



Welcome to Cal-IPC's 2015 Symposium

Session locations: See the maps on the back of this program. Wednesday trainings and Laws & Regulations session are at Balboa Park (directions on our website).

Sponsors: Our many Sponsors help offset the cost of the Symposium while providing information and services to Cal-IPC members. Sponsor exhibits are located in Room 15. Visit them at breaks, lunch, and during the poster/sponsor session.

Thursday evening: Join us for the Social Hour, Raffle and Silent Auction! The raffle features books, wine, artwork, weed tools and more, while the silent auction highlights travel packages and other special items. (See the flyer in the back of this folder for a partial list of items.) Tickets are \$1 each or 25 for \$20, and are available next to the Sales table during the day and at the Social Hour and Raffle itself. Raffle prizes will be distributed at the end of the Social Hour.

Student Networking Lunch: The Cal-IPC Student Chapter invites all students to join them in Room 13 for lunch Friday and an opportunity to talk to invasive plant professionals. Lunch provided.

Photo Contest: Vote for your favorite! The winner will be announced on Friday.

Sales: Our Sales table offers books and Cal-IPC gear, with proceeds supporting Cal-IPC's programs. We accept cash, checks, and credit cards. Check out the new boot brushes!

Presentations Online: PowerPoint slides and posters will be posted on our website.

Continuing Education Credits: California Dept. of Pesticide Regulation CEUs are available for each part of the Symposium (see below). Check in at the Continuing Ed table in the Foyer for attendance sheets and scantron forms. Please take a Verification of Attendance form for your records each day.

Wednesday (Oct. 28)	Course Code	CEU Hours
Training: Strategic Planning for Invasive Plant Mgmt.	M-0997-15	6.0 Other
Training: Calflora Weed Manager	M-0998-15	3.0 Other
Session: Pesticide Laws and Regulations	M-0996-15	2.0 Laws
Thursday (Oct. 29)	M-1000-15	6.0 Other
Friday (Oct. 30)	M-1004-15	6.0 Other
Field trips (Oct. 31)	M-0999-15	4.0 Other

Wednesday, October 28

Trainings

9:00am – 4:00pm. Strategic Approaches for Wildland Weed Management

Santa Fe Room, Balboa Park Club, Balboa Park (2144 Pan American Rd West, San Diego)

Instructors: Steve Schoenig, CA Dept. of Fish and Wildlife, Gina Darin, CA Dept. of Water Resources, Brent Johnson, National Park Service; Andrea Williams, Marin Municipal Water District; Jason Giessow, DENDRA Inc.

[Separate registration required]

1:00 – 4:00pm. Mapping and Tracking Management with Calflora's Weed Manager

Casa Del Prado, Room 104, Balboa Park (1800 El Prado, San Diego)

Instructors: Cynthia Powell and John Malpas, Calflora

[Separate registration required]

Session

6:00 – 8:00pm. Updates on Pesticide Use Laws & Regulations

Santa Fe Room, Balboa Park Club, Balboa Park (2144 Pan American Rd West, San Diego) [Included with Symposium registration. Space limited, DPR-licensed applicators have priority.] Moderator: Joel Trumbo, CA Dept. of Fish and Wildlife

- 5:30 Sign in for Dept. of Pesticide Regulation continuing education credits
- 6:00 Is glyphosate a carcinogen? Sheryl Beauvais, CA Dept. of Pesticide Regulation
- 6:30 Assessing herbicide impacts to pollinators. Richard Bireley, CA Dept. of Pesticide Regulation
- 7:00 Heat-related illness and herbicide use. Carmen Cisneros, Cal OSHA
- 7:30 Understanding and preventing herbicide drift. Joel Trumbo, CA Dept. of Fish and Wildlife

Thursday, October 29

8:00 – 9:00 Check-in and On-site Registration

San Diego Convention Center, Mezzanine Level

Session 1. Habitat Conservation Planning and Invasive Plant Management.

- 9:00 10:20, Room 14AB. Moderator: Doug Johnson, Cal-IPC
- 9:00 Welcome to San Diego, the nation's most biologically diverse county! Tom Oberbauer, County of San Diego Multiple Species Conservation Planning Division (retired)
- 9:30 Lessons learned and the future of Habitat Conservation Planning in California. Elizabeth Taylor, UC Irvine Law Center for Land, Environment, & Natural Resources
- 9:55 Innovations in landscape-level invasive plant management. Doug Johnson, Cal-IPC

10:20 - 10:40 Break

Session 2. Stopping New Invaders 10:40 – 12:00, Room 14A

Moderator: Chris McDonald, UC Cooperative Extension

- 10:40 Initiating the San Diego regional invasive plant Early Detection and Rapid Response (EDRR) program in support of NCCP. Jason Giessow, DENDRA, Inc.
- 11:00 A CNPS Chapter model for early detection and effective response to emergent invasive weeds. Ron Vanderhoff, California Native Plant Society– Orange Co.
- 11:20 Stopping the spread of Volutaria across the California desert. Chris McDonald, UC Cooperative Extension
- 11:40 Rose colored glasses for sale! Weedfree forage and mulch is the enemy of the perfect! Bobbi Simpson, National Park Service

Session 3. Drones and Phones: New Tools for Invasive Plant Management.

10:40 - 12:00, Room 14B

Moderator: Dave Bakke, USDA Forest Service

- 10:40 How the U.S. Department of the Interior is using Unmanned Aerial Systems (UAS) for conservation. Bruce Quirk, US Geological Survey.
- 11:00 Aerial spraying with UAVs for wildland weed control: Applications and potential deployment. *Ken Giles, UC Davis.*
- 11:20 iMapInvasives: Collaborative invasive species data management. Jami Kuzek, Arizona Game & Fish Dept.
- 11:40 How land managers are using Calflora's Weed Manager system. Cynthia Powell, Calflora, Ed King, Placer Co. Ag. Dept., Pete Frye, Marin Co. Open Space District

12:00 - 1:20 Lunch. Room 16 and Patio.

Session 4. Invasive Plant Research (I)

1:20 - 2:40, Room 14A

Moderator: Elise Gornish, UC Cooperative Extension

- 1:20 Herbivores as mediators of an exotic grass invasion. Cody Ender, Sonoma State University
- 1:40 Biology and control of Sesbania punicea seed banks by solarization. Robin Hunter, University of San Francisco
- 2:00 Santa Rosa Plateau Habitat Studies and Restoration Program: Integrating research and environmental education to restore native California grasslands. Justin Valliere, UC Riverside
- 2:20 Effects of altered precipitation and invasion on ecosystem processes in coastal sage scrub. Ellen Esch, UC San Diego

Session 5. Invasive Plant Management

1:20 - 2:40, Room 14B

Moderator: Patricia Gordon-Reedy, Conservation Biology Institute

- 1:20 Finding weeds while avoiding bombs: Controlling invasive species on Fort Ord National Monument. Sue Hubbard, Bureau of Land Management
- 1:40 Barbed goatgrass (Aegilops triuncialis) eradication on Naval Weapons Station Seal Beach, Detachment Fallbrook; adaptive management for invasive plant eradication. Dawn Lawson, SPAWARSYSCEN Pacific
- 2:00 Barb goatgrass strategies and results for the 2014/15 treatment season. Pamela Beitz, East Bay Regional Parks District.
- 2:20 Brachypodium distachyon: An adaptive approach to controlling an invasive species to benefit endemic species and sensitive habitats in San Diego, California. Patricia Gordon-Reedy, Conservation Biology Institute

2:40 – 3:40 Poster Session & Sponsor Exhibits. Room 15. (Posters listed page 8)

Session 6. How Habitat Conservation Planning Can Support Strong Landscape-Level Invasive Plant Management in the Future

3:40 - 5:00, Room 14

Panelists:

- Trish Smith, The Nature Conservancy
- Paul Fromer, San Diego Management & Monitoring Program
- Susan Wynn, US Fish & Wildlife Service

Cal-IPC 2015 Awards

5:00 - 5:15, Room 14

- Organization of the Year
- Golden Weed Wrench for Land Manager of the Year
- Jake Sigg Award for Vision and Dedicated Service

5:15 - 8:00 Social Hour, Raffle & Silent Auction. Room 16. (Appetizers and no-host bar.)

Friday, October 30

8:00 Registration. Mezzanine Level.

Session 7. Wildland Weeds of Alta and Baja California Deserts

9:00 - 10:30, Room 14A

Moderator: Travis Bean, UC Cooperative Extension/UC Riverside

- 9:00 Announcements
- 9:10 Current status on the study of exotic plant species in the State of Baja California, México. José Delgadillo- Rodríguez, Universidad Autónoma de Baja California
- 9:30 Some drivers of Sahara mustard invasion: Surficial geology and primary, secondary, and tertiary roads. Kristin Berry, US Geological Survey
- 9:50 Cryptic invasion and hybridization of Phragmites australis (common reed) in the Southwest. Adam Lambert, UC Santa Barbara
- 10:10 Nonnative grassland control and Otay tarplant (Deinandra conjugens) habitat restoration. Jessie Vinje, Conservation Biology Institute

Session 8. Building Conservation Corps into Invasive Plant Management Projects

9:00 - 10:30, Room 14B

Moderator: Dan Knapp, American Conservation Experience

- 9:00 Announcements
- 9:10 Doing more for less: Using Conservation Corps as an organizational capacity multiplier. *Kyle Gunderman, American Conservation Experience*
- 9:30 River Partners and the Conservation Corps a win-win partnership for job creation, invasive species removal, and habitat restoration.

 Andrew Rayburn, River Partners
- 9:50 The perfect partnership! Engage & train urban youth, garner additional funding, get the job done. Panel: Kyle Gunderman, ACE; Leah Healy, Urban Corps of San Diego Co.; Robert Skillman, Los Angeles Conservation Corps; Rhody Soria, California Conservation Corps

10:30 - 11:00 Break

11:00 - 12:00 Session 9. Discussion Groups. (See descriptions on page 10.)

- 1. **Invasive plant management Q&A.** Room 14A. Expert land manager panel
- 2. **Using non-native species in restoration.** Room 15. Elise Gornish, UC Cooperative Extension
- 3. WHIPPET prioritization tool demonstration. Room 14B. Gina Darin, CA Dept. of Water Resources
- 4. **Putting smartphones to work for invasive plant management.** Room 13. Travis Bean, UC Cooperative Extension/UC Riverside
- 5. **Working effectively with Conservation Corps.** Room 12. Dan Knapp, American Conservation Experience

12:00 - 1:30 Lunch (on your own)

Student Networking Lunch (provided), Room 13

Session 10. Strategies for Eradication Success 1:30 – 2:50. Room 14A

Moderator: John Knapp, The Nature Conservancy.

- 1:30 Eradication 101. John Knapp, The Nature Conservancy
- 1:50 Invasive species eradication projects implemented on islands in Baja California. Luciana Luna-Mendoza, Conservación de Islas
- 2:10 Prioritizing Miconia calvescens survey areas on Oʻahu. Julia Parish, Catalina Island Conservancy
- 2:30 Taking the leap: Starting watershed-wide Arundo donax eradication in Santa Barbara County. Katrina Olthof, Wildlands Conservation Science

Session 11. Invasive Plant Research (II)

1:30 - 2:50. Room 14B

- Moderator: Denise Knapp, Santa Barbara Botanic Garden
- 1:30 Root trait variation and its relevance to seedling growth across 18 native and invasive coastal sage scrub species exposed to drought. *Julie Larson*, Chapman University
- 1:50 Effects of plant invasions on invertebrate diversity and feeding guilds: A meta-analysis and review. Denise Knapp, Santa Barbara Botanic Garden
- 2:10 Current research at the European Biological Control Laboratory. Lincoln Smith, USDA Agricultural Research Service
- 2:30 Selective control of velvet grass in a California coastal prairie. Lewis Reed, *UC Davis Bodega*Marine Reserve

2:50 - 3:15 Break

Session 12. The Future of Invasive Plant Management. Room 14AB

3:15 Weed Alerts and CDFA Update. Dean Kelch, California Dept. of Food and Agriculture

3:35 – 5:00 Projecting the Future of Invasive Plant Management

Moderator: Virginia Matzek, Santa Clara University

Panelists:

The future of invasive species research. Jennifer Funk, Chapman University

The future of invasive plant management tools and techniques. Morgan Ball, Wildlands Conservation Science

The future of collaboration. Luciana Luna-Mendoza, Conservación de Islas

The future of invasive plant management goals and successes. John Randall, The Nature Conservancy

Panel discussion and audience questions

5:00 Adjourn. Field trip participants meet at front of plenary room for instructions.

Join us next year for the 25th annual Cal-IPC Symposium Nov. 2-5, 2016 at Tenaya Lodge near Yosemite!

Saturday, October 31

Field Trips:

Meet 8:00am at the Sofia Hotel, 150 W. Broadway

- 1. Habitat Restoration and Enhancement on the Cleveland National Forest (8:00am-4:30pm)
- 2. Non-native Grassland/Forbland Restoration Using Various Techniques on Rancho Jamul Ecological Reserve and the South Crest Preserve (8:00am-4:30pm)
- 3. UAV Demonstration (8:00am-1:00pm)

Posters

Integrated management project of mesquite in Oman. Saud Al Farsi, Ministry of Agriculture & Fisheries, Sultanate of Oman

Resisting re-establishment of invasive plant species in fuels-reduction areas. Joseph Algiers, Jr., National Park Service,

Susceptibility of invasive blackberry species to rust disease by Phragmidium violaceum in Oregon. William L. Bruckart, III, USDA-Agricultural Research Service

Eradicating weeds in Sierra meadows for climate change resilience. Elizabeth Brusati, Cal-IPC

A plant risk evaluation (PRE) tool for assessing the invasive potential of ornamental plants.

Christopher Crawford, Sustainable Conservation

Phenological and population responses of the invasive pioneer tree, *Bellucia pentamera* (Melastomataceae) to selective logging disturbance at Gunung Palung National Park, Indonesia. *Christopher Dillis, UC Davis*

The interaction of nitrogen and topography on the physiology of Stipa pulchra. Robert Fitch, California State Polytechnic University, Pomona

The effects of nitrogen deposition and plant invasion on litter decomposition. Eliza Hernández, California State Polytechnic University, Pomona

Multi-benefit weed control: the San Joaquin River Invasive Species Management and Jobs Creation Project. *Jeff Holt, River Partners*

Assessing spatio-temporal changes of invasive Algerian sea lavender (Limonium ramosissimum) in San Francisco Bay wetlands. Kerstin Kalchmayr, San Francisco State University

Rapid root responses of native and invasive California plants exposed to a post-drought precipitation pulse. Joanne Kim, Chapman University

Seedbank-mediated coexistence of invasive annual grasses and native annual forbs under a changing climate. *Marina LaForgia, UC Davis*

GrassApp, a tool that helps landowners facing grass invasion, Dorothy Y. Maguire, Boise State University and USDA-Agricultural Research Service

Livestock grazing and landscape diversity in California vernal pools. *Julia Michaels, UC Davis*

Chemically cleaning your boots: The use of disinfectants to reduce the dispersal of invasive weed seeds. Christopher McDonald, UC Cooperative Extension

Identifying emerging invasive plants for early eradication on the San Mateo County coast. Dana Morawitz, Cal-IPC

Do native and invasive species share similar carbon capture strategies? Monica Nguyen, Chapman University

Pre-release impact assessment of the leafmining moth (*Digitivalva delaireae*), a potential biological control agent for Cape-ivy (*Delairea* odorata). Angelica M. Reddy, USDA-Agricultural Research Service

Soil-mediated impacts of the invasive grass Ehrharta erecta on a forest understory community. Annika Rose-Person, UC Santa Cruz

Ecological and economic implications of invasive giant reed (Arundo donax) control for the Santa Clara River watershed. Marc Steele, UC Santa Barbara

Results of velvetgrass (Holcus lanatus) control in the Kern Canyon wilderness of Sequoia National Park. Rich Thiel, Sequoia and Kings Canyon National Parks

Successful habitat restoration of a native thistle following jubata grass control. Don Thomas. San Francisco Public Utilities Commission

Importance of effective public outreach for invasive vegetation removal projects in the Santa Ana River floodplain, Riverside County, CA. Melissa Tu. Atkins North America

Discussion Groups

Invasive plant management Q&A. Room 14A

Panel: Mike Kelly, Kelly & Assoc.; Chris McDonald, UC Cooperative Extension; Patrick McConnell, MCB Camp Pendleton; Bill Neill, Riparian Repairs,

Bring your questions on management of invasive plants to discuss with our panel of experts and fellow attendees. This is an open forum for discussing management strategies for particular plants or situations. Learn from other Symposium attendees' expertise.

2. Using non-native species in restoration. Room 15

Leader: Elise Gornish, UC Cooperative Extension

Come discuss opportunities and limitations of using non-native species for restoration across systems in California. We can explore cost-effective approaches and field techniques for deploying non-natives in vegetation management projects.

3. WHIPPET prioritization tool demonstration. Room 14B

Leaders: Gina Darin, CA Dept. of Water Resources and Elizabeth Brusati, Cal-IPC

WHIPPET stands for Weed Heuristics: Invasive Population Prioritization for Eradication Tool. WHIPPET is a prioritization tool designed to help land managers choose eradication projects. WHIPPET is available in two formats: as an online tool that does not require the

user to have a GIS program as well as an a desktop tool with greater flexibility. Try it for yourself and bring your questions to the discussion group. Both can be accessed from whippet.cal-ipc.org

4. Putting smartphones to work for invasive plant management. Room 13

Leader: Travis Bean, UC Cooperative Extension/UC Riverside

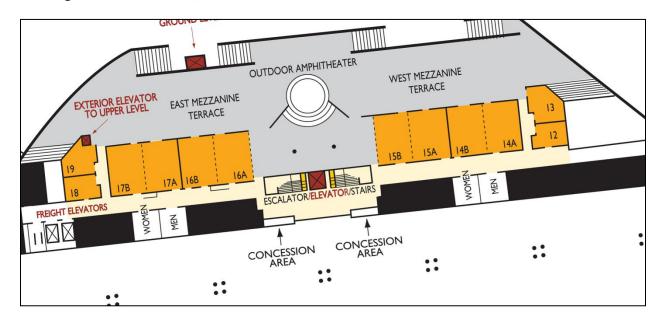
Share information on existing smartphone apps for identification, mapping, monitoring, and control of invasive plants, and explore existing knowledge gaps that might be filled with new app development. Our discussion may also go into an overview of the costs, effort, and time involved with app development.

5. Working effectively with Conservation Corps. Room 12

Leader: Dan Knapp, American Conservation Experience

Is the Conservation Corps right for your weed project? With programs operating from Oregon to Mexico and the Channel Islands to Nevada, conservation corps are active in just about every corner of the State of California. Discuss how to determine the role of the corps in your project. See how the corps can help provide funding for your project, and how you can help develop corpsmembers.

San Diego Convention Center, Mezzanine Level



Downtown San Diego

