



21st Annual Cal-IPC Symposium:

“Bay to Basin: Coordinating Response to Invasive Plants across California”

Doubletree Sonoma Wine Country, Rohnert Park, CA

Illustrations by Ryan Jones



WEDNESDAY, OCTOBER 10

Habitat Restoration Workdays

Gain hands-on field experience controlling invasive plants while working towards your Cal-IPC Trained Wildland Manager Certificate. We will discuss and demonstrate invasive plant control theory and techniques, including cut-stump treatment and site preparation for spraying blackberry, and then participants will practice these field techniques under expert guidance.

THURSDAY, OCTOBER 11

7:45 Registration and Breakfast (Ballroom Foyer)

8:45 Welcome and Opening Remarks

9:00 Session 1. Working Across Landscapes (Salon I-IV)

What stewardship programs are demonstrating our ability to operate at the landscape scale? Hear about regional goals and accomplishments of today’s most effective programs.

Moderator: *TBA*

9:00 The Southern California Wetlands Recovery Project.
Sam Schuchat, California State Coastal Conservancy

9:30 The California Landscape Conservation Cooperative.
Chrissy Howell, USDA Forest Service

10:00 The Bay Area Upland Habitat Goals Project.
Stuart Weiss, Creekside Center for Earth Observations

10:30-11:00 Break (Ballroom Foyer)

11:00 Session 2. Annual Member Meeting (Salon I-IV)

11:00 New Weed Alerts! *Dean Kelch, California Department of Food & Agriculture*

11:15 Cal-IPC Progress. *Doug Johnson, Executive Director, and John Knapp, Board President*

11:30 Keynote Address: “Landscape Management Practices in Late Holocene California: Implications for Contemporary Stewardship.” *Kent Lightfoot, UC Berkeley*

12:00-1:00 Lunch (provided) (Ballroom)

1:00 Session 3. Tools and Strategies for Effective Invasive Plant Management
(Salon I-III) Moderator: *Joel Trumbo*

1:00 Discussion Groups

1. New Weed Control Handbook. (Salon IV)
Come hear about this major new reference source, and get your management questions

- | | | |
|------|---|---|
| 1:00 | Operational performance of a Herbicide Ballistic Technology (HBT) helicopter platform targeting incipient populations of miconia (<i>Miconia calvescens</i>) in Hawaiian watersheds. <i>James Leary, University of Hawaii</i> | answered. <i>Joe DiTomaso, Guy Kyser, and John Roncorroni</i> |
| 1:20 | Use and effectiveness of landscape-scale surveys in developing weed management strategy. <i>Jutta Burger, Irvine Ranch Conservancy</i> | 2. Prevention Best Management Practices. (Sonoma/Santa Rosa)
Come see a new prevention video and discuss ways to implement prevention BMPs into your operations. <i>Garrett Dickman, Yosemite National Park</i> |
| 1:40 | Seed bank limitation, management and overcoming cycles of exotic plants species hierarchical shifts. <i>Sara Jo Dickens, UC Berkeley</i> | 3. Reducing Potential for Herbicide Impacts on Wildlife. (Bodega/Cotati)
Come hear the results of Cal-IPC's survey of herbicide use by land managers and share innovative strategies for reducing the potential for wildlife impacts. A sneak preview of our upcoming BMP manual. <i>Susan Kegley, Pesticide Research Institute</i> |
| 2:00 | The Butterfly Effect: Assessing herbicide impacts to invertebrates. <i>Joel Trumbo, California Dept. of Fish & Game</i> | |

2:20-3:40 Poster Session & Sponsor Exhibits (Vineyard and Chardonnay)

See poster list at end of schedule.

- | | | | |
|-------------|--|-------------|---|
| 3:40 | Session 4. Student Papers (Salon I-III)
Moderator: <i>Ramona Robison, CA State Parks</i> | 3:40 | Session 5. Managing Grassland Weeds (Salon IV)
Moderator: <i>Paul Aigner, UC Davis</i> |
| 3:40 | Development and validation of a more accurate weed risk assessment tool for evaluating the invasive potential of ornamental plants. <i>Christiana Conser, UC Davis</i> | 3:40 | Preserving serpentine grasslands: ten years of research and management to control barbed goatgrass (<i>Aegilops triuncialis</i>) at the McLaughlin Reserve. <i>Paul Aigner, UC Davis</i> |
| 4:00 | Effects of soil inocula on the growth responses of native annual forbs and the invasive annual grass, <i>Bromus diandrus</i> . <i>Bridget Hilbig, UC Riverside</i> | 4:00 | Controlling the spread of velvet grass (<i>Holcus lanatus</i>) in California coastal prairies: the benefits and constraints of five management techniques. <i>Michelle Cooper, UC Bodega Marine Reserve</i> |
| 4:20 | Divergence in acquisition and allocation patterns among native and introduced populations of an annual grass contribute to invasiveness. <i>Matt O'Neill, UC Riverside</i> | 4:20 | Pre-emergent control of medusahead on California annual rangelands with aminopyralid. <i>Guy Kyser, UC Davis</i> |
| | | 4:40 | Control of yellow starthistle and reintroduction of native perennial bunchgrasses. <i>Jennifer Tiehm, Pinnacles National Monument</i> |

5:00 Social Hour, Raffle, & Silent Auction (Vineyard and Chardonnay)

See Raffle & Auction flyer for a description of the amazing items that have been donated!

6:30 Banquet and Awards (Salon I-IV)

Jake Sigg Award, Golden Weed Wrench, Ryan Jones Catalyst Award, Invasive Plants Policy & Media Award, Wildland Weeds Program Award, Student Paper Winner, Photo Winner

FRIDAY, OCTOBER 12

7:00 Registration and Breakfast (Ballroom Foyer)

8:00 Session 6. Working Across Taxa (Salon I-IV).

Exploring the matrix of organisms and trophic levels in which invasive plants thrive.

Moderator: *Ingrid Parker, UC Santa Cruz*

8:00 Plant-microbe interactions and plant invasions.

Ingrid Parker, UC Santa Cruz

8:30 Native pollinators and invasive plants: Implications for agriculture and restoration.

Victoria Wojcik, Pollinator Partnership

9:00 Mutualisms between native and non-native species: Global trends and Californian case studies. *Clare Aslan, Arizona-Sonora Desert Museum*

9:30-10:00 Break (Ballroom Foyer)

10:00 Session 7. Pesticide Laws & Regulations (Salon IV)

2.0 hrs of Laws and Regs credit for certified pesticide applicators.

Moderator: *Ed Duarte, Alameda County Dept. of Agriculture*

10:00 Laws and regulations for pesticide Applicators. *Andrew Smith, Sonoma County Dept. of Agriculture*

10:30 Field safety for pesticide applicators. *Mark Heath, Shelterbelt Builders*

11:00 Calibration of herbicide applications for natural areas. *Guy Kyser, UC Davis*

10:00 Session 8. Invasive Plant Management and Programs, I (Salon I-III)

Moderator: *Andrea Williams, Marin Municipal Water District*

10:00 Use of spatially-referenced inventory data to inform management of *Lepidium latifolium* in tidal marshlands of the San Francisco Estuary. *Giselle Block, US Fish & Wildlife Service*

10:20 California's RCDs: Partnering to combat invasive plants statewide. *Karen Buhr, California Assoc. of Resource Conservation Districts*

10:40 Controlling harding grass (*Phalaris aquatica*) in a grassland setting: An interim report. *Stassia Samuels & Laura*

11:30 California's revised NPDES aquatic pesticide permit update: What's new?
Mike Blankinship, Blankinship & Assoc.

Julian, Redwood National & State Parks

11:00 Controlling invasive plants in Pacific Gas & Electric's hydroelectric watersheds.
Shannon Dinis, Pacific Gas & Electric Company

12:00-1:00 Lunch (provided)

Student Lunch (all students welcome!) Cal-IPC student chapter (Sonoma/Santa Rosa)

Updating GeoWeed – Robert Steers, GGNRA (Bodega/Cotati)

Tool Tailgate – parking lot

1:00 Session 9. Invasive Plant Management and Programs, II (Salon I-III)

Moderator: *TBD*

1:00 Coordinated regional strategy in the central Sierra using CalWeedMapper.
Wendy West, UC Cooperative Extension

1:20 Restoration, flood conveyance, and stormwater management: Emerging criteria for vegetation management in urban streams and flood-prone areas.
Mark Newhouser, Sonoma Ecology Center

1:40 Reliably reducing milk thistle (*Silybum marianum*) to zero density: A treatment model for annual weeds with plastic life cycles.
Tony Summers, Catalina Island Conservancy

2:00 European dune grass control: 15 years of adaptive management.
Tim Hyland, California State Parks

1:00 Discussion Groups

4. Wild Pollinators and Weeds. (Sonoma/Santa Rosa) Discuss the interactions between pollinators and invasive plants, including implications for restoration and agriculture. How can pollinator protection be integrated into your stewardship activities?
Vicki Wojcik, Pollinator Partnership, and Peter Beesley, Pacific Gas & Electric

5. A Coordinated Statewide Management Strategy for Stinkwort (*Dittrichia graveolens*). (Bodega/Cotati) Discuss the biology of stinkwort, its recent expansion, and the status of current management efforts. What should our statewide strategy be?
David Bakke, USDA Forest Service, and Rachel Brownsey, UC Davis

6. Seeking Funding in a Competitive Environment. (Salon IV) Discuss the range of evolving funding sources for projects and programs, and key components of strong grant proposals.
Jason Giessow, DENDRA, Inc.

2:20-2:40 Break

2:40 Session 10. Working Across Time (Salon I-IV)

In the coming decades, climate change will make “restoration” even more of a moving target. Talk of “novel ecosystems” and “assisted migration” is growing more common. A panel of practitioners and researchers will discuss the challenge of setting goals for research and stewardship.

Moderator: *Katie Suding, UC Berkeley*

Panelists:

Jutta Burger, Irvine Ranch Conservancy
Sandra DeSimone, Audubon Starr Ranch Sanctuary
Karen Holl, UC Santa Cruz
Rob Klinger, USGS Western Ecological Research Center
John Knapp, Native Range, Inc.
Lisa Micheli, Pepperwood Preserve

4:00 Adjourn

Field trip participants meet at front of ballroom for information and carpool organization.

POSTERS

Assessing multiple treatment methods to control *Festuca arundinacea* using prescribed burning, herbicide, brushcutting and hydro-mechanical obliteration (H_M_O).

Maria Alvarez, Golden Gate National Recreation Area

Invasive aquatic weeds: implications for mosquito and vector management activities.

Charles E. Blair, Mosquito & Vector Management Dist. of Santa Barbara Co.

Slope instability increased by *Cryptomaria japonica* in Sichuan earthquake zone.

Carla Bossard, St. Mary's College of California

Riparian habitat restoration as part of *Arundo donax* removal in the Russian River Watershed.

Kevin Cullinen, Sotoyome Resource Conservation District

The California firewood task force: A multi-agency response to forest health threats posed by movement of firewood.

Susan Frankel, US Forest Service

Searching for a silver bullet: Reducing the invasive Sahara mustard while preserving native wildflowers.

Chris McDonald, UC Cooperative Extension, Riverside

Setting regional strategies for invasive plant management using CalWeedMapper.

Dana Morawitz, Cal-IPC

Is mastication plus prescribed burning an effective control method for multi-acre medusahead (*Elymus caput-medusae*) infestations?

Courtney Rowe, Plumas National Forest

Is imazapyr an effective alternative to glyphosate for the control of jubatagrass?

Don Thomas, San Francisco Public Utilities Commission

Differential terrestrial pulmonate gastropod species composition inside and outside eucalyptus forests.

Michael Walgren, California Department of Parks & Recreation

Preventing the introduction and spread of invasive weeds: Engaging the construction, aggregate, and utility industries and land managers.

Wendy West, UC Cooperative Extension

SATURDAY, OCTOBER 13

Field trips



1. Mount Tamalpais: From Broomy Bottom to Tall Fescue Top

Full Day: 8:00 am – 4:00 pm. Carpool. Lunch provided. Includes 1-mile, uphill hike (we may be able to shuttle 4-10 people depending on road conditions).

Leaders: *Andrea Williams and Janet Klein, Marin Municipal Water District (MMWD)*

The distinctive profile of Mt. Tam is a Bay Area icon on the north side of the Golden Gate. Our trip begins at Phoenix Lake with a tour of the diverse ways MMWD has tried to manage broom over the past decade, and current efforts without conventional herbicides. Along the tour we will visit older restoration sites that have been replanted, current volunteer sites, a fuel break management site, as a recent grassland/oak woodland restoration following a pipeline replacement, and a periwinkle removal site. We will reconvene at the top of the mountain at Rock Spring for lunch, then hike to Potrero Meadow, discussing yellow starthistle and Douglas-fir removal work along the way. At the meadow, we will discuss how the native perennial grassland, including endemic Mt. Tamalpais thistle, is being threatened by a spreading infestation of tall fescue, velvet grass, and pennyroyal.

2. Blue Ridge-Berryessa Natural Area

Full Day: 8:00 am – 4:00 pm. Lunch provided. Carpool.

Leaders: *TBA*

Venture deep into the wilds of northern Napa to restoration sites and learn about the effort to create the Berryessa Snow Mountain National Conservation Area. Detailed description coming!

3. Wild Pollinators, Weeds and Permaculture

Half-Day: 8:00 am – 1:00 pm. Carpool.

Leaders: *TBA*

Sonoma is a world hotspot of sustainable agricultural, where new innovative practices are born. Visit Singing Frogs Farm in Sebastopol to hear from farmer Paul Kaiser about their native hedgerows and the intersections between wild pollinators, invasive plants, and sustainable agriculture. Detailed description coming!

4. Sonoma Restoration Hotspots

Half-Day: 8:00 am – 1:00 pm. Carpool.

Leaders: *TBA*

Discover Sonoma's coastal conservation hot spots including the recently acquired Jenner Headlands and Willow Creek State Park's invasive plant projects and how they relate to other conservation efforts. Detailed description coming!