

FOOD HABITS OF THE LEOPARD FROG
(*RANA PIPIENS SPHENOCEPHALA*)
IN A MINNOW HATCHERY

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Due to the abundance of ideal habitat free from predaceous fishes, the leopard frog is unusually abundant in most minnow hatcheries. In view of its abundance it is desirable to know whether or not it feeds on minnows.

Other studies have been made on the food habits of the leopard frog, but not on specimens taken where small fishes were known to be abundant. In a study done by Kilby (1935), out of 443 stomachs containing food, the bulk of the food consisted of insects and spiders. The insects were beetles, lepidopterous larvae, crickets, grasshoppers, and some aquatic insects. Knowlton (1944) examined 97 stomachs and found the following: shorthorned grasshoppers, field crickets, leaf hoppers, false chinch bugs, pea aphid, English grain aphid, click beetles, lepidopterous larvae, houseflies, blowflies, mosquitoes, mosquito eggs, deer flies, and ants. In a study done by Drake (1914) out of 209 stomachs, 60 percent contained insects. Other food items included mollusks, crustaceans, myriapods, and spiders.

STUDY AREA

The hatchery at which the study was done is in the Mississippi River bottoms of Jackson County, Illinois near the town of Gorham. The whole study area covered 6 acres. These 6 acres were divided into 19 ponds ranging from 1/20 to 1 acre and ranging in depth from 2 to 4 feet. On the levees and their shorelines, there was a heavy growth of grass and weeds. There were water plants and algae growing on the surface of some ponds.

METHOD OF PROCEDURE

The 46 specimens for the study were collected by the use of an air gun. The stomach contents were determined after dissection.

During the course of the study a record was kept of the availability of the more noticeable food organisms with special reference to the minnow population of the ponds.

RESULTS

Under the conditions of the study area, the leopard frog fed exclusively on insects (Table 1). The majority of these insects were terrestrial. Some aquatic larvae were

TABLE 1.—Stomach contents of 46 leopard frogs¹.

Food Item	Percent Occurrence
Terrestrial Beetles.....	43
Unidentified Insect Remains...	24
Miscellaneous Insects.....	17
Crickets	11
Aquatic Insect Larvae.....	9
Empty	7

¹ Collected April 25 to September 12 in a southern Illinois minnow hatchery.

found indicating that the frogs may feed underwater. Minnows, smaller frogs, tadpoles, and crayfish were available in the study area. None of these items were found in the stomachs.

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