

# NORTHERN CRICKET FROG

by Rob Criswell

*photos-Brandon Ruhe (Left to right) Chris Urban, Chief, Pennsylvania Fish & Boat Commission Natural Diversity Section, and Jordan Allison, Fisheries Biologist, Water Shed Analysis Section.*

With the Summer Olympics in London still fresh in our minds, some older track and field enthusiasts may remember United States athlete Bob Beamon's incredible leap during the 1968 Games in Mexico City. He sprinted down the runway and soared 29 feet, 2 ½ inches in the long jump, smashing the previous mark by almost 22 inches. This nearly unbelievable feat, coupled with his collapse upon learning of the record, became one of the iconic and lasting moments in all of sport.

However, the northern cricket frog would have blown Beamon away. Beamon was 6'3" tall, so he jumped nearly five times his height. But, this diminutive frog, stretching the tape at 1 inch or less, is capable of jumping 6 feet or more than 70 times its height. So, if the frog was 6 feet tall, it could leap an astounding 420 feet and that's from a standing start.

Long jumpers don't need to worry about amphibians showing up at the next Olympiad, but Pennsylvanians should be concerned that northern cricket frogs may not be showing up at all in the future if something doesn't change.

This frog, the state's smallest frog, prefers the vegetated margins of ponds, lakes and slow-moving streams as well as bogs, vernal pools and other wetlands. Although it is a member of the treefrog family, Hylidae, it spends very little time aloft. Unlike its close relatives, the northern cricket frog spends the entire year in the vicinity of watery environs. The uplands adjacent to these waterways are usually forests or shrub lands.

The warty skin of this frog may come in a bewildering array of patterns, but a combination of markings allows for accurate identification. It may be gray, brown, green or a combination of all three with a green or brown stripe running down the middle of its back. A distinctive triangle begins behind the eyes and points toward the rear. There are dark crossbars on the hind legs and a dark stripe along the back of each thigh.

Northern cricket frogs emerge from hibernation in March in southeastern Pennsylvania and perhaps a bit later to the north and west, although some individuals



may remain active all year. Their menu consists mostly of terrestrial insects, and their preferred table fare includes ants, beetles, bugs, flies, grasshoppers and springtails along with a helping of spiders. They are active day and night.

Beginning as early as April in Pennsylvania, some males begin to call, signaling the oncoming breeding season. This species' namesake vocalization has been compared to that of a singing cricket, although the notes sound more like a click than a chirp. It has also been likened to the sound made by repeatedly tapping two pebbles together.

The main breeding season in Pennsylvania is reported to be May through early August. Males "chorus" from open areas along stream banks and shorelines as well as from mats of floating vegetation. The songsters space themselves at least 3 feet apart as they attempt to impress any female in the area. In some parts of their range, lurking within half that distance may be other "satellite" males. These suitors are the "quiet type," lying in wait to intercept an interested female as she makes her way toward one of the crooners.

Females lay up to 250 eggs, either one-by-one and attached to submerged plants or in small masses on the bottom of the waterway. They develop in 40-90 days. The tadpoles may reach a length of nearly 2 inches, or twice their adult size, and may transform as late as October.

The northern cricket frog was once scattered about the southeastern and southcentral regions of the state, along with small populations in the northeast and in the Pittsburgh area. However, it has suffered a precipitous decline. Recent research and field work has revealed that this frog has been eliminated from 92 percent of its historical (pre-1983) locations. In addition, of the six populations discovered since 1983, three have already disappeared. In all, this species is now extirpated from 37 of the Commonwealth's 43 known locations. Of the remaining six, only one in Luzerne County may be viable. This population plunge compelled the Pennsylvania Fish & Boat



Commission (PFBC) to list the northern cricket frog as an endangered species in 2010.

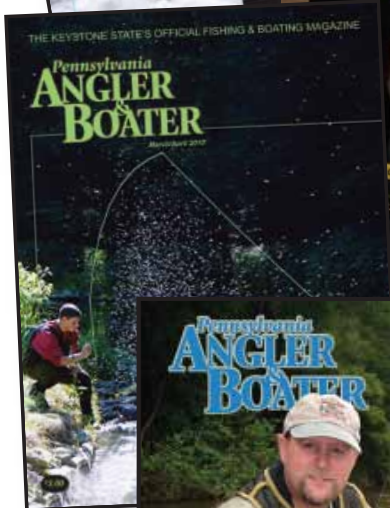
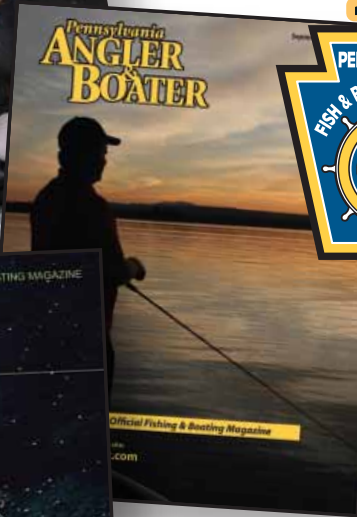
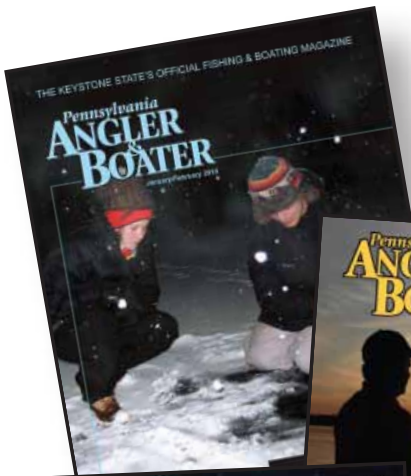
The extinction of this tiny frog in Pennsylvania is a very real possibility. Several of the remaining populations exist in fragmented or urbanized areas and are under heavy pressure. Chris Urban, Chief, Pennsylvania Fish & Boat Commission Natural Diversity Section, considers the greatest threats to our northern cricket frogs to be encroachment into wetlands habitat from residential and industrial development and the water quality issues it brings with it. He points out that these frogs prefer large, unbroken, high-quality wetland complexes, examples of which are few and far between in the northern cricket frog's range.

The area of occupation of the six remaining, widely separated locations totals only about 600 acres or less than one square mile, and the Luzerne County habitat complex accounts for nearly 500 acres of that total. These small sites are vulnerable to pollution and weather events. To make matters worse, the northern cricket frog has a very short life span. Only 5 percent of the population survives over winter. A severe weather event, chemical spill or pesticide application could have disastrous results with no frogs nearby to reestablish the population.

Urban noted that a population reassessment will occur within the next few years and may provide a basis for additional conservation measures. He advises that "one thing we are considering, if the habitats where these small populations occur is deemed to be able to sustain them, is population augmentation by working with our boundary state partners (New Jersey, Delaware and Maryland) where northern cricket frog populations appear to be more abundant."

Although its endangered species status provides some measure of protection, only active conservation and monitoring of the northern cricket frog's populations and its habitats will ensure that the Beamesque leaps of Pennsylvania's tiniest long jumper will persist into the future. ☐





# Pennsylvania ANGLER & BOATER



Get the complete story and read what you've been missing!

Do you like what you're reading? Do you find *Pennsylvania Angler & Boater* online articles a valuable resource? If so, why not become a regular subscriber to *Pennsylvania Angler & Boater* and receive the entire magazine delivered to your doorstep. With each printed issue, we place only a small portion of our feature articles on our website. If you fish or boat in Pennsylvania, you shouldn't miss a single issue, or even a single article! It's been the Pennsylvania Fish & Boat Commission's (PFBC) premier, award-winning magazine since 1931.

Print out this page and mail the form below with your payment to begin your subscription. Or you can subscribe online through

PFBC's Outdoor Shop. **CLICK HERE!**

**6 BIG Issues per year!**

Subscribe with this form today or online at [www.fishandboat.com](http://www.fishandboat.com).

## SUBSCRIBE TO *Pennsylvania Angler & Boater*

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone \_\_\_\_\_

E-mail (optional) \_\_\_\_\_

**SAVE UP TO 44% OFF THE COVER PRICE!**

Payment must accompany orders. Use your credit card, check or money order made payable to the Pennsylvania Fish & Boat Commission. Return this form with payment to: **PA&B Circulation, Pennsylvania Fish & Boat Commission, P.O. Box 67000, Harrisburg, PA 17106-7000.** Allow 45 days to receive the first issue.

One year (6 issues) **\$12**     Three years (18 issues) **\$30**

**TOTAL ENCLOSED**

**\$** \_\_\_\_\_

**Credit Card Purchase:**     VISA     Mastercard     Discover     AmerEx

Credit Card # \_\_\_\_\_ Exp. Date \_\_\_\_\_

Signature \_\_\_\_\_

Phone \_\_\_\_\_ E-mail (optional) \_\_\_\_\_

Since 1931, Pennsylvania's official fishing and boating magazine.

PAA&B-SUB-9-10