Christmas trees brighten Elephant Butte's future

By Joel Gay
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Volunteers flocked to Elephant Butte after the holiday season to place thousands of recycled Christmas trees – weighted with sandbags – as protective cover for game fish. The Adapt-A-Cove habitat improvement project is the brainchild of Earl Conway of the New Mexico BASS Nation. ***(Photo courtesy Earl Conway)***

For decades Elephant Butte has been one of the state's most popular warm water fishing spots, but as the water dropped to near-record low levels in recent years the fishing declined.

As more than one person told the State Game Commission last October, "The lake is broken."

But rather than simply pray for rain, sportsmen have started work on efforts that could improve bass fishing in the short term and perhaps establish a program that can be used as a model elsewhere in the Southwest if drought conditions persist.

It's all about habitat, says Earl Conway, an avid angler and the volunteer conservation director for New Mexico BASS Nation. Almost single-handedly, Conway obtained a five-year permit from the Bureau of Reclamation to put artificial fish habitat in the lake – recycled Christmas trees.

The goal, he said, is to provide protective cover for fry during their most vulnerable stages, and to provide food and habitat for stocked fish as they adjust to life in the wild.

"Without significant intervention and fishery management actions, the fish population at Elephant Butte will continue to be severely impacted" by drought and the annual springtime drop in the reservoir's water level for irrigation, Conway said. "Even if actions are taken, there is no guarantee that game fish populations can be significantly increased, but every little bit of new habitat should help."

Conway, an engineer at Sandia National Laboratories, said he started looking for solutions to the Butte's fishing problem because it seemed no one else was.

During the 1980 and '90s, a string of wet years swelled reservoirs throughout the state, and Elephant Butte was named one of the top 10 bass fisheries in the nation. But starting around 2004, the situation reversed. Since then, low snowpack in the northern mountains has combined with below-average rainfall to drop lake levels. In January, the Butte had less than 300,000 acre-feet of water. Ten years ago it contained 2.1 million acre-feet.

As the lake surface has contracted, siltation has increased in the northern end. In places, light can only penetrate the water 5 inches. "We've got a lake that, for production purposes, is only 4 or 5 miles long rather than 30," Conway said. "There's no cover for the fish. It's an old, old lake bed covered with rock and sand." About the only species doing well, Conway said, are blue catfish.

But the old standbys – largemouth and stripers – are suffering. Stocked fish are being gobbled up by predators because there is too little cover. And when the lake's native fish do reproduce, survival rates are low because the fry are so vulnerable.

"Almost every species is in rapid decline because of drought, rapid drawdown (of the lake level every spring) and lack of cover," Conway said. "Last year was about as bad as anybody can remember."

That's where the Christmas trees come in. Conway did some research and found that artificial cover can benefit warm water species in several ways. Working with the Bureau of Reclamation – which owns and operates Elephant Butte – he got a permit to strategically place thousands of recycled Christmas trees in key spawning coves.

The Albuquerque Hawg Hunters, a bass fishing organization, is leading the five-year project, which it calls Southwest Adapt-A-Cove. Groups and individuals from all over the state descended on Elephant Butte after the holidays with firs, pines and spruce trees in hand. But more trees, artificial habitats and native plants are needed, Conway said. Clubs and individuals are encouraged to adopt a small cove and make it a better place for fish using approved natural and artificial fish habitat.

But anglers cannot simply show up and drop off a tree. "We have to follow the permit conditions carefully to ensure we don't harm water quality, cultural/natural resources or endangered species," he said. "Unapproved materials and plants or actions outside the permitted areas will jeopardize the whole effort and violate regulations."

Conway said he designed the habitat project with Elephant Butte's annual fluctuation in mind. All winter and spring the lake level rises as precipitation falls upstream and snow melts. But around May, irrigation season begins and lake managers begin to release water. The lake's level drops six inches a day, Conway said, and over several weeks the level can fall 30 feet.

"We're playing that decrease and increase," he said.

Knowing the lake will rise until irrigation begins this spring, trees were placed at different depths. Some are in 20 feet, which will provide winter and summer cover for bluegill, crappie and prey base fish. Others were placed on the shore. Once the water rises a few feet, spawning fish can use the branches to hide from birds.

"These fish don't need a lot – just one branch so birds can't come down on them," he said.

When the lake level drops again this summer, Conway sees opportunity. He wants to plant the bare, moist shoreline with native plants. Next fall and winter, that vegetation will provide nutrients and cover to the fish and will improve the shoreline condition as the water inevitably rises.

"If we can get native plant to grow again on the bank – cockleburs is what the fish survive on in the spring now – it will be substantial improvement," he said. "Vegetation will provide more cover and food for the fish than anything else we could do."

And he has more improvements in mind: floating wetlands, suspended habitat, spawning platforms that adapt to rapid irrigation drawdowns. It's a lot of work, and no single solution exists. It will take volunteers, communities and the Department of Game and Fish each doing their part to bring this lake back, Conway said.

If we get lucky with precipitation this winter and spring and the lake rises another 40 feet, there is a lot of vegetation that will be flooded and fish populations will improve. But the weather is in a similar pattern to what happened from 1950 to 1980. For the last 10 years, the lake level dropped during or shortly after the spawn when the fry were most vulnerable.

"Thousands of Christmas trees sounds like a lot but it isn't a drop in the bucket compared to natural vegetation," Conway said. "And even placing habitat in key spawning coves might not be enough by itself."

On the other hand, this sportsman-driven effort could pay off. "If natural spawning and hatchery fish survival improves," Conway said, "I think we can make a substantial impact and learn what else we can do to make this a world-class fishery again."

How you can help the Butte

Southwest Adapt-A-Cove has received grants from Shimano, the Toyota/Audubon Together-Green program and Friends of Reservoirs. Anonymous donors have contributed equipment, materials and transportation of the trees. Fishiding and Mossback Fish Habitat have donated commercial artificial fish structures.

But tax-deductible donations and volunteers are always needed. In particular, a pontoon boat or houseboat platform is needed to transport fish habitat structures and to become a live release boat for tournaments.

For more information, including contact information for Earl Conway, visit the New Mexico BASS Nation Conservation website at ***www.nmbfn.com/home/conservation.***