

The 2- to 3-inch smelt is a critical part of the Delta's ecosystem.



On extinction's edge

Zero Delta smelt found in state's annual fall survey

BY DAN BACHER

For the first time ever, a fish survey that's conducted every autumn by the state turned up zero Delta smelt, considered an indicator species that demonstrates the health of the entire Delta ecosystem.

Once the most abundant fish in the entire estuary, the smelt population has collapsed to the point where not one fish was found in the California Department of Fish and Wildlife's 2018 Fall Midwater Trawl, the lowest in history.

While decades of water exports and environmental degradation under the state and federal governments have brought the smelt to the edge of extinction, representatives of fishing and environmental groups and tribes note that former Gov. Jerry Brown and his administration did nothing to reverse the trend.

"Gov. Brown's legacy is likely to be several extinctions of fish that flourished in this estuary for millennia," said Bill Jennings, executive director of the California Sportfishing Protection Alliance.

The Delta smelt isn't the only fish missing from the fall 2018 survey. It also didn't find any Sacramento splittail, a native minnow species that was formerly listed under the Endangered Species Act until the Bush administration delisted the species.

The striped bass—a popular gamefish that migrates from the ocean, San Francisco Bay and Delta into the Sacramento and San Joaquin rivers every spring to spawn—also showed an alarming drop during the survey. Only 42 striped bass were recorded in the fall survey, one fewer than the previous low in 2010.

The longfin smelt, a cousin of the Delta smelt, isn't faring very well either, with only 52 found, the fifth lowest in the survey's history. The number of threadfin shad and American shad also continued to decline.

Jennings said the figures were alarming.

"This is a very comprehensive trawl and the results were a disaster for Delta fisheries," Jennings said. "Not only is the Delta smelt on the brink of extinction but there are several species lined up behind it."

Jonathan Rosenfield, senior scientist for the San Francisco Baykeeper, emphasized in a tweet that Delta smelt are "not extinct" yet, since other sampling programs still catch them.

He also tweeted that "extinction is not imminent" if state and federal agencies take action, but that "flexible" implementation of the Endangered Species Act has not worked and "it's time to enforce protections."

Found only in the Sacramento-San Joaquin River Delta, the 2- to 3-inch smelt mainly inhabits the freshwater-saltwater mixing zone of the estuary, except during its spawning season. That's when it migrates upstream to freshwater following winter "first flush" flow events, around March to May. The smelt is very susceptible to changes in its environmental conditions due to its one-year life cycle and relatively low fecundity.

Scientists don't have an easy answer for the Delta smelt's precipitous decline, particularly in 2017, a record water year when biologists would have expected a rebound. But fish advocates blame the collapse of Delta fish on the export of big quantities of water to agribusiness and Southern California water agencies by the state and federal pumping facilities in the South Delta over the past 50 years.

The record total for water exports, including water diverted by the Contra Costa Canal and North Bay Aqueduct, was 6.63 million acre-feet in 2011 under the Brown administration, according to state data. That was 163,000 acre-feet more than the previous record of 6.47 million acre-feet set in 2005 under the Schwarzenegger administration.

"We know what fish need," Jennings said. "Fish prosper when they have adequate flows and quality water. They suffer when they don't. The question is how do we get them to survive on less water of poorer quality than they evolved with for thousands of years. The answer appears to be they can't." □

Dan Bacher is editor of Fish Sniffer magazine, which published an earlier version of this story.

Bottoms Up
GRAND OPENING GOOD FOOD GREAT ENTERTAINMENT!
MAY 4TH 12PM TO 2AM
 GUEST APPEARANCES BY
 CLYDE CARSON
 PAULIE MALIGHAGGI "THE MAGIC MAN"
 MAX "PAIN" GRIFFIN
 STEPHAN BONNAR
 BENITO LOPEZ "THE GOLDEN BOY"
 PHIL BARONI "THE NEW YORK BAD ASS"
 SHOWING CANELO ALVAREZ FIGHT @ 6PM
 NACHOS & TACOS \$2 CORONA, \$2 MARGARITAS
 RAFFLE FOR FLATSCREEN
\$5 OFF WITH THIS FLYER
 1672 HAMMONTON SMARTSVILLE RD SUITE A | 530.443.2089
 WWW.BOTTOMSUPMARYSVILLE.COM

Princess & Me
 DANCE CLASSES
 Introduction to Movement & Basic Ballet
 Ages 3-5
 Sierra 2 Center, Studio 1
 2791 24th Street
 Sacramento, CA 95818
 For more Information & to enroll in classes visit
 www.whimsyandwishes.com | (916) 470-9189