

# What is CalWeedMapper and how does it inform Regional Planning?



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# CalWeedMapper

<http://calweedmapper.cal-ipc.org>

CalWeedMapper

[home](#) | [maps](#) | [regions](#) | [how to](#) | [spatial data](#) | [plant profiles](#) | [about](#) | [contact](#)

basic

advanced

SEARCH BY COMMON NAME

SEARCH BY SCIENTIFIC NAME

 indicates suitable range map is available in advanced mode



Photo © Regents of the University of California

***Dittrichia graveolens***  
**(stinkwort)**

Cal-IPC Rating: **Moderate-Alert**

Other Ratings:

**species description**

[Get Species Map Report](#)

SELECT REGION TYPE

SELECT REGION

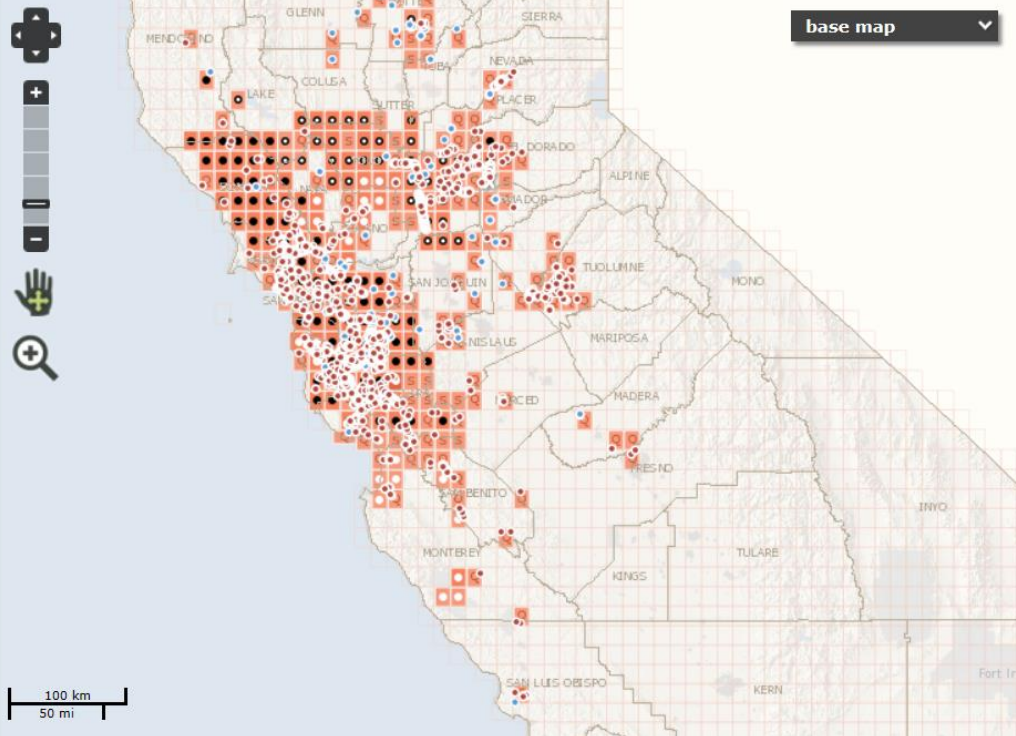


CREATE A REPORT

LEGEND / CHOOSE LAYERS



base map



EXPERT KNOWLEDGE BY QUAD

**Abundance**

- Low
- Medium
- High

**Trend**

- Spreading
- Managed, spreading
- Managed, decreasing
- Eradicated

**Verification Needed**

- Verify Quad
- Verify Species

Adjust transparency:



**SUITABLE RANGE**

- 2010
- 2050
- Change 2010 - 2050

OCCURRENCE OBSERVATIONS

- Consortium of California Herbaria
- Calflora

# What we did

1. Developed a statewide mapping and prioritization tool **[CalWeedMapper]**;
2. Collected data for it **[expert knowledge]**;
3. Linked it with **Calflora and CCH data** for nightly updates of new data
4. Used this tool to work with regional partners to design landscape-level regional strategies

# Data in CalWeedMapper

**Expert knowledge** (by USGS quad)

Including...

- Abundance (**including \*absence \***)
- Spread trend
- Management status

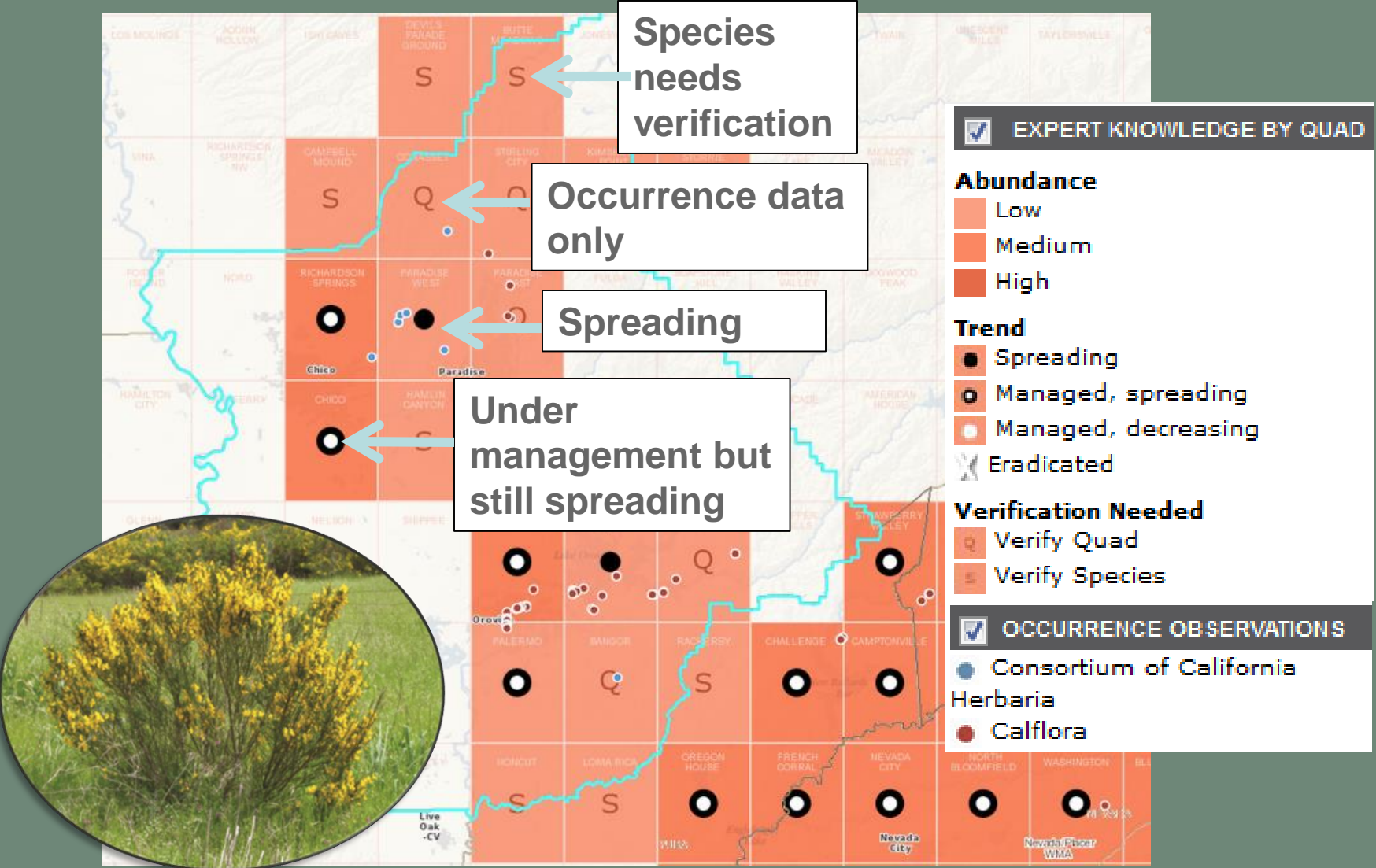
+

**New occurrence data**  
(**Calflora** and **CCH**) nightly

=

**Continuously up-to-date** (though coarse)  
**statewide distribution data**

# Data in CalWeedMapper



# Modeling Potential Spread

basic

advanced

SEARCH BY COMMON NAME

SEARCH BY SCIENTIFIC NAME


 indicates suitable range map is available in advanced mode



Photo © Regents of the University of California

***Spartium junceum***  
**(Spanish broom)**

Cal-IPC Rating: High


Other Ratings: CDFA C, BAEDN


***species description***




CREATE A REPORT

Change 2010 - 2050

 Suitable range

 Expanded range

 Reduced range



100 km

100 mi



# Spatial Analysis: Regional Management Opportunities

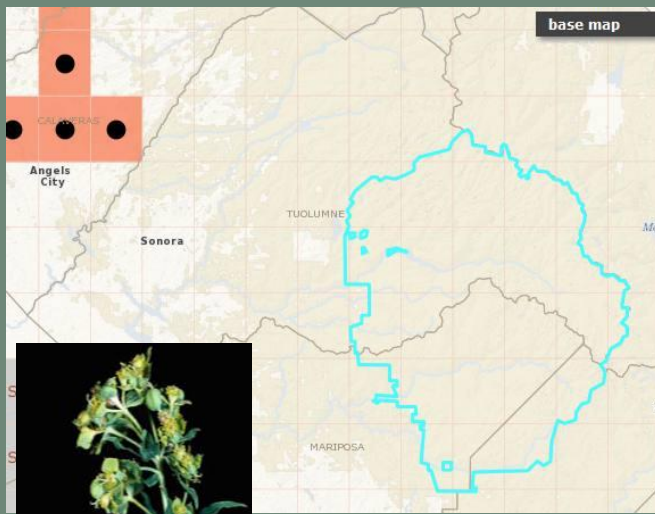
Category based on **distribution**, priority based on Cal-IPC **rating**.

**Surveillance:** Species not present but found within 50 miles – watch for it.

**Eradication:** Species found only in single isolated quads – eradicate it.

**Containment:** Species more widespread – contain its spread.

## Surveillance



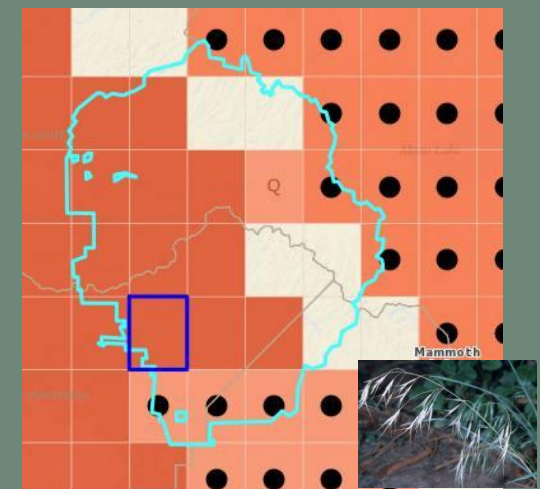
Leafy spurge

## Eradication



Canada thistle

## Containment



Cheatgrass

# Regional Planning

- Landscape-level collaborative planning
- Regions (2-6 counties)
- Transparent, collaborative process to evaluate and prioritize
- Goal - prioritize a handful of species for surveillance and eradication in the region
- Obtain funding for highest priority regional projects





# Regional Planning Process

1. Meeting to devise regional strategy
  - Use CalWeedMapper regional report
  - Decide on species of concern:
    - Surveillance: learn and look for. Map and treat immediately if found!
    - Eradication target: eradicable from the region for less than \$100k?
2. Meeting #2 to draft an eradication workplan
  - Map all known occurrences in California
  - Establish responsibility for initial treatment and for long term monitoring



# CalWeedMapper – Regions page

**CalWeedMapper**      home   maps   **regions**   how to   spatial data   plant profiles   about   contact

**BETA**

## Regional Strategy

Cal-IPC is working with regional partners to set landscape-level strategies, secure implementation funding, and build a coordinated approach statewide. Click on the map to see regional efforts underway!

### REGION UPDATES

#### Northwest

See page.  
Strategic Plan and Eradication Workplan are complete. In August of 2015, the Wildlife Conservation Board (WCB) funded an effort to eradicate 5 species over the next 5 years! Use the ID presentation on the 26 priority species to learn more about this region's top concerns.

#### North Central

See page.  
Strategic Plan and Eradication Workplan are complete. Funding opportunities worksheet is compiled and WCB application is submitted. Many thanks to Marilyn McEvoy and Richard Tate for their work creating a stellar ID presentation of their 23 priority species.

#### Bay Area

See page.  
Cal-IPC has absorbed BAEDN and is furthering this Bay Area EDRR effort. Steering Committee completed WCB proposal to eradicate 7 early detection species from riparian areas. Work is underway on grant proposal to eradicate an isolated *Hypericum canariense* effort. NFWF is funding work

#### South Central Coast Strategic Plan

**Train!** Learn to identify priority detection species using an [illustrated plant list](#)  
**Respond!** Track new occurrence reports of [surveillance & eradication species](#) in your area (Also see new reports of [Cal-IPC Inventory](#) and [Cal-IPC Watchlist](#) species)  
**Get Funding!** See grant-ready projects in the [Eradication Workplan](#)

removal work on *Limonium ramosissimum* and *L. duriusculum* at 10 sites.

#### Central Coast

See page.  
See the ID presentation on the 19 priority species. WMA chairs have verified infestation sizes and locations identified in their Eradication Workplan.

#### South Central Coast

See page.  
In August of 2016, the Wildlife Conservation Board (WCB) funded an effort to eradicate 5 species over the next 5 years. Our team of weed warriors will assemble in early February to kick-off this regional effort!

#### South Coast

Strategic Plan drafted.  
Participants are sharing data/mapping priority species in California.

#### North Sierra

See page.  
Strategic Plan and Eradication Workplan are complete. Two years of treatment are funded by a Calfire Forest Health grant administered through CDFA. Additional funding from the Wildlife Conservation Society's Climate Adaptation Fund has bolstered this effort. The initial regional effort was funded in part by the TTCF Nature Fund.

#### Central Sierra

See page.  
Participants prioritized 10 eradication and 15 surveillance targets. NFWF PTI has provided two years of funding to eradicate three of the top priority species.

# CalWeedMapper – Regions page

## SOUTH CENTRAL COAST [Strategic Plan](#)

**Train!** Learn to identify priority detection species using an [illustrated plant list](#)

**Respond!** Track new occurrence reports of [surveillance & eradication species](#) in your area  
(Also see new reports of [Cal-IPC Inventory](#) and [Cal-IPC Watchlist](#) species)

FunC Flora Observation Hotline MAP TOOLS California Invasive Plant EDIT - SIGN OUT

Scientific Name

Native Status  Common Name

Start Date  End Date  Observer

**OTHER SOURCES**  
CCH, iNaturalist  include surveys/checklists

Phenology  Location Description

History Filter

Plant List  [view](#)

Group  Source

Columns  [customize](#)

Click on ID to select a record. Click on column title to sort. 235 records

anywhere  
 in map area  
 in polygon

**POLYGON**  
South Central Coast

Photos

County   
Alameda  
Alpine  
Amador  
Butte  
Calaveras  
Contra Costa  
Colusa

Location Quality

**Map** **Satellite**

Layers  Layers

Google  Map data ©2019 Google, INEGI 20 km Terms of Use Report a map error

ID	Plant	Photo	Observer	Organization	Date	Location	Description
<a href="#">po143938</a>	<i>Limonium duriusculum</i> European sea lavender		Lindsey Roddick	The Land Conservancy of San Luis Obispo County	2019-07-15	San Luis Obispo	Found slightly above high tide line within the Morro Bay State Park near South Bay Drive. Associate species include Salicornia pacifica, Jaumea carnosa, and Limonium californicum.

# South Central Coast Priority Species



Dalmatian toadflax (*Linaria dalmatica* ssp. *dalmatica*)



## Eradication Targets

1. Canada thistle (*Cirsium arvense*)
2. Dalmatian toadflax (*Linaria dalmatica* ssp. *Dalmatica*)
3. Invasive sea lavender (*Limonium duriusculum*)
4. Japanese dodder (*Cuscuta japonica*)
5. Russian wheatgrass (*Elymus farctus*)



# Learn and do outreach on your region's priority species

**Weed Alert!**  
**Shining geranium**



[www.ca-ipc.org](http://www.ca-ipc.org)

**Shining geranium**  
(*Geranium lucidum*)

**Mature Size** Ankle

**Description**

- Up to 20 in. herb with small pink flowers
- 5-petaled flowers in pairs on thin reddish stems
- Modified leaves just below flower petals are hairless
- Leaves are shiny, roundish to kidney-shaped with 3-7 lobes
- Stems are typically upright and bright reddish in color
- Seeds form in capsules with a long pointed beak, giving the plant one of its common names, "crane's bill"
- Reproduces by seed
- Spread by roads, trails, equipment, and as a nursery stock contaminant
- Native to Europe and Asia



**Bloom Period** May - Jun

**Habitat** Oak woodland, grassland, forest openings, disturbed sites

**2-Minute Removal** Pull



Image credits: Front bottom/top: Bruce Newhouse; Front center: Malcolm Storey, [www.blooming.org.uk](http://www.blooming.org.uk); Back top: Washington State Noxious Weed Control Board; Back bottom: Dorothy Konstantinov; icons by Tim Hyland  
These cards were adapted from a design by National Park Service.



**“The Cal-IPC approach is helping me reinvigorate our noxious weed work. It has helped get our Trinity County WMA back on track. If we are able to pull off prioritizing our Trinity County weeds then we should be able to better focus on priorities.”**

*-Josh Smith, Watershed Research and Training Center, Hayfork (2014)*

Photo by Katie Reinhart

# Questions?

Contact: [dfmorawitz@cal-ipc.org](mailto:dfmorawitz@cal-ipc.org)

Photo from 2018 Symposium (also during  
fire season & on the Fort Ord field trip!)

