

Invasive Plant Patrol: More Effective Early Detection and Rapid Response Through Community Engagement

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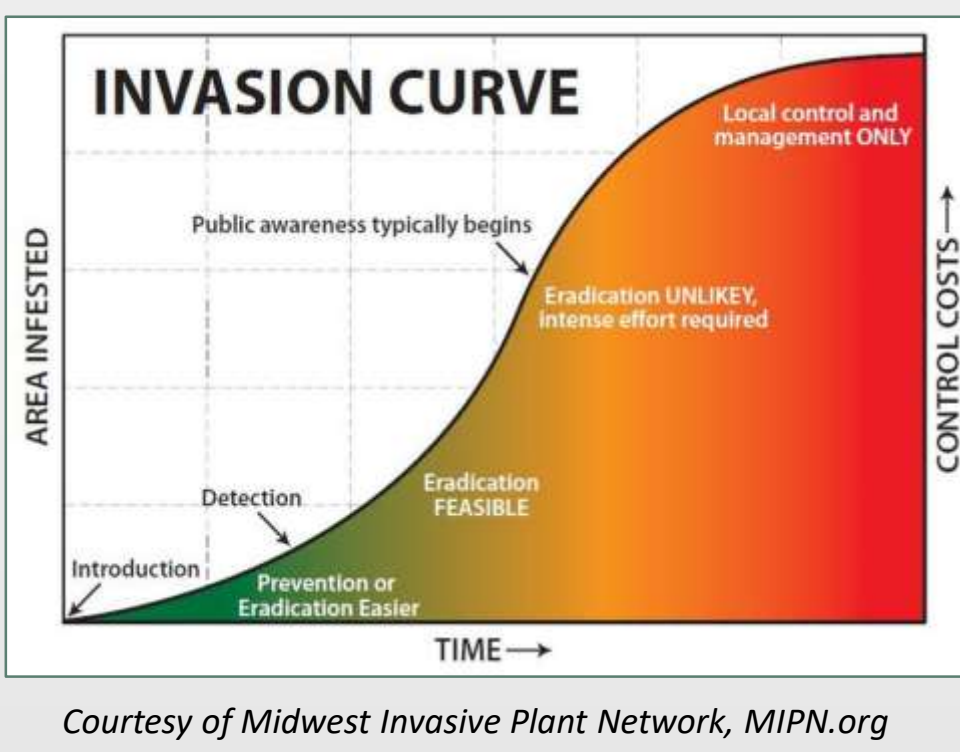


Who Are We?

Laguna Canyon Foundation is dedicated to preserving, protecting, enhancing, and promoting the South Coast Wilderness – a network of nearly 30 square miles of contiguous open space that includes Laguna Coast Wilderness Park and Aliso and Wood Canyons Wilderness Park in Orange County, CA. Our team is currently working on over a dozen projects, including large-scale restoration, rare plant management, and fuel modification projects covering nearly 200 acres of habitat. In addition, Laguna Canyon Foundation advocates for environmentally responsible development, and fosters connections between people and the land through our education and stewardship programs.

Invasive Plant Patrol is on the Job!

- Invasive species pose one of the greatest global risks to biodiversity; therefore, catching native, invasive plants in the emergent phase is essential to effective land management.
- Since early detection is our most effective weapon in combating emergent species, training those who frequent our open spaces is one of our best tools.



Goals of the Invasive Plant Patrol

- Offer volunteers an annual Early Detection Rapid Response Training carried out by the Orange County Chapter of the California Native Plant Society (OCCNPS).
- Train volunteers to use the Calflora application and website to document and map weed populations and treatment information.
- Train volunteers on the basics of targeted invasive control procedures.
- Coordinate monthly surveys on trails in Aliso and Wood Canyons Wilderness Park deemed high risk for emergent plant introduction as identified in the Natural Communities Coalition (NCC) 5 Year Invasive Plant Management Plan.

Target Emergent Species in our Parks

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Centaurea solstitialis
Yellow Star Thistle



Chrysanthemoides monilifera – Boneseed



Delairea odorata
Cape Ivy



Dittrichia graveolens
Stinkwort



Ehrharta calycina
Perennial Veldtgrass



Galenia pubescens
Coastal Galenia



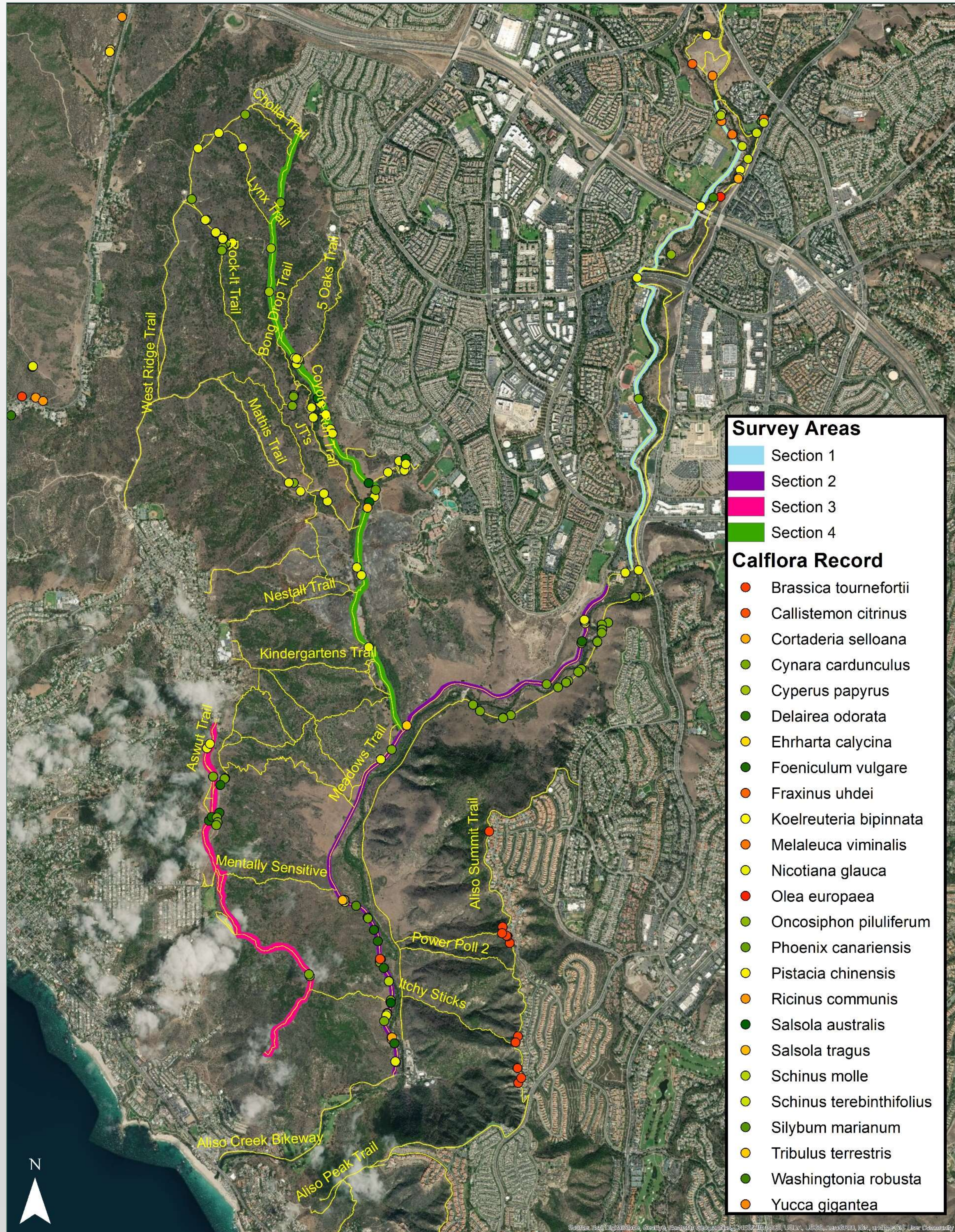
Hypericum canariense
Canary Island St. John's Wort



Melinis repens
Natal Grass



Oncosiphon piluliferum
Stinknet



Survey Areas

- Section 1
- Section 2
- Section 3
- Section 4

Calflora Record

- Brassica tournefortii
- Callistemon citrinus
- Cortaderia selloana
- Cynara cardunculus
- Cyperus papyrus
- Delairea odorata
- Ehrharta calycina
- Foeniculum vulgare
- Fraxinus uhdei
- Koelerutaria bipinnata
- Melaleuca viminalis
- Nicotiana glauca
- Olea europaea
- Oncosiphon piluliferum
- Phoenix canariensis
- Pistacia chinensis
- Ricinus communis
- Salsola australis
- Salsola tragus
- Schinus molle
- Schinus terebinthifolius
- Silybum marianum
- Tribulus terrestris
- Washingtonia robusta
- Yucca gigantea

Invasive Plant Patrol Survey Specifics

- Surveys are conducted on a monthly basis on one of four trails prioritized for likelihood of emergent introduction (see Sections 1-4 on map).
- Surveys are confined to approximately six feet on either side of the trail.
- LCF staff lead surveys to assist in plant identification, herbicide application, and entering and managing Calflora observations.
- Observations are uploaded to the 'OC Parks Weed Managers' group on Calflora. When a weed is treated, treatment information is entered by creating a new record on the existing observation.
- While emergent weeds are top priority, all high priority invasive plants are recorded and mapped.
- Trained volunteers are encouraged to upload observations and stay on the lookout for emergent species any time they are in the Parks.



Challenges

- Volunteers with a lack of botanical knowledge may feel too intimidated to participate.
- Surveying for cryptic species can be discouraging, leading to limited volunteer engagement and reluctance for repeat participation.
- Finding the right balance of hiking and 'stopping to smell the sagebrush.'

Successes and Lessons Learned

- Since January 2018, the IPP has logged over 150 hours of survey time and over 250 new Calflora observations.
- The IPP has been responsible for the detection of new populations of Cape Ivy (*Delairea odorata*), Perennial Veldtgrass (*Ehrharta calycina*) and Stinknet (*Oncosiphon piluliferum*) in the South Coast Wilderness.
- The IPP has treated over 250 Tree Tobacco (*Nicotiana glauca*), 50 Artichoke Thistle (*Cynara cardunculus*) and 100 Puncture Vine (*Tribulus terrestris*).
- You don't need to be a botanist to join the IPP! Identifying plants to species isn't as important for volunteers as simply noticing something new on the trails they regularly frequent.
- Volunteers like to get their hands dirty! Surveys are more engaging when a treatment portion is included, whether it's stump cut treatment, bagging seed, or hand pulling.
- Survey findings can help stakeholders to make more informed decisions regarding effective invasive plant management.

Thank you to our volunteers, partners, and to everyone who has made the IPP possible!

John Foley, Roger Ozinga, Diane Walters, Hallie Jones, Paula Olson, Theresa Karasek, Cameron Davis, Sydney Jones, Alyssa Moreno, Robin Matthews, OC Parks Aliso and Wood Canyons Wilderness Park staff, Ron Vanderhoff, Celia Kutcher, and the entire OCCNPS Invasive Committee

