

# Mudpuppy - *Necturus maculosus*

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## Status

**THREATENED.** It is illegal to kill or collect this species by law in Iowa. Found only in rivers and large streams, or connected ponds, these salamanders are often caught on hook and line while fishing off the bottom. Formerly listed as endangered. Many alert Iowa fishermen have submitted reports with photos when they have caught mudpuppies. Their submissions have been very useful. Any sightings in Iowa should be reported to us or the DNR.

## Description

The mudpuppy is Iowa's largest salamander reaching lengths of 13-16 inches. They are also Iowa's only salamanders that are entirely aquatic their whole lives. Adults are brown, reddish-brown, or gray above with varying numbers and sizes of black spots. Ventrally, they are gray with dark mottling. They have four toes on the front and back feet. Long, feathery red gills are very obvious on the sides of the head. The head is large and flattened. They have small, lidless eyes that do not bulge out from the head like our other salamanders. The tail is laterally compressed with fins above and below that give the tail a paddle-like look. This salamander is extremely slimy and it is nearly impossible to hold on to a specimen with bare hands.

## Subspecies

The mudpuppy, *Necturus maculosus maculosus*, is the only subspecies found in Iowa.

## Range

Mudpuppies are found in eastern Iowa along the Mississippi and some of its tributaries. Most of the records are very old, and the disturbance of the large rivers have undoubtedly aided their decline.

## Habitat

Mudpuppies are found in medium to large rivers and lakes with all types of bottoms. In clear, fast moving rivers and streams, mudpuppies have small, compressed gills. In warm or slow moving rivers and lakes they have big, bushy gills. They take refuge under sunken objects such as rocks, logs, boards, and other debris. They have been taken at depths of 70 feet in large lakes.

## Habits

Mudpuppies are active year round. They are mainly nocturnal. They breed in fall and early winter. The female lays up to 100 eggs in late spring and summer. She digs a cavity under an object such as a rock or log and turns upside down to attach her eggs to the roof of her nest. She guards them until they hatch and may stay with the young a while after they hatch. The young are very small and are marked with a yellow dorsolateral stripe down each side. The pattern changes relatively slowly until they look like adults. This may take five years (Bishop, 1941).

Fishermen often catch mudpuppies while they are fishing. Many believe them to be poisonous and will cut their lines before touching them. This is false; mudpuppies are not poisonous, but large specimens may give a good bite if handled roughly. Sightings of mudpuppies should be reported to the IA DNR or us.

## Food

Mudpuppies will eat anything they can catch. Crustaceans, insects, worms, fish, fish eggs, salamanders, and crayfish are all reported foods. Mudpuppies probably do not have keen eyesight and rely heavily upon

olfactory cues to find their prey.