



What *SNOO* in the Park?

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

As the survey season is getting close to being finished, the Weed Watchers traveled north and south during September in order to complete as many trail and road surveys as possible.

The Weed Watchers started the month with a beginner level training at **Fort Cronkhite**. Four new volunteers attended the training to learn about the program and learn how to identify and map the top 12 priority species. These volunteers have proved to be a great asset for the program, as they are already familiar with many plants and trails of Golden Gate.

A survey was completed this month along **Bunker Road** from Ft. Cronkhite to the Tunnel through many different subwatersheds. Most of the populations found seem to have been around for years, but the Weed Watchers were able to get them mapped in GeoWeed for the first time. Many different species were mapped, but the priority level one and two species found are the following: Five separate patches of **capeweed** (*Arctotheca calendula*) were mapped in **Subwatersheds 7-4, 7-14, and 7-7**. Two patches of **pennyroyal** (*Mentha pulegium*) along the road and one **blackwood acacia** (*Acacia melanoxydon*) along the Coastal Trail were also mapped in **7-7**. **Common teasel** (*Dipsacus fullonum*) was mapped in **Subwatersheds 7-12, 7-13 and 7-14**. **Pennyroyal, pampas grass** (*Cortaderia selloana*), and **blackwood acacia** were mapped in **Subwatersheds 7-12**.

The Weed Watchers headed out to Tennessee Valley to finish surveying small portions of the **Coast, Coyote Ridge, and Green Gulch Trails**. No Priority 1 plants were found in **Subwatershed 11-3**; however, one patch of **ox-eye daisy** (*Leucanthemum vulgare*) was mapped and treated. **Tocalote** (*Centaurea melitensis*) and **Bermuda grass** (*Cynodon dactylon*) were both found along the Green Gulch Trail in **Subwatershed 12-8**. Also in **12-8**, a small patch of **English holly** (*Ilex aquifolium*) was mapped outside of Hope Cottage.

The entire **Dipsea Trail** was surveyed through **Subwatershed 16-1** during a group hike in September. Four patches of **licorice plant** (*Helichrysum petiolare*) were added to the map of several other infestations previously mapped. While two of these patches appear to have been treated, at least one seems to be a new discovery. Several patches of **Himalayan blackberry** (*Rubus discolor*), **cape ivy** (*Delairea odorata*), and **common teasel** were also mapped along with one patch of **thoroughwort** (*Ageratina adenophora*) that was not previously in GeoWeed.

The Weed Watchers finished off the month with a survey along the **Sweeney Ridge Trail** starting from Skyline College. The only Priority 1 species not previously mapped that was found was a patch of **tocalote** scattered along the trail. A patch of **Scotch broom** (*Cytisus scoparius*) that was mapped in the past was given a more accurate assessment while one of the volunteers treated a few of the plants.

The Weed Watchers joined forces with the Point Reyes Weed Watchers this month on two separate occasions. On September 10, **Bolinas Ridge Trail** was surveyed, which crosses several subwatersheds, managed by both PORE and GOGA. These include **PORE Subwatersheds 1-40, 1-42, 1-44 and 1-46** and **GOGA Subwatersheds 18-7, 18-8, 18-9**. **Woolly distaff thistle** (*Carthamus lanatus*) was present throughout, including one large (approx. 5,000 m²) assessment within **GOGA Subwatershed 18-8**. Several small patches of **capeweed** were mapped, as well as two small patches of **Himalayan blackberry** and one small area of **French broom** (*Genista monspessulana*). **Purple velvet grass** (*Holcus lanatus*) was so abundant throughout the area that it could not be mapped.

On September 13 Weed Watchers from both programs hiked the **Cross Marin Trail**. In **Subwatershed 1-44** two separate occurrences of **English ivy** (*Hedera helix*), as well as two separate occurrences of **English holly** were mapped. A small amount of **periwinkle** (*Vinca major*) was mapped trailside. Also, an extensive area of **periwinkle** was mapped in the **Lagunitas Creek** drainage on the north side of the trail. Both subwatersheds had **silverleaf cotoneaster** (*Cotoneaster pannosus*) present, though most was found in **Subwatershed 1-46** near the Sir Francis Drake overpass. **French broom** was also mapped in the Lagunitas Creek drainage in **Subwatershed 1-44**.

The Weed Watchers traveled to **Pinnacles** for a week of surveying towards the end of September. While much of the time was spent on forensic botany and fighting through Durango root (*Datisca glomerata*), several high-priority species were also mapped. In the **Upper Chalona** search area, **stinkwort** (*Dittrichia graveolens*), **Italian** and **slender-**

flowered thistles (*Carduus pycnocephalus* and *C. tenuiflorus*) and **white sweetclover** (*Melilotus alba*) were mapped. Several more patches of **stinkwort** and **white sweetclover** were mapped in the **Lower Chalone** area, along with **autumn willowherb** (*Epilobium brachycarpum*), **poison hemlock** (*Conium maculatum*), **blessed milk-thistle** (*Silybum marianum*), and **common salsify** (*Tragopogon dubius*). **Spearmint** (*Mentha spicata*) and **autumn willowherb** were mapped in the beginning but then were found to be too abundant to continue to collect data beyond presence/absence for the survey area. The Weed Watchers also found three species new to the park, and only one of them was exotic!

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