

Catching Frogs and Spider Webs

The material on this page is furnished by the Coordinating Council on Nature Activities.

Coordinating Nature Study

Realizing the need for a national program that would coordinate the nature activities of national groups working with young people, the American Museum of Natural History invited these volunteer organizations to form a council to be known as the Coordinating Council on Nature Activities for the purpose of teaching the growing generation, through nature activities, the value of all wild life and natural resources and their conservation. The organizations represented are: American Museum of Natural History, American Nature Study Society, Boy Scouts of America, Camp Directors' Association, Camp Fire Girls, Inc., Girl Scouts, Inc., Pioneer Youth of America, Playground and Recreation Association, and the Woodcraft League of America.

Mounting Spider Webs

How many of us have walked abroad in the early summer mornings after a heavy dew and have seen glistening in the sunlight the jeweled webs of spiders? These delicate, though exquisitely spun homes vary in size and architectural design, thus making them fascinating material for study and collection. I often wonder how many persons pause to enjoy the beauty and craftsmanship of these cunning structures and hope that they might be preserved forever.

One may ask how a thing so sheer as a spider's web may be kept for all time. This is entirely possible, not difficult and intensely interesting to do. There are a few necessary preparations to be made before going into the field. Secure two rectangular pieces of glass, any size suitable to choice, cleanse thoroughly and put aside for later use, as one is not likely to be able to carry them to the field without mishap. Next cut four pieces of cardboard the same size and shape as the glass. Of these, two pieces should have the centers cut out, leaving a rim of one inch in width. Now place the four pieces together with the whole pieces on the outside and fasten securely with a string. This, together with a tube of paste, is all that is necessary to take into the field.

Upon finding the web, unfasten the cord, lay aside the solid pieces of

cardboard, place paste upon the rim of one of the remaining pieces and center the web. After centering, put the paste side of the cardboard against the web, hold steady with one hand, and with the free one draw the web over the frame, thus cutting the web loose. Now put the second piece of cardboard, from which the center has been removed, against the pasted side of the other, press firmly, making sure that they stick. Next take up the solid cardboards, place one on either side and tie with the cord, all the while exercising care to avoid pressing against the center. Upon arriving home, remove the covers, and in their stead place the glass, previously prepared, and fasten with binding paper.

The spider web is now mounted, may be freely handled, and should remain a thing of beauty for many years.

—THELMA J. GREENWOOD, *American Nature Study Society*.

Frog Hunting

There is something fascinating about the night. When darkness covers the familiar scenes of daylight hours, it is easy to imagine ourselves in some strange land with uncanny creatures all about. Many weird sounds come to our ears. As most of them are unknown to us, we tend to believe, as our forefathers did, that they are made by hobgoblins. But night-crying hobgoblins are not so mysterious as they seem. If we take rubber boots and a flashlight and hike out into the darkness and the swamps, we soon discover the source of most of these voices.

One of the commonest night sounds, which may be heard from almost any marsh, pond, or temporary pool, is a shrill "Peep-peep-peep" half whistled, half chirped. It is a strong, penetrating note as if a large creature had produced it, yet it comes from a tiny brown tree frog scarcely an inch in length. With a spotlight, great numbers of the "Spring Peepers" can be seen, swimming about in the water, jumping over reeds like grasshoppers, or sitting patiently on a twig, serenading into the night. The sound is one of the first messengers of spring and may be heard very soon after the snow melts. With every whistle the Spring Peeper swells out his throat into a monstrous bubble or "vocal sac" which collapses as soon as the song is ended.

Along with the Peepers, especially

in the marshes and shallow ponds, there may be heard the Leopard Frog, so named because of the bright spots on his coat. The call is an unmusical "kerr-r-or-oak ker-oak" as if a group of old men were arguing about the election. The Leopard Frog has a vocal sac on both sides of his throat. When he calls, he looks as if he had the mumps. Only the male frogs ever sing, and their songs, like those of birds, are primarily love songs. Soon the females respond to the appeal and come out to lay their eggs. These eggs, lying in the water like masses of jelly, can often be found and taken home to develop, first into tiny tadpoles and later into perfectly formed diminutive froglets.

Many people believe that all frogs are alike, that "a frog is a frog." But right in New York City, there are ten varieties, all different in size, color, pattern, habits and song. In woodland pools, we find Wood Frogs "Quack-quack-quack"-ing like so many ducks. They are easier to hear than they are to see, for their coats just match the dry leaves about them.

Large deep ponds usually have different varieties from those of the swamps and pools. It is a favorite sport for boys and girls to explore the banks of these ponds and try to catch the fat Bull Frogs before they leap to the safety of the water. Even at night, the frogs are wary and we have to creep up very carefully without a light in order to see them call for their "Jug o' Rum, Jug o' Rum" or to watch them enjoying their evening repast. Bull Frogs eat almost anything from earthworms and small snakes to mice and birds. I have even seen them devouring their own tadpoles.

Here also may be heard the two calls of the Pond Frog—one a loud explosive "Tchung" and the other a lazy "Tung - Tung - Tung." Many people do not know the distinction between the Pond Frog and the Bull Frog. The former is smaller, greener in color and has two wrinkles down his back.

A third neighbor of the deep ponds is the Pickerel Frog. They usually stay by themselves in a very unsociable way. Perhaps their fellow frogs dislike their "snoring." Evidently they dislike it themselves for I have never found two Pickerel Frogs snoring side by side.

(Just turn the page)

Frogs and Spider Webs

(Continued from page 383)

Hop Toads are like frogs, in that they come in great numbers every Spring to lay their eggs in the water. The song is a melodious drone, strangely beautiful to come from such an unattractive creature. It is unfortunate that the toad's looks are so against him, for he is a good-natured and valuable friend. His skin was never known to cause warts and his taste for destructive insects saves us

thousands of dollars every year. Toad eggs are laid in long strings of jelly which look like necklaces of jet and crystal. The tadpoles develop very quickly and leave the water when they are no larger than horse-flies. One summer I counted the toadlets which were emerging like a swarm of insects from one side of a Long Island pond. There were more than thirty to every square foot. I estimated that there were over one million five hundred thousand toads leaving that pond at that moment. Imagine how many billions are produced each year! Of course only a small percentage of these survive, the vast majority being eaten by birds, snakes, and fishes, or dried up by the sun.

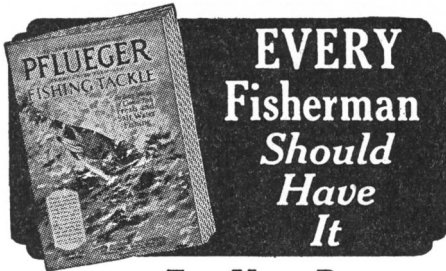
On Long Island and along the coast there is another kind of toad, with smooth skin and a black horny pad on its heel. It is called the Spadefoot Toad, for it digs with that horny pad. In a short time it can burrow backward until entirely concealed in the sand. When the Spadefoot calls, he swells up his whole body with air, closes his eyes and screams "Wowrrrrr wowrrrrr."

Anyone who has spent much time in the country, especially around old orchards, has surely heard the high, school-girl trill of the Common Tree Toad. Many people think it is the

call of an insect and believe it to be a sure sign of rain. But it is a tree-dwelling frog and like other frogs seems more apt to sing in damp weather, be it before or after rain. It is almost impossible to find a Tree Toad during the day. Their bodies adhere very tightly to the trees, and their skin color changes from gray to green according to the back-ground. But at night in the breeding season they migrate long distances to water-lily ponds, brimming over with song and activity. Sometimes in the midst of their trilling, we hear a strange uncanny sound "Who-Who-Wo." The negroes of Long Island call it the Turkey Root, meaning a bad spirit which calls like a turkey. They are very much afraid of the sound and could not be bribed to go near it. If they did explore, they would only find a lazy Tree Toad, indolently calling with its throat only half inflated.

Most of these frogs and many other creatures are out in the open tonight waiting to be seen by anyone who will throw a spot-light upon them. Frog hunting may not sound as thrilling as lion hunting or bear hunting, but just try it some night and see what genuine sport it can be!

—G. KINGSLEY NOBLE of the American Museum of Natural History, and RUTH CROSBY NOBLE.



Free Upon Request

Write and get a copy of Pflueger's Pocket Catalog No. 146. It contains just the kind of information every fisherman wants. Besides being a catalog of Pflueger tackle for every kind of fishing—also illustrates and describes leading game fish, habits—haunts—weights—food value—tackle recommended for catching, etc.

THE ENTERPRISE MFG. CO.

Dept. 000 Akron, Ohio

Oldest and Largest Manufacturers of Fishing Tackle in the United States



"When you gather round the camp-fire—"

Each of you should have your own copy of the **SCIENCE NEWS-LETTER** with its special outdoor nature pages.

To make it easy for groups, clubs, scout troops, summer schools and gangs to provide each of their members with individual copies to tear up and digest as they please, this **QUANTITY or BUNDLE** order price is offered.

TEN copies to the same address for THIRTEEN WEEKS—\$6.00.

(For each additional copy add 60c to above price. You may figure bundle orders of ten or more copies for a smaller number of weeks at 6c a copy per week. The regular price of the **SCIENCE NEWS-LETTER** is \$5.00 a year and 10c a week.)

BUNDLE ORDER

To **SCIENCE SERVICE, 21st and B Sts., N. W., Washington, D. C.**

Send copies of the **SCIENCE NEWS-LETTER** for weeks to the address below.

Remittance for \$..... is enclosed.

Name.....

Address.....