

# Wildlife Diversity Notebook: Longnose Gar

By Karen McClure

**Common Name:** Longnose Gar

**Scientific Name:** *Lepisosteus osseus*

**West Virginia Status:** Common in areas where they occur.

**Description:** The longnose gar is a long cylindrical fish covered with ganoid scales (diamond-shaped, thick hard scales that do not overlap). This fish's single dorsal and anal fins are near the tail fin. Longnose gars, appropriately named, have long, beaklike snouts filled with many sharp teeth, reminiscent of needle-nose pliers. They are usually olive green on top and silver-white below with yellow-orange fins. Some fish have dark spots on their fins and along their sides, mostly towards their tail; however, gar from murky water often will not have spots. Longnose gars can reach more than 50 inches in length and weigh more than 25 pounds. The West Virginia state record for length is 52.25 inches and weight is 19.08 pounds. These records are for two different fish caught in the Kanawha River.

**Habitat:** Longnose gars live in medium to large rivers in areas with a slow current.

**Diet:** Longnose gars mainly eat other fish, along with an occasional invertebrate. They lie in wait or slowly follow their prey, then quickly rush in to move their snout from side to side, injuring or killing their prey. Once it captures its prey, the longnose gar will manipulate the prey so that it can swallow it head first. Adult gars feed more at night than during the day.

**Range:** The longnose gar is native to the Mississippi watershed, the lower Great Lakes, and along the Atlantic Coast. In West Virginia, the longnose gar swims in the Monongahela, Little Kanawha, Kanawha, Guyandotte, Big Sandy and Ohio rivers, as well as small tributaries of these rivers.

**Life History:** Longnose gars spawn in the spring, using vegetated shallows



*A longnose gar showing one of the variations of color displayed by the fish.*

*Photo by Jim Negus*



*Shelby Searls of Henderson caught a 52.25-inch, 16.42-pound fish from the Kanawha River in Mason County on August 20, 2006, using a creek chub for bait. Searls' catch established a new West Virginia record for length.* Photo by Zack Brown/WV DNR

or gravel stream beds. Males chase the females during courtship. A single female may spawn with more than one male in a season. Longnose gars do not build a nest or provide any parental care for their eggs. Each female longnose gar can release more than 30,000 tiny dark eggs. These eggs are poisonous to crayfish and mammals, and take about a week to hatch. Studies have indicated that male bass provide care for both their own eggs and those of gar, and that fishes in nests with young of both species had a higher survival rate than those in nests with only bass young. One researcher hypothesized that gars benefit from this association because their eggs are guarded, while the bass benefit because gar eggs are larger and closer to the nest's edge

than their own, and thus are eaten more often than bass eggs in the nest.

Hatchlings use a suction cup on their snout tip to attach to a submerged object until they consume their yolk sac. Young gars can reach two feet in the first year. Males mature in three to four years; females take about four or five years. Longnose gars can live more than 20 years, with females typically living longer than males. Longnose gars have gills to take oxygen from the water like other fish but also have an air bladder that allows them to gulp air to extract oxygen.

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