



What *SNOO* in the Park?

Golden Gate Weed Watchers Invasive Species Early Detection Significant **N**ew **O**bservations and **O**ccurrences August 2008

Importance of Early Detection of Invasive Species

Aggressive non-native plants threaten to change the landscape of our national parks. These plants can alter entire ecosystems, reducing habitat for the unique plants and animals of the San Francisco Bay Area in the very places set aside to protect them. Often, by the time a plant is noticed as a problem it has spread throughout an area. The Weed Watchers help patrol the park for some of the newest invaders—and find them when they can still be prevented from becoming a permanent part of the landscape.

August was once again a very productive month for the Weed Watcher Program. Unfortunately all of our interns had to go back to school this month, but not before putting in many hours out on the trails surveying and treating our priority species.

The Weed Watchers left the trails to do a road survey along the entire one-way portion of **Conzleman Road**. This survey went through **Subwatershed 1-2**, where several patches of **tocalote** (*Centaurea melitensis*), one patch of **thoroughwort** (*Ageratina adenophora*), and one patch of **kikuyu grass** (*Pennisetum clandestinum*) were mapped.

Parts of **Old Bunker Road Trail** and the **Coastal Trail** were surveyed in August. In **Subwatershed 7-1**, six separate patches of **licorice plant** (*Helichrysum petiolare*) were mapped. **Pennyroyal** (*Mentha pulegium*) was the only previously unmapped high priority plant that was found in **Subwatershed 7-2**.

The Weed Watchers returned to the **Bobcat Cut-off trail** in August to finish a survey started in July. In **Subwatershed 7-10** a small patch of **thoroughwort** that had not previously been mapped was recorded in GeoWeed. **Licorice plant** and **capeweed** (*Arctotheca calendula*) were discovered and mapped in **Subwatershed 7-9**. In **Subwatershed 8-6** several Priority 1 and Priority 2 species were mapped, including three patches of **capeweed**, two patches of **pennyroyal**, and one patch of **English Ivy** (*Hedera helix*). Two patches of **Scotch broom** (*Cytisus scoparius*) and one patch of **purple foxglove** (*Digitalis purpurea*) were also mapped as well as manually treated.

On one of his last hikes as an intern, Zach surveyed the **Bobcat Trail** from Wolfback Ridge down to the Miwok Trail junction. While he found several patches of previously mapped **capeweed**, **Scotch broom** and **Portuguese broom** (*Cytisus striatus*) were the only new infestations that he found. **Scotch broom** was mapped in **Subwatersheds 8-3, 8-4, and 8-5**. **Portuguese broom** was only found and mapped in **Subwatershed 8-5**.

The Weed Watcher Interns started the month off by surveying priority sections of the **Fox Trail** and the **Coastal Trail**. In **Subwatershed 10-2** one patch of **capeweed**, one patch of **pennyroyal** and one patch of **licorice plant** were mapped. Along the Fox Trail in **Subwatershed 11-2** one patch of **licorice plant** and some **pennyroyal** was mapped. **Licorice plant** and **Singleseed hawthorn** (*Crataegus monogyna*) were also mapped in **Subwatershed 11-3** along these trails.

Subwatersheds 11-11 and 11-4 were surveyed along the **Tennessee Valley trail** from the nursery and then following the **Coastal Trail** south to Wolf Ridge. No Priority 1 species were found in either watershed. The Weed Watchers did find and map **pennyroyal** in **Subwatershed 11-4**.

The Weed Watchers ventured back to **Muir Woods** in August to do a survey of the main trails starting from the Visitor Center. **English holly** (*Ilex aquifolium*) was the only Priority 1 species found. In **Subwatershed 12-5**, one small patch of **Himalayan blackberry** (*Rubus discolor*) was mapped along with a few small **English ivy** plants that were also hand pulled. A few more **English ivy** plants were mapped and pulled in **Subwatershed 12-3**.

The **Green Gulch** and **Coyote Ridge Trails** through **Subwatershed 12-8** need some attention after all of the high priority species that were found here. Seven separate occurrences of **capeweed** were mapped, along with one patch of **Scotch broom**, two patches of **kikuyu grass**, and two patches of **pennyroyal**. The Weed Watchers also mapped three patches of **licorice plant**, but were able to manually treat two of them while they were out there.

On August 9, the Weed Watchers headed out to **Dias Ridge** to survey the trails in **Subwatershed 12-9**. Three large patches of **licorice plant** were spotted about 100 m from the trail. Two patches of **pennyroyal** were also mapped along the trail.

A brief survey was conducted through **Subwatershed 13-1** along the **Miwok trail**. Many patches of **licorice plant** had already been mapped here, but the Weed Watchers found and mapped one new patch. Several **purple foxglove** plants were found and quickly removed along the trail.

Subwatershed 13-6 was not formally surveyed in August, but while on a survey along the Marincello Trail, a large **licorice plant** was spotted from several hundred yards away on a hillside in 13-6.

Once again the interns joined IPP this month. They helped to remove and map **French broom** (*Genista monspessulana*) and map two occurrences of **licorice plant** in **Subwatershed 16-1**.

The Weed Watcher Interns returned to **Stinson Gulch** to survey **Willow Camp Trail** in **Subwatershed 16-3**. This area is known to have a large infestation of **oblong spurge** (*Euphorbia oblongata*), so the interns focused on mapping isolated patches, which ended up being only one patch of **oblong spurge**. They also mapped one patch of **thoroughwort** along the trail.

The Weed Watchers spent a nice hot day down at Sweeney Ridge surveying the **Sweeney Ridge Trail**. Both **ox-eye daisy** (*Leucanthemum vulgare*) and **tocalote** were found scattered along the trail in **Subwatersheds 19-2** and **28-3**. A small patch (about 10 m²) of **Bermuda grass** (*Cynodon dactylon*) was mapped along the trail at the bottom of a seep in **Subwatershed 19-2**.

To finish off Steve and Dearbhail's internships, the Weed Watchers went on a survey around **Fort Funston**. While many non-native dog species were seen, no Priority 1 plants were found. The interns did map many patches of **European searocket** (*Cakile maritima*) and a few occurrences of **panic veldtgrass** (*Ehrharta erecta*) while hiking through the dunes.

If anyone would like more information or maps please contact Jen at 331-5023 or Jenn_Jordan@nps.gov.