frogs, and wood frogs, can be found away from water, most frogs spend their lives at the edges of ponds, lakes, marshes and rivers.

Toads and frogs are difficult to differentiate, but toads typically have warty skin and shorter back legs. Toads can be found in many different habitats, from deserts to forests to lawns. On spring nights, you'll find frogs and toads in wet areas where they gather to lay their eggs. Shining a flashlight on the animal will enable you to get close. To experienced herpers, each species of frog and toad can be identified by the male's call. Some herpers even play recordings of these calls to illicit a response from a desired species.

Snakes live in virtually every habitat. Some species hide under rocks and other objects until nightfall, while others are found out in the open at midday. Many people fear snakes, but the vast majority of snakes in North America are harmless (see "A Word About Snakes," at left).

Reptiles and amphibians are easy to find and fun to observe. Children who might be bored by birds or wildflowers will perk right up if you show them a

Continued on page 67



The milk snake is one of the most beautiful creatures in North America.

Exotic Vegetable Seeds

Most of the exotic vegetables discussed in "The Global Gourmet's Garden" won't be available as bedding plants at your local nursery, but you don't have to travel the world to grow this international crop. Just start them from seed. All of the vegetable seeds are available from mail-order catalog companies. And the following companies specialize in exotic varieties.

BOUNTIFUL GARDENS SEEDS

18001 Shafer Ranch Road
Willits, CA 95490
(707) 459-6410
An impressive array of organic and naturally-grown seeds.

THE COOK'S GARDEN

PO Box 5010
Hodges, SC 29653
(800) 457-9703
Exotic seeds and recipes for cooking with ethnic vegetables.

THE GOURMET GARDENER

8650 College Blvd. Ste. 205
Overland Park, KS 66210
(913) 345-0490
Herbs, mesclun and many other unusual vegetables.

JOHNNY'S SELECTED SEEDS

Foss Hill Road
Albion, ME 04910
(207) 437-4301
Chiogga beets to Chinese cabbage.

NEW HOLLAND BULB CO.

PO Box 335
Rockport, IL 62370
(217) 437-2108
Lemongrass plants.

GEO. W. PARK SEED CO.

Parkton Avenue
Greenwood, SC 29647
(864) 223-7333
A good basic source for all kinds of seeds.

PINETREE GARDEN SEEDS

PO Box 300
New Gloucester, ME 04260
(207) 926-3400
Well-researched growing information and a focus on ethnic vegetables, plus they sell in small quantities, making it easy to try lots of new varieties.

SHEPHERD'S GARDEN SEEDS

30 Irene Street
Torrington, CT 06790
(860) 482-3638
Wide selection of ethnic varieties, such as Asian greens, specialty salad greens, hot peppers, even epazote and Holy Basil.

STOKES SEEDS INC.

PO Box 548
Buffalo, NY 14240
(716) 695-6980
Hundreds of vegetables and a good selection of herbs.

SUNRISE ENTERPRISES

PO Box 1960
Chesterfield, VA 23832
(804) 796-5796
Asian vegetables.

TERRITORIAL SEED CO.

PO Box 157
Cottage Grove, OR 97424
(541) 942-9547
French filet beans, fava beans, daikon radishes and much more.

TOTALLY TOMATOES

PO Box 1626
Augusta, GA 30903
(803) 663-0016
Mostly tomatoes, with a wide selection of peppers thrown in for good measure.

VERMONT BEAN SEED CO.

86 Garden Lane
Fair Haven, VT 05743
(803) 663-0217
More than just beans, a full selection of exotic vegetable seeds.

WILLHITE SEED INC.

PO Box 23
Poolville, TX 76487
(800) 828-1840
Over 500 varieties of vegetables.

Attracting Herps to Your Garden

Toads eat up to one-third of their body weight in insects each day. One or two snakes living in your barn or under your toolshed will provide safe and effective rodent control.

You can encourage herps to take up residence on your property. To entice toads, salamanders, lizards, and small snakes to move in, place flat rocks or old boards around the edge of your garden. Most of these animals will sleep under the objects during the day, then come out at night to feast on insects and other garden pests.

A pile of large rocks or a stack of firewood not only provides a safe hiding place for lizards and snakes, but also provides sites for these animals to lie in the sun on cool mornings.

Small ponds or water gardens will attract frogs. Like their cousins the toads, frogs will eat huge quantities of insects. However, most species of frogs require wetter habitats than toads, which only enter the water to lay their eggs.

Since amphibians (frogs, toads and salamanders) absorb water and oxygen through their skin, these animals are very susceptible to pesticides and other lawn chemicals. Gardeners wishing to attract these insect eaters should refrain from using chemicals whenever possible.

salamander, turtle or toad. While some people still consider it odd to actually seek out such slithery creatures, many are finding that the study of these fascinating animals greatly adds to their enjoyment of the natural world. ♣

John Rakestraw is a naturalist at Camp Kern, an outdoor education center near Oregonia, Ohio. Thanks to Sarah Grimké Faragher, PhD candidate in behavioral herpetology at Northern Arizona University in Flagstaff, for technical assistance.