

Laguna weed purge makes headway

Cleared waterways attract otters, ospreys and kingfishers to areas once overgrown with Ludwigia

Sunday, February 18, 2007

By MIKE MCCOY
THE PRESS DEMOCRAT

Two years ago, that bothersome Ludwigia weed was choking some of Sonoma County's key waterways, clogging spawning paths for endangered fish while offering safe harbor for West Nile-carrying mosquitoes.

Today, the battle to clear the channels leading to and from the Laguna de Santa Rosa is showing real-life signs of success.

"We're seeing whole families of otters out there that we've never seen before," said Julian Meisler, restoration manager for the Laguna de Santa Rosa Foundation.

The "there" Meisler refers to is 5.5 miles of drainage creeks west of Rohnert Park and along Occidental Road near Sebastopol and 80 acres of flood plain in the Sebastopol area. Two years ago, the area was judged to be the most heavily infested with the invasive aquatic weed, and thus the target of a three-year effort to reverse its spread.

Ospreys and kingfishers have also returned to the reopened waterways, once fully carpeted with Ludwigia, a member of the water primrose family.

Signs of the fast-growing plant began showing up a dozen years ago. Nothing was done to combat its spread until fears arose that the intertwined plants were providing a protective umbrella from pesticide sprays designed to kill the potentially disease-bearing mosquitoes that bred in its thicket-like midst.

That alarm helped overcome environmental opposition to a coordinated plan carried out by the Laguna foundation and its contractors to use herbicides to kill the Ludwigia.

The foundation, with nearly \$2.1 million in funding provided by the Sonoma County Water Agency, the city of Santa Rosa, the Marin/Sonoma Mosquito & Vector Control District and the California Wildlife Conservation Board, has spent \$1.5 million on the battle to date.

Meisler said the balance of the funding will be spent this summer on another round of spraying, removal and mapping, similar to what was done the first two years.

In the first year, 5,300 tons of dead *Ludwigia* were hauled out of the waterways near Rohnert Park and Sebastopol. This summer, about 25 percent of that amount was removed, partly because the larger areas had been cleared the year before.

Still, what was removed "was enough to cover four football fields three feet deep," Meisler said.

The return of the otters, ospreys and kingfishers along some of the reopened channels show the program is working, he said.

So does the reduction in adult mosquito populations around the harvested areas.

While *Ludwigia* has proved a stubborn foe, Meisler said efforts to reduce its range and density have provided greater access to Marin/Sonoma Mosquito & Vector Control District workers to spray during the mosquito breeding season.

Meisler said tests conducted by the district indicate the adult mosquito population in the work zones has declined dramatically. In 2005, traps set along the Bellevue-Wilfred flood control channel near Rohnert Park recorded 3,800 adult mosquitos and those on the main Laguna channel ensnared 4,000. In those areas in '06, the numbers dropped to 314 and 195, respectively, he said.

Despite the successes, Meisler said there is no talk of eradicating *Ludwigia*, which has gained a foothold along portions of the 14-mile-long laguna and hundreds of miles of tributaries that feed into it.

"There is too much to try to get all of it. There will have to be some level of maintaining or we will end up back where we started," he said.

Containment, restoring riparian habitat and addressing problems that fuel the spread of *Ludwigia* - including nutrient-rich runoff from lawns, golf courses and dairies - is the group's longer-range focus.

Success has largely depended on geography.

Meisler said *Ludwigia* did not return to 90 percent of the deep channels sprayed with herbicide. The success rate dropped to just under 50 percent along shallower creeks, while the flood plain remains covered in the revegetated weed, although not as densely, he said.

"It does much better in shallower areas, where it can root in soil that is not under too much water," Meisler said.