## Ann and Nancy's War

Restoration of imperiled fish just got shut down where it's needed most

## **By Ted Williams**

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In the April 2004 issue I discussed the tragically misguided effort to ban the chemical piscicides rotenone and antimycin-chemicals that are used to poison alien fish prior to reintroducing natives, and which in most cases are the only tools available to save imperiled fish from extinction. At the time, that effort-led by Nancy Erman, a retired macroinvertebrate researcher from the University of California-Davis, and Ann McCampbell, of the Multiple Chemical Sensitivities Task Force of New Mexico (a group consisting, basically, of herself)-was only impeding restoration. Now, however, the two states where native fish populations are in most desperate need of these piscicides have, for all intents and purposes, banned them. Restoration in California and New Mexico has been stopped dead in its tracks; and the future of rotenone and antimycin, along with the native fish (not just trout) that can't be saved without them, is in jeopardy across America.

Facing possible extinction unless the bans are lifted are: the threatened Paiute cutthroat (the rarest trout in the world), the Gila trout (America's only inland salmonid listed as endangered), the Rio Grande cutthroat (New Mexico's state fish), the Lahontan cutthroat (once believed extinct), and the golden trout (California's state fish). In response, the Desert Fishes Council passed a resolution supporting piscicides at its November meeting in Tucson. In attendance was the world's foremost salmonid authority, Dr. Robert Behnke, who writes me as follows regarding the New Mexico Game Commission's August 18, 2004 decision to strip the Game and Fish Department of authority to use piscicides without commission consent: "Besides local chemophobes, a [non-practicing] medical doctor [McCampbell] raised nonsensical questions about contamination of groundwater-poisoning drinking water supplies. Her status as a 'medical authority' caused the commission to suspend treatment. Once this was accomplished, the chemophobe network notified the Lahontan Regional Water Quality Control Board, leading it to believe that credible risks for piscicides had been established, and the board blocked the Silver King Creek rotenone treatment [to recover Paiute cutts]."

McCampbell and Erman's stunning success this past year would not have been possible without major help from sportsmen and the media. The threat of genetic introgression tends not to register with anglers. And why should it? They've been conditioned by the management establishment to relish Frankenstein fish-pigment-impoverished mutants and weird hybrids that keep the hatchery bureaucracy in business because they have to be concocted from genetically twisted stock or from species so divergent they're likely to produce sterile offspring. It's expecting a lot of anglers who read the hype about "palamino trout," "centennial golden rainbows," "albino rainbows," "saugeyes," "splake," "tiger trout," "tiger muskies," and "wipers" to worry about rainbow genes showing up in Gilas or cutts.

But there's antipathy as well as apathy. To see it you need go no further than fly-fishing Internet forums. One participant on the FR&R bulletin board (www.flyrodreel.com) writes about the recently aborted rotenone treatment of California's Silver King Creek, which would have de-listed Paiute cutts, thereby opening a closed fishery: "If they poison the stream and only the threatened native species is there, you won't ever be able to fish for it. . . . But we all know that closing down public access here would be great to these wackos." Another participant likens poisoning mongrel trout to "ethnic cleansing" and goes on to say: "I am a mongrel of sorts myself and delight in my diversity. . . . We

Americans champion the freedom to love who ever we choose to love. . . . We abhor those who seek human genetic purity! American military men and women have died and continue to die for the freedom of others oppressed by those who wish to impose the same limitations on man as you are seeking to impose on trout. . . . 'Purity' is a word often used by racists, Nazis and bigots."

**Two years ago the feds announced** they would use antimycin to restore pure Colorado River cutts to Lake Pettingell on the west side of Rocky Mountain National Park. The lake is hardly a major angling destination-there's no trail, and it's a 12-mile poke during which you climb 3,000 vertical feet, then slide down about 7,000 vertical feet to fish an eight-acre pond. Local anglers could have fished for the pure cutts, but they were sentimental about their mongrels and threw such a hissy fit that the Park Service backed off.

With few exceptions the media is fish-stupid and lazy. Rather than really investigate the issues of native-fish restoration, reporters collect a few quotes from someone like Behnke, then offer what they call "the other side" by interviewing some utterly uncredentialed crackpot. In one Associated Press piece about the proposed project to recover Paiute cutts the only alleged authority cited was one Patty Clary of Californians for Alternatives to Toxics, who was quoted as making this false statement: "Essentially what they're proposing is to kill everything-everything-in this stream." High Country News recycled wives' tales spun by a rancher (a heavy user of herbicides and insecticides) who claimed that his "pregnant ewes must have drunk some [antimycin] poisoned water [because] the following spring two lambs were born dead with kidneys that weighed four pounds. It was totally grotesque." More alleged evidence was provided in the form of quotes from the terrified owner of Paprika (a pregnant llama) who claimed to have "started studying antimycin" on the Internet where he found all manner of "disturbing" info. Finally, the piece reported that rotenone applied to California's pike-infested Lake Davis sent 62 people to the hospital. The truth was that 62 residents, having whipped themselves to hysteria with poppycock provided by McCampbell and others, went to the hospital because they wrongly supposed they'd been sickened by rotenone, a naturally occurring chemical that in 71 years of use by fish managers has never been known to harm a person. (To the credit of High Country News, it allowed me to set the record straight in "Writers on the Range"-a syndicated column it sends to major Western newspapers.)

Despite suffering from what she calls "multiple chemical sensitivity," McCampbell was in full cry this past August at the New Mexico Game Commission meeting. Also in attendance were at least half a dozen of her acolytes, including Sam Hitt of Wild Watershed, who writes of her as follows: "Dr. Ann McCampbell, New Mexico's most effective advocate for a toxic-free environment, is a card-carrying outsider. Marginalized, ridiculed, ignored, she operates from the edge, without staff or budget, stitching together unlikely coalitions that win with the power of truth and little else. . . . Today she advocates despite debilitating illness, forced to live from time to time in a relatively chemical-free 1983 Chevy. . . . Dr. Ann slowly made her way from the back of the room to a table in front of the commissioners. After saying a sentence or two she would cover her nose and mouth with the respirator and take a deep breath."

McCampbell and her unlikely coalitions do win, but hardly with "the power of truth." She warns that the commercial formulation of antimycin-applied at less than 12 parts per billion-carries "a skull and crossbones warning" and "is fatal in humans if swallowed" directly from the bottle. All sorts of useful liquids also fall into this category, but not amtimycin. Because it's nontoxic to humans, EPA no longer requires the skull and crossbones on the label. At the commission meeting she and her troupe repeatedly called antimycin a "broad-spectrum poison"-this of a naturally occurring chemical with a half life of hours (unless it's exposed to direct sunlight, in which case, the half life is a few minutes)

and that eradicates only fish, provided the treatment is successful. Further, she claimed that antimycin has been "banned in California . . . because, actually, California EPA has done the most updated review of this product."

First, it wasn't "banned;" it was just not re-registered because the new state pesticide regulations require rigorous testing that antimycin's manufacturer-Nick Romeo, who operates out of his house-can't afford, owing to his miniscule market. Second, California has not done a "review" of antimycin.

McCampbell told me there are plenty of alternatives to piscicides. When I asked her what these might be she said: "genetic swamping" (saturating mongrels with pure stock), "overfishing," and "netting" (none of which work), and "electro-fishing," which is horrendously labor intensive and works only on tiny streams.

Ilse Bleck, representing the 7,000-member Rio Grande Chapter of the Sierra Club, echoed McCampbell's untruths at the New Mexico Game Committee meetings that antimycin had been "banned in the state of California," recycled her misinformation about dangers to amphibians and macroinvertebrates, questioned whether the pure wild stock held in hatcheries could "adapt," and opined that saving Rio Grande cutthroats "does not outweigh the potential harm done to an otherwise healthy, self-sustaining ecosystem."

Lilly Rendt, another witness educated by McCampbell, likened piscicide formulations of antimycin and rotenone-which don't kill air-breathing organisms and are as close to silver bullets as chemical pesticides get-to DDT. And she said that, having seen the "eagles die," she didn't know "why we have to go through that again." As an alternative she suggested underwater TV cameras so managers could, well, kind of keep on eye on things.

However, there was much accurate testimony from state and federal fisheries managers and anglers, including TU's state chairman, William Schudlich, who passed out copies of my April 2004 FR&R column. Despite the histrionics of the McCampbell camp, sound science and good stewardship might have prevailed had it not been for the testimony of two respected outdoor writers from Silver City-Stephen Siegfried, outdoor editor of the Silver City Daily Press; and Dutch Salmon, author of seven outdoor books. "You're killing the threatened [Chiricahua leopard] frog," proclaimed Siegfried. (Adult frogs are unaffected and, if there's a frog or toad population in a project area, treatment is put off until tadpoles, which are usually unaffected anyway, have metamorphosed.) "What happens if an osprey has eaten a fish in the next drainage and flies over and drops the eggs? Do we poison the whole works again?" (Apparently, Siegfried is under the impression that unfertilized, digested fish eggs hatch.)

Both Siegfried and Salmon repeated most of McCampbell's misinformation, but their main contention (now part of McCampbell's standard harangue) was that introgressed fish are good enough if they're, say, 80 to 90 percent pure. As an alternative to poisoning mongrels they suggested the same non-solutions McCampbell endorses-electro-fishing and genetic swamping. They hadn't heard, didn't believe, or didn't care that subsequent cross breeding can increase alien genes.

Having assimilated all this testimony, the game commissioner who cast the deciding vote against piscicides, Peter Pino of the Zia Pueblo tribe, declared: "What if we came up with a poison that killed all the white people and left all the native people here? Would we like that? I think that's what we're talking about."

**According to Sam Hitt,** McCampbell was calling the meeting "a miracle in the making" before it even took place because she had been assured by Game Commission chairman Guy Riordan during one of her lobby sessions that he and "most of the board" agreed with her notions and found them "refreshing" and that, even before hearing a word of testimony, they "opposed" piscicides.

With this victory in hand, McCampbell and her network turned their attentions to Silver King Creek in California. Here they linked up with energetically Nancy Erman. The previous year Erman had single-handedly shut down Paiute restoration by convincing the Center for Biological Diversity to sue the US Forest Service, thereby frightening away the California Department of Fish and Game, which has jurisdiction over native fauna and didn't need the Forest Service anyway. To her credit, Erman has great knowledge of and affection for insects, some of which do indeed die during piscicide treatments. But she is unwilling to concede that bugs quickly recolonize from untreated water and that, when they do, they often fare better because they no longer have to cope with alien predators with which they did not evolve.

Like McCampbell, Erman plays fast and loose with the facts; and she cultivates a similar network of loud, aggressive, ignorant chemophobes. "Pisces"-the newsletter of the California-Nevada Chapter of the American Fisheries Society-allowed her to draw the old spurious connection between piscicides and DDT and to make the following false statements in its Winter 2004-05 issue: "Further poisoning is unnecessary for recovery of the Paiute cutthroat trout and may even threaten its future" and "many terrestrial mammals, birds, reptiles, amphibians . . . are put at risk from these projects." Perhaps the most dishonest statement in the piece, a mantra of Erman, McCampbell and their followers, was this: "Management' that sacrifices other species and natural processes for the sake of one species is a betrayal of the public trust." To the general public, politicians and the media, that means piscicides "sacrifice species." They do no such thing; they occasionally "sacrifice" non-target individuals. The local population then recovers.

When it looked like Paiute restoration was going to get underway in the fall of 2003, TU volunteers helped the state and feds electro-shock as many mongrels as they could from Silver King Creek and evacuate them to nearby water in order to placate local anglers for whom "a trout is a trout." But in "Pisces" Erman falsely accused managers of dumping the mongrels into pure Lahontan cutthroat habitat: "CDFG, Trout Unlimited, and the US Forest Service moved hybrid Paiute cutthroat/rainbows into other waters including Poison Lake. Poison Creek, the outlet of Poison Lake, had been a source for pure Lahontan cutthroat trout." I knew this to be false, and when I asked Erman where she'd gotten her information she hemmed and hawed and said: "Well, we found a reference that they had been using that stream for pure Lahontans." But the reference she produced talks about the Lahontan population introduced about a century ago to "Poison Flat Creek," a tributary of Poison Creek and isolated from it by a long series of impassable waterfalls.

Also testifying was Laurel Ames of the California Watershed Alliance. A month before the board meeting she had circulated an action alert entitled "Stop Poisoning of Sierra Nevada Creeks" that parroted Erman's and McCampbell's bogus claims: "It is well documented that non-chemical alternatives are available. . . . We shouldn't poison wilderness streams and lakes for fishermen who want to catch a certain kind of fish. . . . There is also new evidence that rotenone has long-lasting, possibly even permanent impacts on stream ecosystems." I pled with her to cease and desist, explaining that native-fish restoration isn't "for fishermen" any more than condor restoration is "for birders," that there are no "long-lasting impacts," that she was jeopardizing the last best chance to save a beautiful and unique creature from extinction, and that, although native trout are rarely seen by non-anglers such a herself, they're a vital part of natural ecosystems. I might as well have been speaking Chinese.

In their attempt to treat a mere 11 miles of stream-thereby restoring Paiutes to their entire native range, something that has never been done in salmonid restoration-the agencies have been jumping through hoops for 10 years. The recovery plan came out in 1985. On April 4, 2003 the project finally passed muster under a "biological opinion" prepared by the US Fish and Wildlife Service. On April 10, 2003 it passed muster under the California Environmental Quality Act (CEQA). On May 5, 2004-after months of scoping sessions and public commentary-it passed muster under the National Environmental Policy Act (NEPA). With that, Erman filed an administrative appeal that went all the way to the chief of the Forest Service, who denied it. On July 8, 2004 the Lahontan Regional Water Quality Control Board (a strictly political entity) issued a tentative permit, so the agencies committed major funding to the project-which they now can't get back. On August 10, 2004 the Fish and Wildlife Service issued its final "Revised Recovery Plan." On August 27 the board recommended issuing a final pollution-discharge permit.

Then, at the September 8, 2004 board meeting, after the window for legal challenge had expired, all the same ancient red herrings were hauled out and flung around by Erman, McCampbell and their minions. Both CEQA and NEPA studies had determined that there were no mountain yellow-legged frogs or Yosemite toads in the project area, yet there was endless flap about "danger" to these species. Both CEQA and NEPA studies had determined that there would be no permanent damage to macroinvertebrates, but there was endless talk of "dangers to macroinvertebrates." Erman was supposed to get five minutes to testify, but she was allowed to go on for at least 20 minutes. Finally, the board voted to make no decision, thereby blocking restoration indefinitely. Since the Endangered Species Act requires federal agencies to do what's in their power to recover listed species, the board may be in violation of federal law.

"After all that work it just drove us nuts," declares Phil Pister, executive secretary of the Desert Fishes Council. "Nancy and all her buddies screamed so loud that the board was afraid to take action. It's going to get harder as time goes on."

Phister knows a thing or two about fish restoration. On August 18, 1969 he held the world's total population of Owens pupfish in two buckets. To save this fish he and his California Fish and Game colleagues had to build a refuge by damming a small stream and rotenoning out the largemouth bass, carp and bluegill. Today that would be politically impossible. Even back then he got a nasty letter from a snail fancier who fretted about snails getting poisoned from the two-acre impoundment. Since then anglers have continually slipped bass back into one of the refuges. They've done it "dozens of times," says Pister. "Each time Fish and Game removes most of the bass with electro-shockers and spear guns, since the impoundment is only about one acre. But it's extremely labor intensive. The local attitude is 'My granddaddy used to catch bass here and by Gawd I'm gonna do it, too.'"

Pister also helped save California's state fish-the golden trout-by poisoning browns that, in some places, outnumbered goldens 200-1. "Our job," he told me, "was to build a series of barriers, then introduce rotenone or antimycin. Luckily, this was before this big furor. We did run into some of it, though, with the animal-rights people." Millions of dollars have been invested in building these barriers, and now they're deteriorating. There are miles and miles of stream that need to be treated or re-treated, especially in the habitat of the threatened Little Kern golden trout. In the current climate that can't happen.

The turn-around has to begin with anglers who have acquired what 19th Century sportsman and outdoor writer George Bird Grinnell called "a refined taste in natural objects," anglers who defend native fish not because they are fun to catch or good to eat or beautiful, not because they are

anything, only because they are. Herewith, two important facts to pass on to those who remain unconvinced: 1) Piscicides can only be used on small headwater streams; no one is talking about or is capable of poisoning out, say, browns and rainbows from the Madison River. And, 2) With the home-field advantage native species tend to grow faster and bigger than non-natives. Witness the robust native greenback cutts, which-in arguably the most dramatic success story in the history of the Endangered Species Act-have replaced the scrawny, stunted browns, rainbows and brookies in and around Rocky Mountain National Park. Thanks to piscicides you can now fish for greenbacks.

The chemophobes can't be educated, but they can be outlobbied. And the public can be won over by people who have the facts and dare to speak the truth, and who understand that creatures like Gila trout, Owens pupfish, and all the vanishing cutthroats are every bit as precious to our nation as redwoods, timber wolves, bison or grizzlies.