

Tiny fish at center of huge California water war

DIXON, Calif. (AP) — California's historic drought could wipe out a tiny, endangered fish that's played an outsized role in the state's water wars.

The delta smelt lives in the Sacramento-San Joaquin River Delta, the West Coast's largest estuary that supplies water to Central Valley farms and millions of Southern California residents.

The silvery, finger-sized fish has been in trouble for years, but the four-year drought is helping to push the smelt to the brink of extinction. And it threatens sev-

eral other native fish species, including the longfin smelt, green sturgeon and winter-run Chinook salmon.

In July, a key index of delta smelt abundance hit zero for the first time since the survey began in 1959. Researchers found a handful of smelt, but the number was too small to register on the population gauge.

"The delta smelt is basically on its last legs right now. We'll be lucky if it survives the coming year," said Peter Moyle, a fish biologist at the University of California-Davis who has been studying the

fish for four decades.

On a recent fish survey, Moyle and three other researchers trawled the turbid waters of the sprawling estuary that once teemed with the delta smelt.

They pulled a net out of the water and emptied dozens of fish into a plastic bin on their research boat. They logged and tossed back 13 species, including carp, crappie, catfish and striped bass — but no delta smelt.

Delta smelt populations have been declining for decades due to invasive predators, pollution, habitat loss

and increased water exports to farms and cities. The drought has worsened conditions by reducing freshwater flows and raising water temperatures.

"The drought has basically made all the things that were bad for smelt worse," Moyle said.

The delta smelt has been at the center of vicious water fights between farmers, fishermen, cities and environmentalists ever since it was listed as a threatened species under the U.S. Endangered Species Act in 1993. It was listed as an endangered under state law in 2010.



AP Photo/Rich Pedroncelli
In this July 15 photo, a delta smelt is seen at the University of California-Davis Fish Conservation and Culture Lab in Byron, Calif.

Soil health company showcases new rotation crops

By MATTHEW WEAVER
Capital Press

REARDAN, Wash. — Pacific Northwest farmers could soon break up their wheat rotations with warm-weather canola, fava beans or safflower crops.

Soil research company Rhizoterra Inc., showcased the new crops during a field day on its research farm in Reardan, Wash.

The company worked with scientists from the USDA Agricultural Research Service, Washington State University and University of Idaho to raise new varieties of fava beans, chickpeas, cover crops, sunflowers, safflower and warm-season canola.

Rhizoterra challenged breeders to provide crops that are drought-tolerant early and take heat later on in the growing season, said Jill Clapperton, principal scientist and co-founder with Reardan farmer Fred Fleming.

"The idea here is to develop the expertise of how to grow these crops," Clapperton said. "If we show that they grow in this area, we have to help the farmers make this commercial venture."

Clapperton said she is the only one in the Reardan area growing canola, fava beans and chickpeas.

Fava beans are in demand in coastal regions and on the East Coast, Clapperton said. She hopes to supply a new protein processing plant in North Dakota.

"We can get into our fields earlier," Clapperton said. "If we can put fava beans in the



Rhizoterra Inc. soil scientist Jill Clapperton demonstrates a new tracer that would allow farmers to measure the materials in their soil during a field day July 22 near Reardan, Wash. Ag Enterprise Supply Inc. crop advisor Cal Barta looks on at left.

field in March and let them grow — they like it cold in the spring and hot in the summer. I think they're really suited to this area."

Clapperton also showcased new technology, including a pelletized compost made by Royal Organics in Royal City, Wash., and a portable tracer that would allow growers to check their soils. Spangle, Wash., farmer Bob Sickers was considering possible options to diversify his crop rotations. He said he'd be interested in the new crops if there's demand for them.

"We have to have a market, we have to make money growing it," he said. "I'm still probably going to wait and see. We're just looking and trying to learn."



Clapperton demonstrates a new tracer that would allow farmers to measure the materials in their soil.

Photos by
Matthew Weaver
Capital Press

Tour highlights clean water projects on agricultural lands

By JOHN O'CONNELL
Capital Press

LAVA HOT SPRINGS, Idaho — Cameron Williams' cattle used to congregate along the banks of the Bear River to drink, trampling vegetation and contributing to sediment in the water.

Thanks to his involvement in a collaborative project aimed at improving water quality, the Grace, Idaho, rancher now has three new pastures, each containing a water trough filled by a solar-powered pump. The troughs enable him to better spread livestock and limit their contact with the river.

His ranch was among seven ongoing or recent southeast Idaho water-quality projects included in a July 21 bus tour organized by the Idaho Soil and Water Conservation Commission. Tour organizers said most of the landowners are agricultural producers, who typically derive as much benefit as the environment.

Williams said he's proud of the return of vegetation along the river, but his ranch operations have also improved.

"It's given us more management flexibility," Williams said. "We can isolate herds and not have to go to the river with them."

Similar water-quality projects were scheduled for the Magic and Treasure valleys as

part of an Idaho Conservation Summit. Tour invitations were extended to politicians, soil and water conservation districts, the Idaho Department of Environmental Quality, the Environmental Protection Agency, landowners and project partners.

The state invests \$2.8 million annually in the conservation commission, including \$1.2 million directly to Idaho's 50 local conservation districts. Funding for projects highlighted during the tour came from a host of sources, including USDA grant programs and EPA grants authorized under Section 319 of the Clean Water Act, as well as a host of local agencies, non-governmental organizations and companies.

Chris Banks, a Chesterfield rancher who started a consulting business to help landowners and agencies find grants and overcome hurdles to complete their water-quality projects, facilitated many of the tour projects.

"Typically (projects) improve (landowners') ability to water their livestock and manage their grazing, and it improves their water quality," Banks said. "We've also improved the loss of land by doing stream bank restoration, and we've done a lot of weed and brush management, helping to create a better mosaic for grazing and even sage grouse."

Wheat Marketing Center seeks new executive director

Board chairman:
Center is 'crossroads'
of industry

By MATTHEW WEAVER
Capital Press

The search is underway for a new director at the Wheat Marketing Center in Portland, Ore.

"We've already had a number of people express interest in the position," said Bill Flory, a Culdesac, Idaho, farmer and center board chairman.

Executive director David Shelton resigned in early July after 16 years. Flory said no reason was given.

"We wish him well," he said.

The position requires a management perspective and understanding of the industry, Flory said.

"The wheat marketing center is the crossroads of the world as far as technical expertise, problem-solving, opportunity

exploration with our customers and the products their markets require," he said.

The center aligns with U.S. Wheat Associates' mission as the export market development arm of the industry, Flory said.

Flory expects the search to last 45 to 60 days.

"With the caliber of applications we're getting already, I don't think we're going to have to leave it open for a long period of time," he said.

Flory said it's an exciting time for the center, pointing to product development with overseas customers. Flory and center technical director Gary Hou will meet with wheat buyers in Central America next month to discuss milling and baking challenges.

"There's always challenges, but a number of us see those as opportunities," he said. "The world is highly competitive and we've got to have the resources to continue to sell wheat and provide our customers with the technological tools they need."