Invasive weed all but eliminated from Marin after 12-year effort

By Mark Prado, Marin Independent Journal
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Sandra Guldman of Larkspur takes in the view at Hal Brown Park in Kentfield. Guldman was part of group who help get rid of the invasive spartina grass from this marsh area. Robert Tong — Marin Independent Journal

Count this one as a victory for the environment.

After a 12-year struggle, a harmful invasive weed, accidentally brought to Marin where it proliferated wildly, is close to being eradicated thanks to local volunteers and a state agency that saw to its demise.

The aim of the state Coastal Conservancy’s San Francisco Estuary Invasive Spartina Project is to eradicate the weed to protect the long-term health of the native marsh ecosystem and to restore the habitats that have been affected throughout the Bay Area.
This week the agency approved a $4.1 million plan for continued work, which will extend efforts to eliminate the invasive cordgrass, along with monitoring and replanting of native vegetation through 2019.

The marshland at Hal Brown Park contained the invasive spartina grass before volunteers helped removed it. Photo by Sandra Guldman

A dozen years ago 32 sites in Marin — Pickleweed Park, Blackie’s Pasture and Corte Madera Creek among them — had some 6 acres of invasive spartina infesting hundreds of parcels. Today its spread has been reduced to less than one-tenth of an acre.

“It took us longer than we expected, but I think we did a good job,” said Sandy Guldman, vice president of Friends of Corte Madera Creek, whose group of volunteers played a role in the effort. “The work has been a success.”

The spartina wreaks havoc because it crowds out native grasses, drying up marsh areas that are needed for species such as the endangered California clapper rail and salt marsh harvest mouse, while squelching native plant diversity.

“It grows in very thick and dense down into the channels and into mudflats that should be unvegetated,” said Drew Kerr, treatment program manager for the spartina project. “It eliminates shorebird foraging habitat.”

Two types of spartina were found in Marin and they arrived in different ways.
About 70 percent was spartina densiflora, a bunchgrass-type weed that grows heavy and thick. As part of a restoration project in the mid-1970s, it was gathered from Humboldt Bay and introduced into Kentfield’s Creekside Park, known today as Hal Brown Park. The spartina densiflora arrived in Humboldt Bay in the 19th century after being stuffed into Chilean lumber ships, which used the cordgrass as dry ballast.

“I’m not sure why it was picked (for restoration at Creekside Park), it looks nothing like the native cordgrass,” Kerr said, noting the Creekside Park project even won a restoration award.

The spartina densiflora grew aggressively and soon made its way out of the park via Corte Madera Creek, getting into other Marin bayside locations.

The remaining 30 percent was a hybrid that mixed with native cordgrass stemming from the introduction of spartina alterniflora by the U.S. Army Crops of Engineers, which used it to stabilize dredge materials, Kerr said.

“It all creates a monoculture, providing no habitat,” Guldman said.

Work on the problem began as a test in 2003 and went into full effect in 2005 with an herbicide — Imazapyr — being used for initial work, an approach that concerned some Marin residents. But once the benefits were explained, there was more support, project backers said.

“What was used was so mild and such low toxicity we couldn’t nail the stuff as fast as we had hoped,” Guldman said.

What’s left of the spartina densiflora is now pulled by hand, although sites need to be monitored for seed banks left behind. The spartina alterniflora can’t be pulled because underground root systems break and it rapidly grows back.

Bay Area-wide between 2005 and 2015, the project has eliminated more than 776 acres or 97 percent of invasive spartina from more than 25,000 acres of infested tidal marsh and 25,000 acres of mudflats.

“Years ago it seemed like a never-ending battle,” said Doug Bosco, chairman of the Coastal Conservancy. “Now you can see we are restoring major landscapes. That’s a very positive thing.”

About the Author

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