

# Fly-Fishing the Shad Kill

## On the White River Reservoirs & Tailwaters

By Scott Branyan

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The threadfin shad is a forage fish for game fish and is native to the coastal plain lowland streams and the Mississippi and Arkansas Rivers. Its scientific name is *Dorosoma petenense* (Gunter).<sup>1</sup> The threadfin, along with its larger cousins, the gizzard shad, the American shad, and the hickory shad, is a true herring and hence a schooling fish. The larger shad live in saltwater and run the rivers to spawn.

Likely indigenous to the lower Mississippi, it was not recorded in Missouri until 1962. Threadfins have been introduced to manmade reservoirs in the Ozarks and the Ouachitas. They were introduced to the White River reservoirs in the early 1960s. Being a temperate fish and preferring warm water, massive die-offs have been reported at temperatures below 45 degrees.<sup>2</sup>

The diet of threadfin shad consists of microscopic plants and animals, and their diet does not change as they mature. Adult size is often only 4-5 inches, while their larger cousin the gizzard shad may mature at 9-14 inches.

Studies suggest threadfins live near the surface and are limited to a narrow range of depth in the summer between the surface and the thermocline, but are found evenly distributed across the horizontal surface of the lake. Life span is about three to four years. Females live longer.

### A Forage Fish

Threadfin shad serve as forage for many kinds of bass and other species of fish in the reservoir. They are an important forage fish for stripers and hybrids. These bass will herd schools of threadfin and feed voraciously on them during the late fall, winter and early spring.

Anglers can observe threadfins dying in the reservoirs in February in the upper few feet of the water column. As the fish succumb to low water temperatures, one can see individual fish roll and sway back and forth in a suspended fashion. During this time, it is effective to fish a shad pattern suspended on a sink tip line at about the same depth twitched and rolled very slowly within 20-30 feet of the bank edges for black bass. Spotted bass are especially vulnerable to this technique.

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<sup>1</sup> *Dorosoma* refers to the body shape of the young, "lance body." The term *petenense* refers to a locality, Lake Peten, Yucatan. *The Fishes of Missouri*, revised edition, 1997, p. 72.

<sup>2</sup> *Ibid. Fishes of Arkansas*, p. 112.

## **Understanding the Tailwater Phenomenon**

Shad can come through any of the dams during the late winter and even early spring. Peak time is usually the last two weeks of February. I have seen them come in early January and as late as the first week or two of April. On rare occasions, there have been shad kills in August when the dissolved oxygen level in a reservoir narrows to extreme limits well below the shad's comfort zone in the water column. Greers Ferry is less likely to see a regular winter shad kill because it lies farther south. A number of scenarios involving shad can present themselves to anglers below the dams. These scenarios are conditioned upon two basic factors: 1) the state of the shad kill itself, and 2) the timing and amount of generation.

### The Shad Kill Chill Out

As I noted earlier, the shad start to die when lake temperatures fall under about 45 degrees. The colder it gets the more shad die. There are several things which may actually affect the die-off:

- Cumulative lake temperatures (inlet and mid-lake temperatures may vary)
- Photo period (effect of cold temperatures may be affected by when they arrive)
- Metabolic demands (more need to feed in mild winters)
- Availability of food (severe winters may limit)

Generally, a harder, more prolonged winter will mean longer, lower cumulative temperatures and less food supply for shad resulting in more massive die-offs. There are usually shad kills each winter in most of the reservoirs. The big question is whether they are in enough numbers and the generation patterns are favorable to draw them through the dam in mass.

### The Giant Sucking Sound

The timing and amount of generation affects how the shad get pulled through the penstocks and turbines and become available as food to fish below the dams. Here are some of the possible scenarios:

- It takes heavy generation to pull shad through in an early stage of die-off. During heavy, continuous generation (especially during drawdowns) shad will come through in cycles or episodes. These spurts of shad will induce trout to feed. Watch for signs of shad coming through by observing crows, seagulls, herons and other birds near the dam.
- If there is less demand for generation, shad may get pulled through as generation increases during peak power demands in morning and evening. Once this starts occurring, trout will be on the lookout during these flow increases.
- The last scenario is the one that makes for spectacular shad kill fishing. This is where there has been a shutdown of some time, and suddenly heavy generation is started and continues for 10-12 hours or longer. This can carry large numbers of dead shad well downriver as far as 35 or 40 miles and make them available to fish which rarely see shad in the lower reaches of the longer tailwaters—namely Bull Shoals and Norfolk tailwaters.

## **Effective Fishing Techniques**

Trout gorge themselves on threadfin shad when they come through the dam at high water, and it does not take long for them to develop an appetite for the small fish. Winter and early spring is a

good time to fish white streamers to imitate this phenomenon. A Zonker tied with a white rabbit strip is a good attractor for fish feeding on the shad. Fish it on a floating line at high water or use a sinktip line to strip it into the water column. The fly shows up well in the water and you can tell if you're getting any reaction to it. White woolly buggers or Arkansas beadheads can sometimes be effectively fished under an indicator. One of my favorite patterns is a Lefty's Deceiver. The fly has enough bulk it will float for some time before being pulled under by a sinktip line. Retrieved, it is deadly at times as the silhouette is very close to a shad body.

On about half generation capacity from the dam, I prefer a 6-7 weight rod with a 200-250 grain 25-foot sinktip line. On this I am usually fishing 12-pound test and flies in sizes 6-10. Under more generation, I'll use an 8-10 weight with a 300-350 grain sinktip. On this rig, I'll throw flies up to size 1/0 and sometimes heavily weighted. Be sure to use 14-pound or even 16-pound test with the bigger flies. In a drift boat, we work tighter in to the bank, so we are not throwing long lines here, but usually working just the 25 feet of sinking tip to maintain good line control and ease of presentation. Much of the fishing is visual since you are fishing flies that show up well in the water. I recognize that this is not everybody's cup of tea, but the exhilaration of a big fish coming and taking one's fly under these conditions is an enormous energy rush, and it rivals big game fishing anywhere else in the world. If you are physically and mentally up for it, I recommend it.

Fishing the shad kill requires a boat since it occurs during high water generation. A guide service is generally the best option to allow an angler to concentrate on fishing opportunities. But it is never a sure thing. Fish tend to gorge on the shad and then go off the feed, cycling on and off to coincide with the most abundant spurts of shad. For this reason, I like to fish further downriver and try some other streamers during the course of a day. If we seem to be rolling some good size fish, we'll stick with the shad patterns. Bigger browns are usually predictable or not on a given day. There are definitely days when you want to stick with a good shad fly and forget numbers of fish with the prospects of turning a trophy brown trout or even a rainbow or cutthroat on a well presented streamer. On a given day, one or two hookups with a 6-8 pound brown is a thrill for most folks. If you are really fortunate, you may have seven or eight opportunities. I've had pretty good success coaching novices on landing a big fish in this class. However, if you stick into a double digit pounder, well then, the stakes and your adrenaline just went off the chart and you are on your own. Katy, bar the door!

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Scott Branyan is a native "Arkansawyer." Born in the northeast part of the state, his folks moved to Fayetteville in 1969. Scott began hunting and fishing the Ozarks at that time. After graduate school, Scott and his wife Sharon moved to the White River community of Monte Ne in 1994. Scott opened Ozark Fly Flinger guide service in 1996.

Scott wrote a regular fly-fishing column for the Morning News of Northwest Arkansas for eight years. Besides guiding, he is currently researching on the White River and has written several entries on the history of the U.S. Army Corps of Engineers and its White River projects for the *Encyclopedia of Arkansas History and Culture*. His specialized knowledge of the White River has made him a passionate conservationist and a valuable resource person for conservation organizations. He has been active in the Arkansas Chapter of TU since 1996 and is a recipient of the chapter's Coy C. Kaylor award. Contact Scott at [www.flyflinger.com](http://www.flyflinger.com).