



Illinois Chorus Frog (Photo credit: Missouri Department of Conservation)

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The Call of the Frog: A Search for Illinois Chorus Frogs

By Tom Lerczak, Illinois Nature Preserves Commission

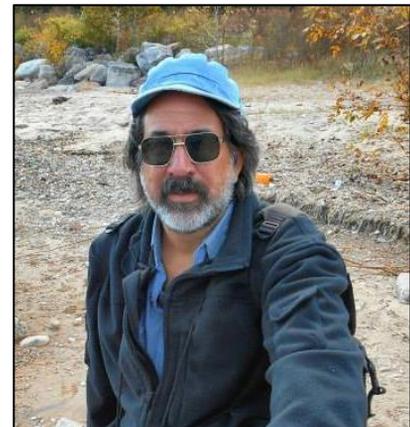
“Oh the night life, ain’t no good life, but it’s my life.” – Willie Nelson

It was nearing midnight, and I was standing alone on the edge of a remote Mason County road intently listening. The mid-April night was so quiet that I could hear barking dogs miles away and the slight breezes passing through newly leafed-out trees. But I tried to filter out all other sounds in order to focus on the breeding calls of the rare Illinois chorus frog, of which I heard none.

So after the required five minutes of listening, I jumped into my Chevy Trail Blazer and dashed to the next stop on my 65-mile chorus frog survey route. When I arrived and shut down my vehicle lights, I became engulfed in the pure darkness of a moonless sky. From where I stood, I could see lights from several home sites miles away

and the blinking lights from an airplane; but otherwise I stared into clear skies that opened to the universe. By starlight I again listened for the high-pitched, squeaky-wheel-sounding Illinois chorus frog. And heard nothing for five minutes. Not even a barred owl, which I did hear earlier in the evening just after sunset. And certainly no frogs, which did not surprise me since the area I was sampling, chosen at random, held no standing water. Without water I have learned not to expect frogs. So I proceeded on, quite a bit less energetically than the first stop of the night, 13 miles to the Illinois River bluffs and the final square-mile section of the survey route.

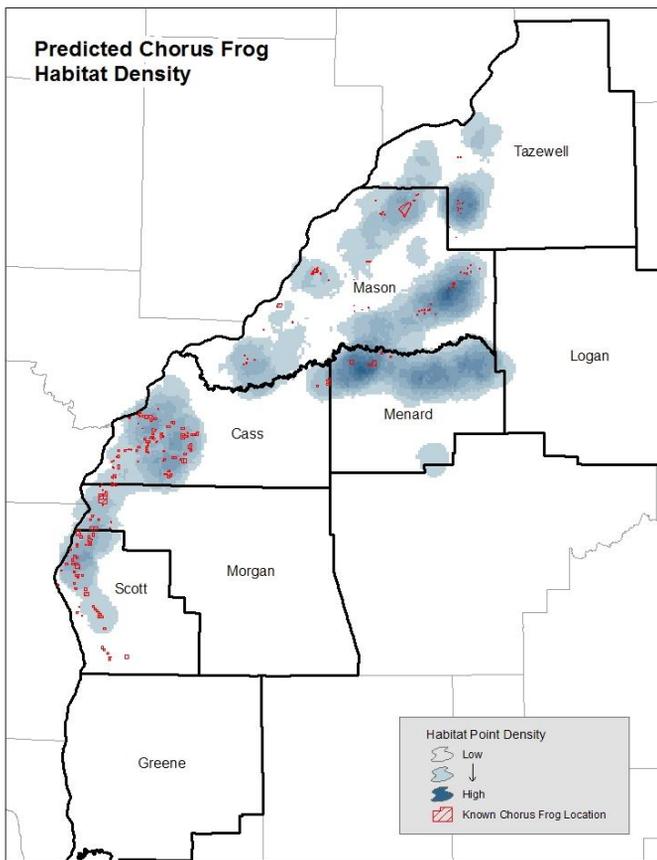
At well past midnight, far from any town, I was the only car on the road. I fought to stay alert and ready to avert the occasional white-



Tom Lerczak has been a Natural Areas Preservation Specialist with the Illinois Nature Preserves Commission since 1996. He covers 21 counties in central Illinois.

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Tammy Miller, Editor
tammy.miller@Illinois.gov



Andrew Hulin, a GIS specialist with Division of Natural Heritage, developed a habitat model to identify areas likely to be inhabited by the Illinois Chorus Frog. The largest patch of habitat in the U.S. occurs in central Illinois

tailed deer, raccoon, or rabbit that might dart in front of my vehicle at the last second. Driving the back roads at night required a constant awareness of where I happened to be at any given moment. Once disoriented, precious time could be lost finding my way again. So I paid close attention to the trip meter, county road map, key intersections, and whatever landmarks I could make out in the darkness.

After finishing the last of the survey stops, I had still not heard any Illinois chorus frogs. I knew, however, that my survey run was not wasted effort. This was only the first year in a ten-year survey conducted by the Illinois Department of Natural Resources (IDNR), and my sample route was one of nine being conducted by other IDNR staff in southern and central Illinois, from Alexander County on the south to Tazewell County on the north. My data would feed into the larger analyses conducted by the IDNR. In addition, because the Illinois chorus frog is state-threatened (if populations fall, it could become state-endangered or even extirpated), any information on its abundance, distribution, and behavior is valuable.

Gaining insight into the habitat needs of such a secretive species, I'm sure, has not been easy. Because except for the brief spring breeding



Male Illinois Chorus Frog, photo taken in Alexander county. (Photo credit : Scott Albert)

PSEUDACRIS ILLINOENSIS

Family: Hylidae (treefrogs and allies) in the order Anura (frogs)

Description: Tan to tannish gray with a white belly and many dark brown or gray irregularly shaped markings on its body. This frog has a distinguished V-shaped marking between the eyes, a dark stripe from snout to shoulder, and a dark spot below each eye. Young froglets are dull gray and have inconspicuous body markings. The skin of the Illinois chorus frog has a rough texture. The large and muscular forearms of this frog are used to dig the burrows where it spends much of the year. The webbing on the hind feet is poorly developed.

Size: Body length: 1 to 1½ inches

season, the Illinois chorus frog spends all its life buried underground, where it survives on small invertebrates. Its forelegs are highly adapted for digging in pure sand, which is why it is only found in areas with open sand, in only 10 of Illinois' 102 counties; the Mason County sand area, about 25 miles northwest of Springfield, with wind-blown sand dunes, native sand prairie, and ephemeral wetlands (lacking fish that prey upon tadpoles), is of special importance to the Illinois chorus frog.

As it turned out, I did finally hear Illinois chorus frogs during the second run of my midnight frog surveys a few days later; on this second run, though, I heard Illinois chorus frogs at only two listening stops: a good number calling at the nearly dry Sand Lake, just south of Havana, and one calling frog at a listening stop near the Illinois River. But calling whip-poor-wills at several stops—sometimes western chorus frogs, gray tree frogs, and American toads—made up for the lack of the missing target species.

Following my last stop at one o'clock in the morning, with a slight tension behind the eyes, I wearily headed for home. Staying up late is not as easy as it was decades ago. I was not meant for the night life, and I expected my biorhythms to be out of kilter for days. But I eagerly looked forward to next year's survey, and the next eight years after that. Being part of something larger makes it all worth the effort. So the night life can, indeed, be a good life.



The Illinois Chorus Frog breeds in temporary and semi-permanent wetlands. These areas are important for a wide range of species.

The first range-wide survey of Illinois Chorus Frogs was conducted in 2015. Observers detected the species in 33 of 78 sections (42%). Breeding conditions were excellent in Alexander County, where the species was detected in 9 of 10 sections. Cass, Morgan, and Scott counties yielded 11 detections in 16 sections (69%). A late thaw and parched conditions made for sporadic breeding activity in Mason, Menard, and Tazewell counties. Collecting data over an ample period of time (about 10 years) will allow us to distinguish weather-driven changes in breeding activity from more meaningful long-term trends in occupancy.

Observers from the Nature Preserves Commission (Tom Lerczak), Division of Natural Heritage (John Wilker, Ray Geroff, Michelle Simone, Andrew Hulin) and Division of Wildlife Resources (Kenny Delahunt, Chad Bartman, Bob Bluett) participated in the survey. John Palis and Eric Golden accompanied less experienced observers and trained them to identify calls of the Illinois Chorus Frog. Brian Mahan surveyed historical sites in Madison County and Monroe counties, where the last official records of occurrence were from the 1990's.

