

WILPLIFE NOTES

<u>Pecos bluntnose shiner</u>



Two subspecies of bluntnose shiner (*Notropis simus*) formerly occurred in New Mexico. The Rio Grande bluntnose Shiner (*N.s. simus*) is extinct, but the Pecos bluntnose shiner (*Notropis simus pecosensis*) persists in the Pecos River. A member of the minnow family, the Pecos bluntnose shiner was once common in the Rio Grande and Pecos Rivers.

The major cause for the decline in populations of the bluntnose shiner is the periodic drying up of its habitat, as a result of irrigation diversions, dams and drought. The detrimental effect of dams includes changing the flows, temperature, and the structure of the streams. Non-native fishes, particularly predators on the bluntnose shiner may have also contributed to the decline of the bluntnose shiner.

The subspecies of bluntnose shiner native to the Rio Grande is now considered extinct. The last documented collection/record of the subspecies was in 1964 near Pena Blanca in Sandoval County.

The Rio Grande bluntnose shiner was found in the Rio Grande and the lower reaches of its major tributaries from the state line near El Paso, Texas, north to Abiquiu on the Chama River of New Mexico. This subspecies, first listed as endangered in the state in January 1975, was not found in New Mexico in a 1986-87 survey of its native waters.

The Pecos bluntnose shiner was once found in the Pecos River from Santa Rosa to below Lake McMillan. It was first listed as endangered in the state in May 1976, and was listed by the U.S. Fish and Wildlife Service as threatened, with critical habitat designated in February of 1987.

In the Pecos River, the Pecos bluntnose shiner is more common in main channel areas about a foot or more deep, where water speed is moderate and there is a sand substrate.

Populations of the Pecos

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Providing for year-round flows and limiting the duration of irrigation releases is essential to the conservation of the Pecos Bluntnose Shiner.

bluntnose shiner have decreased significantly, and it is no longer found in the Pecos River above Fort Sumner Reservoir. Another major cause for the decline of the bluntnose shiner are the large, extended releases of water from reservoirs during the spawning season of this species. Bluntnose shiners produce eggs that drift in the current for several days before they develop enough to move on their own. When they are able to swim, they leave the main channel and go to slower water areas in the river. Long releases of water from the reservoirs are thought to flush eggs and larvae downstream into Brantley Reservoir where they do not survive.

Bluntnose shiners feed on zooplankton, invertebrates, plant material, algae and terrestrial insects.

The Pecos bluntnose shiner is a slender, elongate fish with a rounded snout. The caudal or tail fin is forked and the anal fin is slightly concave. The lateral band is indistinct. Overall it is silvery, with a pale greenish-brown back. On its back or dorsal side it is light olive to tan and the sides are bright silver with some scattered dark speckling. The fins are whitish in color. The species attains a length of three inches or less and may live two to three years. The Pecos bluntnose shiner appears to have an extended spawning season (May- Sept), but reproductive success is dependent on sharp increases in water flows associated with spring runoff and summer storms. Significant hatches of fry have been documented in the Pecos River in years of high rainfall.

Providing for year-round flows and limiting the duration of irrigation releases is essential to the conservation of the Pecos bluntnose shiner. In addition, monitoring of the Pecos population should be continued on a regular and systematic basis to warn of any problems.



Shaded area indicates current range in New Mexico.