



WILDLIFE NOTES

American eel

Anguilla rosteata

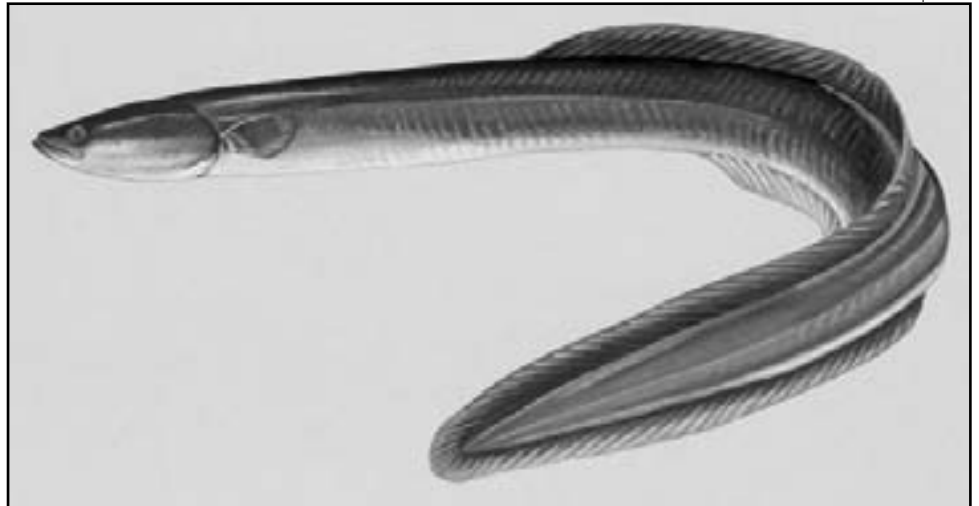
Common to the southern and eastern United States, the American eel once was also a native to New Mexico's major rivers. The eel was reported to be in the Rio Grande and even the Santa Fe River in the 1870s, and in the Canadian and Pecos drainages into the 1960s. In time, it was placed on the endangered species list but later removed because it had become extinct in New Mexico. In the 1980s, however, specimens showed up in the Rio Grande again. Is the species gone or not?

Dams are part of the story, blocking river migration routes between inland areas and the Sargasso Sea, northeast of the island of Cuba. It is there that eels hatch, both the American and European counterparts. They return to rivers to live, the females particularly. No river access, no eel migration.

Dams hold rivers back today. Elephant Butte Dam on the Rio Grande is now about 76 years old. In New Mexico the Rio Grande also holds back Caballo and Cochiti lakes. Other Rio Grande dams in Texas impede eels.

At least three bonafide reports of eels have come from the Rio Grande in recent years.

In the summer of 1983 a woman reported that an eel had been caught in an irrigation ditch about five miles south of San Marcial in Socorro County. At first the Department of Game and



Fish was skeptical but an investigation, involving digging up the discarded head and skin from a backyard garden, proved the lady was correct. Then on March 9, 1984, a mechanic found a dead eel on a catch basket of the Elephant Butte dam hydroelectric facility. There was no question as to the eel's identification.

And in the spring of 1984, an angler caught a 30-inch eel near San Marcial and brought it home in the back of a pickup truck. Having survived that trip, the eel was placed in a backyard ornamental pond. Later it journeyed to Santa Fe in an insulated ice chest. It was also on display for 17 days at the New Mexico State Fair. After becoming a ward of the Game and Fish Department's endangered species project, it stayed healthy in its aquarium home, free of fungus after

treatments, and content for some time.

Colorado is also part of the eel's story. A wildlife employee apparently released eels into some Colorado drainages, including the Rio Grande, in the 1960s; it is not known whether these eels swam down into New Mexico. More significantly, in the early 1980s a private operation (called the Weisbart and Weisbart Hog Farm and Fish Ranch) was located south of Alamosa. The business' name indicated its products. The owners may not have known their ponds had access to the Rio Grande, but the eels in their pools found out, and they migrated. Weisbart and Weisbart owners are no longer around to answer questions as to how this may have happened, or what they planned to do with the eels.

It is believed that the eels are never going to re-establish a viable population in our state rivers. Most likely they won't reach the ocean to breed, and even if they did, there is no longer any way for them to make it back from the ocean.

Eels can live 20 or more years, so we may see them in New Mexico for some time. The size range would be up to 18 inches for adult males, 48 inches for females. Eels are reported to be good to eat, and in some regions they are even regarded as fighting game fish.

These mystery fish are not well understood. We do not know what happens to the adults when they leave fresh water to spawn. The place of spawning has been determined only by collecting newly hatched eels. Nothing is known of mating activity.

The American eel takes about a year to develop through a preliminary stage into a baby eel, called an

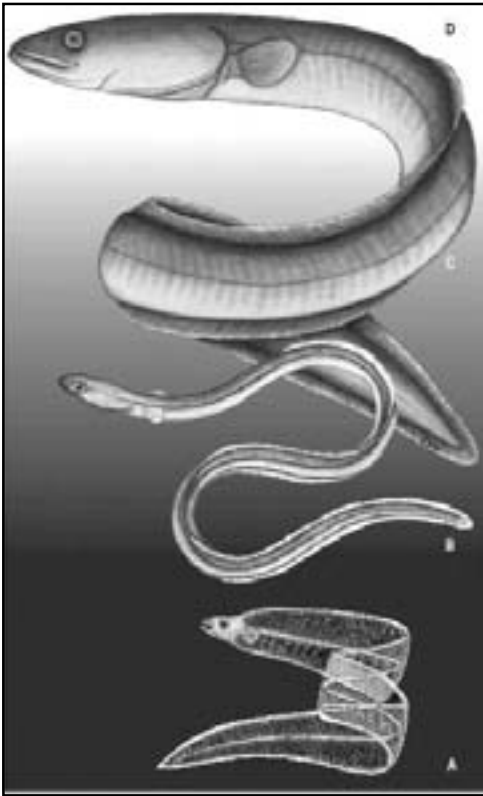
elver. Its European cousin takes about three years to do this. Elvers reach our coastline when they are about two inches long, a year after hatching.

Males seem to remain fairly close to the mainland, while females travel far inland when they are about two inches long, a year after hatching.

Males seem to remain fairly close to the mainland, while females travel far inland. After reaching their adult sizes in six to eight years, eels return to the spawning grounds to breed and die.

Eels hide under cover by day and are active at night. They feed on living or dead animal matter that includes fish, crayfish and worms. If you see or catch an eel in New Mexico, let the Department of Game and Fish in Santa Fe know. You'll be helping track one of the fishery mysteries of the 1980s.

Published 1992



THE LIFE CYCLE OF THE AMERICAN EEL

A. After hatching the larvae are transparent and shaped like a willow leaf. They then metamorphose into a more recognizably eel-like juvenile form called glass eels.

B. After migration they become pigmented. These eels are known as elvers.

C. Now in their yellow eel phase, the American eels will remain in the brackish and fresh waters of rivers for a few years.

D. Before beginning its life-ending migrations American eels turn to a blackish-bronze color, their eyes enlarge, they fatten and develop a thicker skin and their digestive tract degenerates. They are then silver eels - the last stage of their lives.

**Wildlife Notes is published by
the Department of Game and Fish.
If you are interested in obtaining
additional copies, please send
your request to:
Conservation Education Section
Department of Game and Fish
PO Box 25112
Santa Fe, NM 87504
(505) 476-8119**
