Early Detection Rapid Response (EDRR) Pilot Project – Updates!

Cal-IPC Symposium
October 10, 2014

Ramona Robison
Natural Resources Division
• Santa Cruz
• Orange Coast
• San Diego Coast
• North Coast Redwoods
• Sierra
EDRR Pilot Project Goals

- Reduce invasive plant management costs over time
- Train employees and volunteers to detect new weeds
- Develop management framework and document effort
Results From First Two Districts
Yellow archangel
*Lamiastrum galeobdolon*
Mint family

**General description**

Fast-growing perennial ground cover that may be either trailing or upright depending on conditions. Yellow archangel, also known as yellow Lamium, is very competitive and fast-growing in the forest habitats of western Washington and western British Columbia. When it is dumped with yard waste or escapes from intentional plantings, it spreads quickly into forested areas and out-competes native understory plants.

**Legal status**

Yellow archangel is a non-regulated Class B noxious weed in King County. Control is recommended but not required. County Noxious Weed Boards in Washington State have the option to specify control areas for this plant but no areas have been designated in King County. Contact the [Washington State Weed Board](https://www.wsdot.wa.gov/parks/education/noxious-weeds) for more details on designation areas.

**Impacts and distribution**

The variegated form of this species is a popular ornamental in garden beds and hanging baskets as well as a groundcover for shady sites. In Washington State, yellow archangel has been reported as escaping in many western Washington counties including San Juan County, Kitsap County, Pierce County, Thurston County, Snohomish County, King County and others.
Orange Coast

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<tr>
<th>Weed Alert!</th>
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<tbody>
<tr>
<td>Devil’s thorn</td>
<td>Stinkwort</td>
<td>Saharan mustard</td>
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![Devil’s thorn](image1)

![Stinkwort](image2)

![Saharan mustard](image3)
EDRR Pilot Project Methods

Himalayan Knotweed, Roadside Near Trinidad SB
Updating the Methods
Target List Development

EDRR Start-Up Meeting, San Diego Coast District, March 2014
Some Surprising EDRR Targets

Allium triquetrum, Neal Kramer, Calphotos

Indian Plantain, Bolsa Chica SB
Developed GIS Map Books for Search Areas
EDRR Identification Card Updates

Weed Alert!
Musk thistle

Mature Size

Description
- Up to 6 ft. tall thistle with painful spines
- Red-purple, globe-shaped flowerheads 1-3 in. wide
- Mature flowers often droop on long stalks
- Grows as a low round cluster of leaves in the first year
- Dark green leaves are lobed with sharp brown to whitish spines at tips
- Leaves taper down stems as spiny wings
- Reproduces by seed, resprouts if cut
- Spread by wind, waterways, wildlife, waterfowl, livestock
- Native to Europe, Asia, the Mediterranean region

Bloom Period  Jun - Jul

Habitat  Scrub, coastal prairie, grassland, forest, disturbed sites

2-Minute Removal

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### Value of Collaboration with Partners

<table>
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<tr>
<th>Aquatic weeds currently treated by DBW in the Delta</th>
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<tr>
<td><strong>Water hyacinth</strong></td>
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#### Description
- **Water hyacinth**
  - Floating to rooted perennial
  - Thick, spongy, floating oval-shaped leaves, Healthy leaves float on lower surfaces
  - Juveniles develop into mature clumps up to 50 cm tall
  - Small white flowers
  - Native to Central and South America

- **Egeria densa**
  - Submerged aquatic perennial
  - 3-5 leaves, whorled
  - Middle and upper leaves 15-40 mm long, 2-5 mm wide
  - Small white flowers extend up to 3 cm above water surface
  - Native to South America

- **Spongeplant**
  - Submerged aquatic perennial
  - 3-5 leaves, whorled
  - Middle and upper leaves 15-40 mm long, 2-5 mm wide
  - Small white flowers extend up to 3 cm above water surface
  - Native to South America

#### Growth Period
- **Water hyacinth**: Spring - fall
- **Egeria densa**: Spring - late fall
- **Spongeplant**: Spring - fall

#### Habitat
- **Water hyacinth**: Ponds, sloughs, channels, canals, streams, and lakes
- **Egeria densa**: Slow-flowing or still water in ditches, sloughs, canals, rivers, ponds, lakes, and reservoirs, often in nutrient-rich substrates
- **Spongeplant**: Ponds, sloughs, channels, canals, streams, and lakes

#### Control Methods Currently Used by DBW
- **Water hyacinth**
  - Chemical Control
  - Hand Removal

- **Egeria densa**
  - Chemical Control
  - Hand Removal

- **Spongeplant**
  - Chemical Control
  - Mechanical Control
  - Chemical Harvesting

#### Control Options for Residents
- **Water hyacinth**
  - Mechanical Removal: Hire an aquatic mechanical harvesting company.

- **Egeria densa**
  - Chemical Harvesting: Hire an aquatic mechanical harvesting company.

- **Spongeplant**
  - Mechanical Removal: Hire an aquatic mechanical harvesting company.

*Residents and partners can use these control methods on their own risk.*
EDRR Future Plans

Dean Kelch, CDFA, Early Detecting in Washoe Meadows SP