

2017 CAL-IPC SYMPOSIUM
Working Across Boundaries

PROGRAM

AUG 7 VERSION

Tuesday, October 24

1:00 pm – 5:00 pm **Training 1: Invasive Plant Management 101** (Room: *TBD*)

Are you new to the field of invasive plant management? Or have gaps in your understanding about how everything ties together? Here's your chance to get a solid foundation and learn about: how land managers identify, map and prioritize weeds; how weed biology affects weed control methods; the range of control tools at our disposal as part of the Integrated Pest Management toolbox; strategic approaches for program success; and more. Taught by experienced Cal-IPC field course instructors.

1:00 – 5:00 pm **Training 2: Calflora Weed Manager** (Room: *TBD*)

Did you know you can map weeds on your smartphone, using a custom interface designed for your organization? That you can record details each time you treat a population? Calflora's Weed Manager suite of tools is designed to do this and more. Calflora staff and current users will show you how it all works.

6:00 – 8:00 pm **DPR Laws & Regulations: Updates on pest control regulations**

Room *Grand Ballroom III*. Chair: *Joel Trumbo, California Dept. of Fish & Wildlife*

6:00 Is glyphosate a human carcinogen? *Joel Trumbo, Cal. Dept. of Fish & Wildlife*

6:30 Protecting surface water from pesticide contamination in California. *Kean Goh, Dept. of Pesticide Regulation, Environmental Monitoring*

7:00 Respiratory protection requirements for herbicides. *Emma Wilson, Dept. of Pesticide Regulation*

7:30 What to expect from your pesticide inspection. *Robert Mulherin, Deputy Agricultural Commissioner, Riverside County Agricultural Commissioner's Office*

7:00 – 9:00 pm **Student Mixer**

Room *TBD*

Wednesday, October 25

7:00 am Registration and Continental Breakfast

8:00 – 9:40 am **Session 1. Invasive Plant Management in the California Desert**

Room: *Grand Ballroom*. Chair: *Heather Schneider, Rare Plant Biologist, Santa Barbara Botanic Garden*

8:00 Invasive plant management programs update. *Doug Johnson, Executive Director, Cal-IPC*

8:20 California desert invaders: Threats and opportunities to conserve a vast ecosystem. *Naomi Fraga, Director of Conservation Programs, Rancho Santa Ana Botanic Garden*

8:40 Not all weeds are equal: Effects of weeds on desert biodiversity. *Cameron Barrows, Research Ecologist, UC Riverside Center for Conservation Biology*

9:00 Managing invasive plants at Joshua Tree National Park. *Neil Frakes, Biologist, Joshua Tree National Park*

9:20-9:40 am Break

9:40 – 10:40 am **Session 2. Biological Control**

Room: *Grand Ballroom I*

Chair: *Patrick Moran, USDA- ARS*

10:00 Weed biological control in California: Review of the past and prospects for the future. *Michael J. Pitcairn, Cal. Dept. of Food and Agriculture*

10:20 New biocontrol releases and integrated control targeting *Arundo* and Cape-ivy in riparian areas. *Ellyn Bitume and Scott Portman, USDA- Agricultural Research Service*

10:40 Past, present, and future: Saltcedar (*Tamarix* spp.) and biological control in California. *Nicole Norelli, Riparian Invasion Research Lab, UCSB*

9:40 – 10:40 am **Session 3. Collaboration**

Room: *Grand Ballroom II*

Chair: *Rachel Kesel, OneTam*

10:00 Building partnerships: Tribes and invasive plant management for habitat restoration. *Kurt Broz, Pala Band of Mission Indians*

10:20 Erasing imaginary lines: Working collaboratively across state and national park lines to combat invasive plants. *Tom Reyes, National Park Service- Golden Gate National Recreation Area*

10:40 Early detection of invasive plants across boundaries. *Rachel Kesel, OneTam*

10:40-11:00 am Break

11:00 – 12:00 pm **Session 4. Tools & Techniques**

Room: *Grand Ballroom I*

Chair: *Mark Newhouser, Sonoma Ecology Center*

11:00 – 12:00 pm **Session 5. Federal Programs**

Room: *Grand Ballroom II*

Chair: *Brent Johnson, Pinnacles National Park*

11:00 The hoe isn't the only thing scuffling: Testing non-chemical control techniques for <i>Brachypodium distachyon</i> in serpentine and non-serpentine grasslands. <i>Andrea Williams, Marin Municipal Water District</i>	11:00 Planning constraints to IPM adoption by National Forests in California. <i>Philip Brownsey, Consulting Rangeland Ecologist</i>
11:20 Aerial lifts and <i>Arundo donax</i> control in the Sacramento-San Joaquin Delta. <i>Mark Newhouser, Sonoma Ecology Center</i>	11:20 BLM's Mojave Desert native plant restoration following wildfires and weed treatments: The right seed in the right place. <i>Judy Perkins, Bureau of Land Management</i>
11:40 Completing the knowledge cycle: Deriving IPM knowledge directly from practitioners on working landscapes. <i>Tracy Schohr, UC Davis</i>	11:40 Effectiveness of non-native plant treatments across the U.S. National Park system: A synthesis. <i>Scott Abella, University of Nevada, Las Vegas</i>

12:00 - 1:30 pm Lunch (provided)

<p>1:40 – 2:40 pm Session 6. Soils</p> <p>Room: <i>Grand Ballroom I.</i> Chair: <i>Amanda Swanson, UC Riverside</i></p> <p>1:40 Mycorrhizae, invasions, and the temporal dynamics of mutualism disruption. <i>Sara Grove, UC Santa Cruz</i></p> <p>2:00 Restoring soil microbial conditions after grass invasion for improved restoration. <i>Brooke Pickett, UC Riverside (student contest)</i></p> <p>2:20 Argentine ants may be significantly contributing to the spread of numerous invasive weeds. <i>Greg Rubin, California's Own Native Landscape Design</i></p>	<p>1:40 – 2:40 pm Session 7. <i>Volutaria</i>: Attempt at Early Eradication</p> <p>Room: <i>Grand Ballroom II.</i> Chair: <i>Chris McDonald, UC Cooperative Extension</i></p> <p>1:40 Overcoming challenges: Managing the highly invasive <i>Volutaria</i> across California. <i>Chris McDonald, UC Cooperative Extension</i></p> <p>2:00 Management of <i>Volutaria tubuliflora</i> at Anza-Borrego Desert State Park – A community effort. <i>Mason Hyland, California State Parks</i></p> <p>2:20 <i>Volutaria</i> detection and management at Upper Newport Bay, Orange County. <i>Ron Vanderhoff, California Native Plant Society, Orange County Chapter</i></p>
--	--

2:40 – 3:00 pm Break

<p>3:00 – 4:00 pm Session 8. SF Bay/Delta</p> <p>Room: <i>Grand Ballroom I.</i> Chair: <i>Drew Kerr, Invasive Spartina Project</i></p> <p>3:00 Mapping, prioritization, and eradication of <i>Arundo donax</i> in the Sacramento-San Joaquin Delta. <i>Alex Young, Sonoma Ecology Center</i></p> <p>3:20 Assessing spatio-temporal changes of invasive <i>Limonium ramosissimum</i> in San Francisco Bay wetlands. <i>Kerstin Kalchmayr, CSU San Francisco (student contest)</i></p>	<p>3:00 – 4:00 pm Session 9. Grasslands</p> <p>Room: <i>Grand Ballroom II.</i> Chair: <i>Andrea Williams, Marin Municipal Water District (Session organized by the California Native Grasslands Association)</i></p> <p>3:00 Weed management and habitat restoration in Southern California grassland and forbland. <i>Travis Brooks, Land IQ</i></p> <p>3:20 Barb goatgrass management: Interactive effects of grazing, glyphosate rate, application timing,</p>
---	--

<p>3:40 Controlling Algerian sea lavender in San Francisco Estuary tidal marshes. <i>Drew Kerr, Invasive Spartina Project</i></p>	<p>and restoration seeding. <i>Travis Bean, UC Riverside</i></p> <p>3:40 Grassland restoration and invasive weed management in Southern California: Medusahead as a case study. <i>Chris McDonald, UC Cooperative Extension</i></p>
---	---

4:00 – 5:00 pm Session 10. Poster Session & Sponsor Exhibits

5:00 – 6:30 pm Social Hour, Raffle & Silent Auction

6:30 – 8:30 pm Awards Banquet

9:00 – 10:30 pm Campfire Circle with Ken Layne of Desert Oracle

Thursday, October 26

7:00 am Registration

8:00-9:00 am. Session 11. Engaging Diverse Communities in Invasive Plant Management

Room: *Grand Ballroom*

Chair: *Antonio Solorio, Santa Monica Mountains National Recreation Area*

Panelists: *Ammy Baez, Youth Program, Santa Monica Mountains National Recreation Area*
Fernando Villalba, Biologist and Youth Programmer, John Muir National Historic Site
Gaby Jiminez, Los Angeles Conservation Corps

9:00 – 9:20 am Break

9:20 – 10:20 am Session 12. Coastal

Room: *Grand Ballroom I*

Chair: *Doug Gibson, San Elijo Lagoon Conservancy*

9:20 Invasive plant management on an island with goal of eradication. *Jonathan Shore, San Francisco Bay National Wildlife Refuge Complex*

9:20 – 10:20 am Session 13. Desert

Room: *Grand Ballroom II*

Chair: *Cameron Barrows, UC Riverside*

9:20 Native riparian revegetation success in controlled tamarisk and non-tamarisk sites in the Mojave River watershed, California. *Kenneth Lair, Lair Restoration Consulting*

9:40 Modeling the control of invasive fennel (<i>Foeniculum vulgare</i>) on San Clemente Island. <i>Emma Havstad, CSU San Diego</i>	9:40 Effects of renewable energy development on demography of <i>Brassica tournefortii</i> . <i>Karen Tanner, UC Santa Cruz (student contest)</i>
10:00 Carlsbad Hydrologic Unit Invasive Plant Species Control Program. <i>Barry Lindgren, San Elijo Lagoon Conservancy</i>	10:00 Post-fire monitoring for invasive plants on the Hualapai Reservation, Peach Springs, Arizona. <i>Jessica Orozco, Hualapai Dept. of Natural Resources</i>

10:20 – 10:40 am Break

10:40-11:40 am. Session 14: Discussion Groups

1. **Tools & Techniques: Ask the Invasive Plant Management Experts** – Whether you’re curious about ways to control a particular plant, need to know how to plan for an unusual situation, or need guidance on strategy, come learn from your peers and get your specific control questions answered by our expert panel of seasoned land managers. *(Room: TBD)*
2. **Aquatic and Estuarine Weeds** –Water is precious in California, and not only to humans. Water supports wildlife, and aquatic and estuarine environments are especially rich habitats. Come discuss the latest invasive plant management efforts in the Delta, Lake Tahoe, San Francisco Bay and elsewhere. *Led by Drew Kerr, Invasive Spartina Project, Gina Darin, Cal. Dept. of Water Resources, and David Kratville, Cal. Dept. of Food & Agriculture (Room: TBD)*
3. **UAVs and Helicopters** – Come discuss what land managers need to know about incorporating these flying tools into their management programs. *Led by Julia Parish, Catalina Island Conservancy and Morgan Ball, Wildlands Conservation Science. (Room: TBD)*
4. **Communications Strategies** – Whether communicating with volunteers, decision makers, the media or the public, we need to ensure that our message is as effective as possible. Studies find some counterintuitive things about how people understand issues. We’ll talk about communication planning for invasive plant management programs, including hot-button issues like use of herbicides and tree removal. *Led by Doug Johnson, Cal-IPC. (Room: TBD)*
5. **Non-Chemical Approaches to Invasive Plant Management** – Much of invasive plant management is done without the use of herbicides, but there are few comprehensive guides to best practices for using the wide range of non-chemical approaches. Managers need to know which techniques work—and don’t work—in which situations, and so do decision makers who face public scrutiny. Come hear about the current effort to compile best practices for non-chemical approaches and share your expertise and perspectives. *Led by Andrea Williams, Marin Municipal Water District, and Rachel Kesel, OneTam. (Room: TBD)*

11:40 am – 1:00 pm Lunch (on your own)

Career Panel Lunch, organized by the Cal-IPC Student Section

<p>1:00-2:00 pm Session 15. Biology</p> <p>Room: <i>Grand Ballroom I</i> Chair: <i>Justin Valliere, UCLA</i></p> <p>1:00 Native and invasive in the same region: Determining the mechanisms of invasion success for Monterey pines in California. <i>Briana Boaz, UC Berkeley (student contest)</i></p>	<p>1:00-2:00 pm Session 16. Botanic Gardens</p> <p>Room: <i>Grand Ballroom II</i> Chair: <i>Heather Schneider, Santa Barbara Botanic Garden</i></p> <p>1:00 Thinking beyond the garden: How the Santa Barbara Botanic Garden confronts invasive plants</p>
--	---

1:20 Restoration of invaded walnut woodlands using a trait-based community assembly approach <i>Sierra Lauman, Cal Poly Pomona</i>	via horticulture, education and research. <i>Heather Schneider, Santa Barbara Botanic Garden</i>
1:40 Changes to plant functional traits and seed production in response to drought in native and invasive annuals of California. <i>Justin Valliere, UCLA</i>	1:20 Out of the garden and into the wild: Rancho Santa Ana Botanic Garden's role in plant conservation and invasive species management. <i>Naomi Fraga, Rancho Santa Ana Botanic Garden</i>
	1:40 Re-introducing introduction: Renewed relevance of public gardens' traditional role and preventing invasive plant introductions. <i>Frank McDonough, Los Angeles County Arboretum & Botanic Garden</i>

2:00 – 2:20 pm Break

<p>2:20-3:20 pm Session 17. Restoration</p> <p>Room: <i>Grand Ballroom I</i> Chair: <i>Marla Knight, Klamath National Forest (retired)</i></p> <p>2:20 The good with the bad: When ecological restoration facilitates non-native plants. <i>Lindsay P. Chiquoine, Univ. of Nevada, Las Vegas</i></p> <p>2:40 Coastal strand enhancement, invasive plant management and restoration – North San Diego County. <i>Shirley Innecken, San Elijo Lagoon Conservancy</i></p> <p>3:00 Forest health and watershed improvement through noxious weed management. <i>Susie Urie, Tahoe National Forest</i></p>	<p>2:20-3:20 pm Session 18. State Programs</p> <p>Room: <i>Grand Ballroom II</i> Chair: <i>Steve Schoenig, Cal. Dept. of Food & Agriculture</i></p> <p>2:20 100 years of statewide coordination and eradication of Invasive weeds in California: A brief history. <i>Steve Schoenig, Cal. Dept. of Food & Agriculture</i></p> <p>2:40 Utilizing California's State Wildlife Action Plan 2015 Update (SWAP 2015) as a collaborative invasive species management tool. <i>Junko Hoshi, Cal. Dept. of Fish & Wildlife</i></p> <p>3:00 Aquatic invasive plant management across California. <i>David Kratville, Cal. Dept. of Food & Agriculture</i></p>
---	---

3:20 – 3:40 pm Break

<p>3:40 – 5:00pm. Session 19. Invasive Plant Management in California and Hawaii</p> <p>Room: <i>Grand Ballroom</i>. Chair: <i>Doug Johnson, Cal-IPC</i></p> <p>3:40 New weeds in California: An update. <i>Dean Kelch, California Dept. of Food & Agriculture</i></p> <p>4:10 Invasive plant management in Hawaii. <i>Joshua Atwood, Program Supervisor, Hawaii Invasive Species Council</i></p>
--

5:00 pm Closing Remarks

Friday, October 27

Field Trip 1: Joshua Tree National Park (Full-day, 7:30 am-4:30 pm)

We will travel through Joshua Tree from south to north, following the transition from the Colorado Desert to the Mojave Desert. NPS staff will describe management approaches for historic plantings of non-natives that the park is preserving. We will visit research plots assessing the effects of atmospheric nitrogen deposition on invasive annual brome grasses. Joshua tree woodland sites that have burned in wildfires fueled by invasive annual grasses provide an opportunity to discuss the future of this iconic species given the threats of global climate change and additional wildfires. Participants will only walk a short distance from our vehicles.

Field Trip 2: Whitewater Preserve (Half-day, 7:30 am-12:30 pm)

Hike the Whitewater River canyon, a candidate for National Wild & Scenic designation, where intact riparian habitat is home to the endangered Southwest willow flycatcher and Bell's vireo. The site is enclosed within BLM's San Geronimo Wilderness between the San Bernardino and San Jacinto Mountains, and provides range for bighorn sheep, deer and bear. Hear about how management of invasive plants has been a part of the Wildlands Conservancy's restoration work to protect this special desert place. The visit will involve approximately 4 miles of easy walking. Participants should be prepared for warm weather, with sturdy shoes and water.

Field Trip 3: Coachella Valley Preserve (Half-day, 7:30 am-12:30 pm)

Visit the Coachella Valley National Wildlife Refuge to view one of the last and largest remnants of a unique sand dune system in the Coachella Valley. This system, home to the endemic, endangered Coachella Valley fringe-toed lizard and Coachella Valley milkvetch, as well as the rare flat-tailed horned lizard, is under threat due to the invasion of Sahara mustard, and has been the focus of annual citizen weed pull efforts to reduce the abundance of the mustard. Also within the Preserve, we will visit a series of palm oases along the San Andreas earthquake fault, a scenic riparian system that was restored from a formerly highly-invaded state by the reduction of tamarisk, which has had implications for the water table, soil salinity, and growth of native species. The visit will involve approximately 3 miles of easy walking. Participants should be prepared for warm weather, with sturdy shoes and water.