

Yellow Starthistle site in Yucaipa in November after multiple treatments in 2010.

The Santa Ana River & Orange County WMA

The Santa Ana River and Orange County Weed Management Area (SAROCWMA) was formed in 2003 with the objectives of controlling Pepperweed and other outlier weed populations in the Santa Ana River watershed. The SAROCWMA coordinates weed management activities to help prevent and control the spread of invasive weeds. These activities include locating and reducing the range of invasive weeds; identifying and removing newly emerging weed populations and educating the public about the issues associated with invasive weeds.

Attendance, Outreach, & Funds

SAROCWMA holds its meetings quarterly with representatives from 10 agencies and groups regularly in attendance. 15 people attended at least one meeting in 2010.

Our partner from the Orange County chapter of the California Native Plant Society gave 3 presentations within our boundaries with a combined total audience of **50** people.

Our partner the California Invasive Plant Council Student Chapter had outreach booths at several public events including the University of California Riverside plant sale, the Santa Rosa Plateau native plant sale, UCR Discovery Day, and Western Municipal Water Distrct's Earth Night. They also helped to create an invasive plant power point presentation for an elementary school. They reached **459** people with their outreach efforts

this year.



We would like to thank the following groups for their generous donations to the weed management area and for the In-kind support of the WMA members:

In Kind:

San Bernardino Dep. of Agriculture - for \$5,173.35

Riverside-Corona Resource Conservation District - for \$4,320.13

Direct Match:

Santa Ana Watershed Association - for \$9850

City of Brea - for \$2068

Shipley Nature Center - for \$625

Huntington Beach Tree Society - for \$300

We would also like to thank the Cal-IPC Student Chapter at UCR for all of their volunteered time at public events and weed pulling events (right).



This Year's Weed Control Progress

The Santa Ana River and Orange County WMA proudly declairs four weed populations to be eradicated as of 2010:

- 1 of *Ricinus communis* near Mt. Rubidoux in Santa Ana Regional Park
 - 1 of Delairea odorata in Carbon Canyon Regional Park
 - 1 of Cynara cardunculus in Carbon Canyon Regional

Park

- 1 of Cortaderia selloana along Ortega Highway.

Weeds surveyed	in 2010	
Weed	Common name	Gross Acres
Ailanthus altissima	Tree of heaven	1700.75
Arundo donax	Giant reed	1701.6
Carduus nutans	Musk thistle	0.25
Centaurea diffusa	Diffuse Knapweed	<0.25
Centaurea solstitialis	Yellow Star Thistle	1701
Cursium vulgare	Bull Thistle	19.78
Cortaderia selloana	Pampas Grass	< 0.125
Cynara cardunculus	Artichoke Thistle	2,625
Foeniculum vulgare	Fennel	2.125
Lepidium latifolium	Perrennial pepperweed	26.28
Myoporum laetum	Myoporum	0.25
Nicotiana glauca	Tree tobacco	1700
Pennisetum setaceum	Fountain Grass	0.5
Ricinus communis	Castorbean	1713.37
Sapium sebiferum	Chinese tallowtree	1
Silybum marianum	Milk thistle	2.5
Spartium junceum	Spanish broom	< 0.125
Tamarix	Saltcedar	1719,28

Weed control	work in 2010	
Weed	Common name	Net Acres
Ailanthus altissima	Tree of heaven	7.75
Arundo donax	Giant reed	13.6
Carduus nutans	Musk thistle	0.25
Centaurea diffusa	Diffuse Knapweed	< 0.25
Centaurea solstitialis	Yellow Star Thistle	25
Cursium vulgare	Bull Thistle	0.5
Cortaderia selloana	Pampas Grass	< 0.125
Cynara cardunculus	Artichoke Thistle	2.625
Foeniculum vulgare	Fennel	2.125
Lepidium latifolium	Perrennial pepperweed	15.5
Linaria genistifolia spp. Dalmatica	Dalmation toadflax	419 plants
Myoporum laetum	Myoporum	0.25
Nicotiana glauca	Tree tobacco	13
Pennisetum setaceum	Fountain Grass	0,5
Ricinus communis	Castorbean	16.37
Sapium sebiferum	Chinese tallowtree	0.5
Silybum marianum	Milk thistle	2.5
Spartium junceum	Spanish broom	< 0.125
Tamarix	Saltcedar	23

Areas surveyed include parts of the San Bernardino Mountains, parts of Chino Hills State Park, parts of the San Bernardino valley including some in Chino, Ontario, Upland, Redlands, and Yucaipa, parts of Ortega Highway between Lake Elsinore and San Juan Capistrano, portions of the Santa Ana River, and portions of Temescal Vally. In the table to the left are the acres surveyed listed by weed species.

Weed control work is underway at multiple sites within the larger areas being surveyed. All weed control areas use multiple removal and control techniques including: hand cutting and removal, treat in-place, cut and spray, and manual removal when plants are small. In the table above are the acres controlled listed by weed species.

Project progress and successes

Due to the large size of our WMA, and the fact that it covers three counties, we have numerous projects in various stages of the eradication process. We place a lot of focus on preventative weed maintenance as well as looking for outlier populations. The progress of a few of our projects is outlined below.

In San Bernardino County there is only one site known to be infested with *Centaurea diffusa* which is at Arrowbear Lake in the San Bernardino Mountains. On this half acre site 36 plants were treated in 2007 and only three were found and removed in 2010.

In Riverside County in Rancho Jurupa Regional Park Perennial Pepperweed is 90% reduced compared to 2005, and Castor Bean is now rare where control started in 2005 although it is still common along the riverbank downstream from the treatment area.



In Riverside County the Cal-IPC Student Chapter assisted in post fire herbacide control studies at the Santa Rosa Plateau on Erodium botrys.



In San Bernardino County in upper Yucaipa near Oak Glen Creek there was aproximately 20 acres of Yellow Starthistle detected. Post emergent spraying began in May using Round Up Pro Max. Three treatments were conducted to prevent the invasives from setting seed.

In Orange County in Featherly Regional Park, following the major wildfire of November 2008 and opportunistic treatment thereafter, castor bean is nearly eradicated along La Palma Blvd., near the citrus groves, and along the SARI pipeline. Numbers of recent new seedlings have been reduced by a factor of 1000 or more compared to early 2009. most areas where it is still present are in some difficult to reach areas along the river banks.