

# Arkansas River Shiner Takes Road Trip to Recovery

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**S**tiff springs on the four-wheel drive jostled me around the cab. It's slow going down a rocky two-track to the Pecos River. The corrugated road bisects low hills rounded off by incessant winds. Only stiff, scrubby creosotes that stand unyielding to the wind break a monotonous view. You can see for miles across this part of New Mexico—and it looks the same in any direction. Were it not for landmarks like the river, one could easily get lost.

The shallow Pecos River makes a wide swath across the landscape. It's typical of plains streams: slow flowing over a low gradient, and sand. The banks are sand. The bottom is sand—and it's transitory, always moving. The river elbows its way into the foot of a hill, eroding in one place, depositing in another. Only alien salt cedar that rim the river hold the banks in place, and even that's temporary.

Another alien species, the object of our foray, lives here. The Arkansas River shiner (*Notropis girardi*, back cover) was brought to the Pecos via an inadvertent bait bucket introduction some 22 years ago. It's become established here while in its native range—the Arkansas River from Kansas down to Arkansas—extinction comes like a semi head-on in the wrong lane. Dwindling water, poor water quality, and flood flows tempered by reservoirs: these have all contributed to the species' decline, which led to a threatened designation in 1998.

The Pecos River itself is a reservoir—a reservoir of Arkansas River shiners. I've made the trip with other U.S. Fish & Wildlife Service (USFWS) biologists from Oklahoma and New Mexico, as well as New Mexico Game and Fish, to make what could be a milestone in the shiner's road to recovery. Our purpose: collect shiners and carry them back alive to

Tishomingo National Fish Hatchery in Oklahoma for captive propagation.

"Hatcheries are increasingly important to endangered species conservation," said Brent Bristow, biologist for USFWS, Oklahoma Fishery Resources Office. "Witness the successes with paddlefish in the Mississippi basin or trouts in the Southwest. There's a hatchery component to all, but hatcheries cannot go at it alone. In front of any successful conservation project is habitat restoration."

Advancing ridges of sand across the stream bottom are where you find Arkansas River shiner. Summer freshets flush and erode, keeping that ridge moving.

"These transitory ridges provide two things, a place to eat and a place to rest," said Chris Hoagstrom, biologist for USFWS, New Mexico Fishery Resources Office. "Flows with the right amount of turbulence are paramount to maintain habitat for this animal. The turning sand turns up food for shiners that lie in wait. Stop the flows and you essentially stop feeding fish."

While the U.S. Fish & Wildlife Service works to restore habitat for the shiner, Tishomingo National Fish Hatchery tries to make the turn needed to get this fish down the right conservation path. That is, learning to feed and spawn this wild fish in captivity. It's never been done before—the learning curve is steep and the stakes are high.

In the end, after three days of seining, 300 shiners made the 500-mile trip to the hatchery where they are doing quite well. It's a long way from southeast New Mexico to the hatchery in Oklahoma. And long, too, is the road to recovery for the shiner, but concerted conservation efforts like this one can get us there.