

Bidwell Park Privet Tree Removal Project 2004-2011

By Susan Mason for Friends of Bidwell Park

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Background

Japanese privets (*Ligustrum japonicum*) are an introduced species that spread rapidly through Bidwell Park since their introduction in Chico. Plant invasions like this reduce the number of native plants by out-competing natives for resources such as water, nutrients and sunlight. Privets are one of 22 plants on Butte County's Noxious Weed List. They spread via bird feces and are found throughout Chico, especially along the Hwy 99 corridor, where they were planted for screening after its construction. In irrigated or marshy areas of Bidwell Park, privet seedlings and saplings formed dense infestations; but there were also large and small privet trees in almost every area of Lower and Middle Park. The joint Friends of Bidwell Park (FOBP) and Chico Park Division privet removal project started in May 2004 when Park Ranger Bob Donohue asked FOBP to remove Japanese privet trees at Five Mile Recreation Area between the parking lot and the asphalt walkway. The privets were so dense that it was difficult to see from the parking lot into the lawn areas to the north. Eventually, FOBP removed about 10,000 privets from this relatively small slope. As the project started, Park staff cut down the 50 or so very large privet trees that surrounded the Five Mile lawn areas to eliminate that seed source and later did the same at Caper Acres. However, they did not treat the stumps with herbicide. This proved to be problematic as these stumps resprouted vigorously.

Project Description

The project eventually expanded to include the areas between Lost Park and the east edge of Five Mile. ***It is the largest invasive plant removal project in the park's history***, in terms of volume of debris removed and volunteer hours devoted to the project. It's also one of only two major projects focusing on removal of an invasive overstory plant (the other being Tree of Heaven which is entirely a FOBP project). Japanese privets can grow to 20 inches or more in diameter and up to 60 feet tall. The removal methods used by volunteers are to hand-pull seedlings; use Weed Wrenches® to pull out saplings up to two inches in diameter and to dig out larger trees. All of the debris, except for the largest stumps and a few downed trees in remote areas, was cut up with hand saws (volunteers can't use power tools) and dragged by volunteers to park roads. Most of these hundreds of large piles of privet debris were trucked to a composting facility by park maintenance staff. In addition, approximately ten to fifteen forty-yard roller bins (donated or rented) were used at major work sites that were accessible for bin drop-off.

Project Statistics

In the last seven years, hundreds of thousands of privet trees, saplings and seedlings have been removed. In addition to FOBP's 3,900 hours of volunteer time spent doing on-site surveys and privet removal (plus undocumented time spent off-site in project planning, tool maintenance, volunteer recruitment, etc.), numerous Park Division volunteer work sessions focused on privet tree removal. The California Conservation Corps also provided volunteer labor. Salt Creek Conservation Camp crews spent 15-20 days digging out large privet trees in two Lower Park

locations, under Park Ranger supervision. Besides hauling the piles of removed privet, park maintenance staff used a backhoe to remove about 25 large stumps that were resprouting after their tops had been removed by City staff. Two volunteers who were licensed by the State treated 82 un-removable privets (in erosion-prone areas or large resprouting cut stumps) with herbicide and a similarly licensed City employee treated twelve such trees.

Project Follow-Up

After the initial extensive removal project ended in December, 2010, FOBP divided the project area into forty zones and did an intensive search in each zone for privets missed during the initial work. Six thousand more privets (about one-third of them trees and saplings) were removed during this first annual monitoring of previously worked areas. Because so many park neighbors have privet trees, during future annual monitoring we expect to find and remove hundreds more seedlings but few mature trees.

At last count, within the project area 105 un-removable privets remain to be treated or re-treated with herbicide, removed with a backhoe or otherwise eliminated by park staff. The north side of Lost Park, which has at least 25 trees left, is problematic because the city doesn't have precise information about the boundary between the park and the adjacent residences. The golf course still has hundreds of thousands of trees (possibly Glossy privet, *Ligustrum lucidum*). In addition, FOBP notes that a deciduous, semi-evergreen, and less prevalent privet species, which we also removed, has a different biology than the park's more common Japanese privet. This less prevalent species produces seed much more quickly (3 years versus up to 10 for the Japanese privet according to published research) and has roots that will resprout from small fragments.

For the Future

This very-visible, large-scale invasive plant removal park project was sanctioned by the City of Chico and supported by the work of park staff. However, the city's park management never publicly acknowledged the validity of the project, e.g. with press releases, media interviews, or via project status reports agendized at monthly Bidwell Park and Playground Commission meetings. Although FOBP volunteers explained the project to any passerby who asked, the City did not take the initiative to promote the project to the community at large, even though the City staff was aware of public adverse misconceptions about the project. Perhaps City staff will publicize the work that has been accomplished to date. This would help to sustain the privet removal project into the future and could encourage park neighbors to consider removing their own privet trees which would lessen their adverse impact on Bidwell Park.