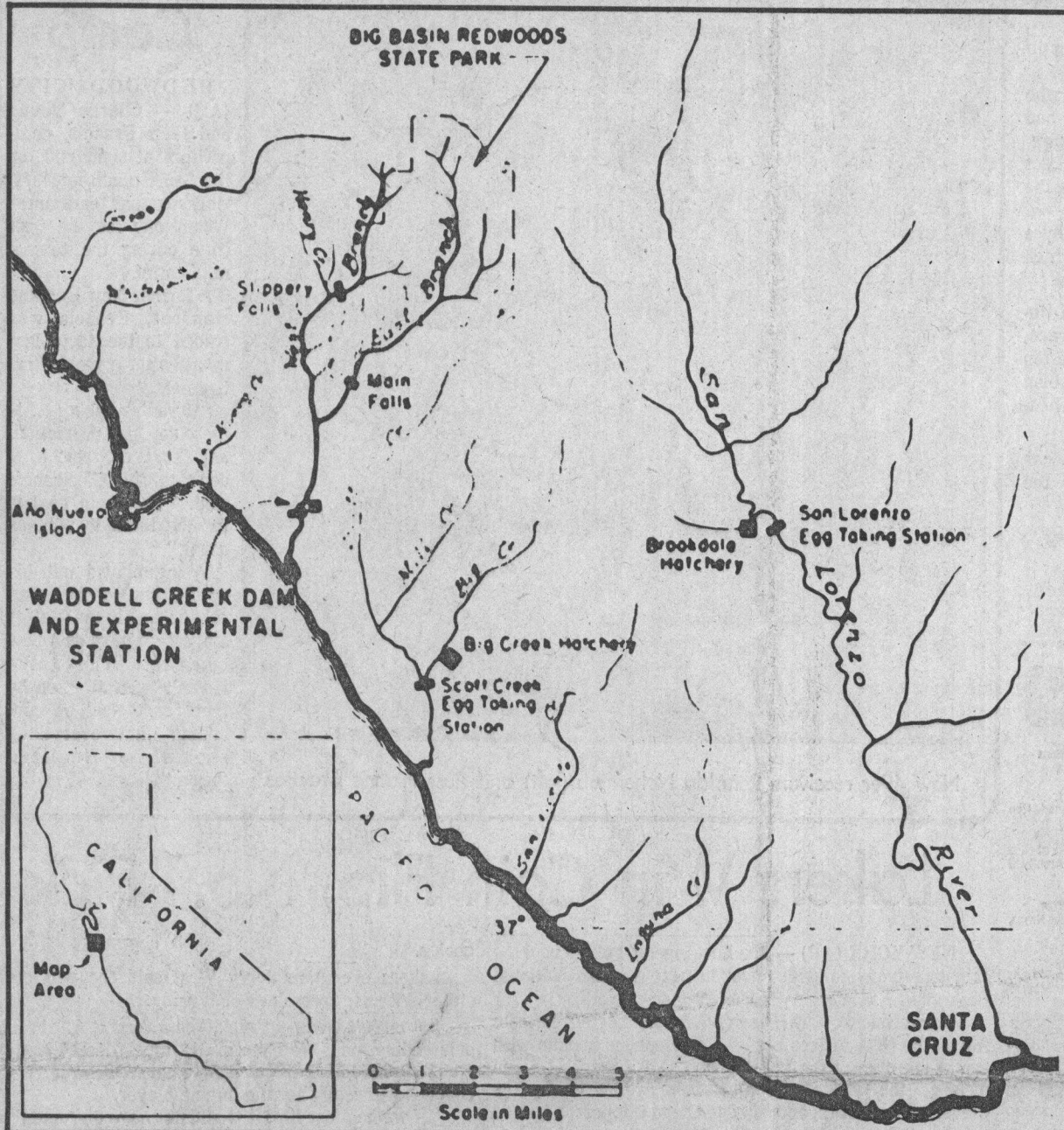
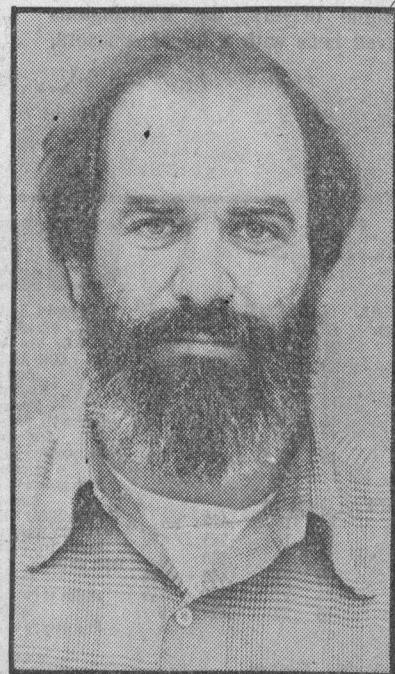


# The Great Outdoors



## Salmon, Steelhead & The Bay



David Streig says that after a search of the Monterey Bay area, Big Creek was determined as the best site for a hatchery. Map shows the site of the original Big Creek Hatchery, as well as Waddell Creek experimental station (1934-42).

## Hatchery May Enhance Monterey Bay Area Fish Resource

**D**AVID STREIG ENVISIONS fishermen lined up along the banks of the San Lorenzo River, unable to get their lines in the water fast enough to snag the steelhead that are waiting for them. He dreams of salmon fishermen, be they commercial or sportsmen, returning from the bay loaded with silver salmon day after day.

Streig and the Monterey Bay Salmon and Trout Project have taken steps toward making those dreams become a reality, and the reconstruction of the Big Creek Hatchery may be the most important step of all.

"The resource is not gone," says Streig of the steelhead and silver salmon in Monterey Bay and its tributary rivers. "It (the hatchery) is something that needs to be done and can be done now."

The Big Creek Hatchery is being developed on the McCreary Ranch in Davenport, near the site of the original Big Creek Hatchery, which was open from 1927 to 1939. It is planned to trap fish as they spawn in Big Creek this year, raise their eggs at the site, then release them in next spring as a rejuvenated breed of Monterey Bay silver salmon and steelhead.

Currently, fish which are planted in Monterey Bay area rivers come from the Mad River Hatchery in Humboldt County. But, Streig says, it has been shown that those North Coast fish don't adapt well in this area.

"There has been a genetic dilution, with cross-breeding with the North Coast fish, which tend to come back early," Streig says. "Our river mouths aren't high enough until December and January, but the North Coast fish comes back in October and November. We would like to see local fish used. Hopefully, we can reverse the genetic dilution."

Streig has been involved before in raising fish, being the former manager of International Shellfish, a since-closed oyster hatchery. But, oyster are entirely different from steelhead and salmon, in that they don't need to leave the hatchery to reproduce. Steelhead and salmon leave the river for the ocean, then return to spawn.

"The oysters didn't go anywhere," Streig says. "Salmon are up for grabs. You only get what comes back to you."

And, he realizes, often the salmon don't return because they are illegally fished. "Of the fish that get out to streams," Streig says, "50 percent are getting fished — some illegally. There is more catch-and-release fishing, particularly with females."

But, Streig tells a story of fishing with a friend who caught a good-size steelhead, but after catching it, gently removed the hook and released the fish back into the stream. Another nearby fishermen went wild. "He said, 'Give it to

me, it's worth \$30,'" Streig recalls.

Commercial fishing in streams is illegal — in fact, all streams in Santa Cruz County have been closed to fishing this year. But, Streig realizes illegal fishing takes place. "It's being done," he admits. "But you can't catch the people."

The Monterey Bay Salmon and Trout Project is not in the business of catching poachers. Its purpose is to enable the fish to flourish again in Monterey Bay. And, since its origin in 1976, it has been successful, despite a hazardous beginning.

For example, the first fish allocated to the Project by the California Department of Fish and Game all died before they could be released in 1977. But, by March of this year, the Project released 48,285 fish into rivers from Santa Cruz County to San Luis Obispo County. In the San Lorenzo River, 20,385 fish were released; in the upper Pajaro River, 22,650 were released; the remaining 5,250 were released in Choro Creek, which runs into Morro Bay.

Streig says the Project has released about 80 to 85 percent of the fish they have raised. "We've done better than anyone else in the state," Streig says.

The Big Creek Hatchery will start with a local strain of fish, from the Carmel River. The Carmel River hasn't been planted with Mad River fish, which, Streig notes, should assure the Big Creek Hatchery of raising a pure breed of Monterey Bay area fish.

The reason that is important revolves around the natural return process of silver salmon and steelhead. Both fish have a "homing instinct," by which the young fish which leave the fresh water for the ocean return to their "parent stream" for spawning purposes. Streig says there is a theory, though, that as fish are maturing, they develop what he calls a "sun-compass orientation," by which they gauge the sunrise. Then, when in the ocean, they read the sunrise to take them back to fresh water.

That, Streig insists, means that fish reared in the Mad River, then released in the Monterey Bay area, don't necessarily return to Monterey Bay area streams. "It leads me to believe the Mad River fish are going back to the Mad River, or nearby," Streig said. "If we raise them locally, they will come back here, somewhere."

"We trapped 65 adult steelhead in January and February in the Carmel River," said Streig, noting there were 34 females and 31 males. From those fish, the Project realized 197,000 fertile eggs. Nearly 100,000 have already hatched, having been sent to the Silverado Hatching Facility in Mendocino County. But the Project's fish raising ponds east of Salinas, which have been used since 1977, aren't big enough to handle such an overwhelming number of fish. Thus, the

search for a new, complete site, where fish can be raised from the egg until smoltification.

"We looked at every stream in Santa Cruz and Monterey counties," Streig said. "We narrowed it down to six, the three, then one — Big Creek. The McCreary family offered it to us at no charge, simply because they would like to see fish in their rivers and streams."

The Project is a non-profit organization and has been financed over the years partly by donations, as well as from money allocated from the Santa Cruz and Monterey county DFG fines. "You could say the poachers have been supporting us," Streig says, smiling through his thick beard.

But, most of the support has come from sportsmen groups, particularly the Santa Cruz Fly Fishermen. Other local groups who have backed the Project are the Scotts Valley Lions Club, the Pajaro Valley Rod and Gun Club and the newly organized San Lorenzo River Steelheaders Association. Support from Monterey County has also been heavy, Streig said.

"From our initial construction (fund raising) drive, there has been enough support to carry it on," Streig says. But, of the \$32,000 needed to rebuild the Big Creek facility, less than \$15,000 has been raised.

The Project, though, has proved itself — to the DFG, at least — to be worth an investment. The organization's high percentage of released fish indicates the future of the Big Creek Hatchery could be bright. Dating back to 1977, here is the Project's track record:

- November 1977 — 1,500 fish received.
- March 1978 — 1,128 fish released.
- October 1978 — 10,000 fish received.
- March 1979 — 8,972 fish released.
- October 1979 — 10,000 fish received.
- March 1980 — 9,740 fish released.
- November of 1980 — 20,000 fish received.
- March 1981 — 17,040 released.
- October 1981 — 54,575 fish received.
- March 1982 — 48,285 fish released.

"Now, we are biting off a bigger chunk, building the new facility," Streig said. The Project has applied for a federal grant, to the National Marine Fisheries Department. The grant has already passed through the Los Angeles offices and is on its way to Washington, D.C., Streig said. But, money won't be available until July, if at all.

Money from the county fines covers the cost of feeding the fish before they are released, but the rest of the new facility must be financed if the program can handle the nearly 200,000 fish this year. "We may lose a lot of fish," Streig admits. "It would be a major hat trick to pull it off this year."