California Invasive Plant Council 2010 Symposium
"Weeds and Wildlife: Impacts and Interactions"
October 14-16, 2010, Crowne Plaza Ventura Beach, Ventura, CA


Giant reed (*Arundo donax*) by Ryan Jones

~ THURSDAY, OCTOBER 14 ~
Please see abstracts for the complete list of authors on each presentation.
Top of the Harbor and Bayview are on the top floor; all other rooms are on the 1st floor.

7:30 REGISTRATION *(lobby)* & BREAKFAST *(Top of the Harbor)*

TRENDS IN EARLY DETECTION MAPPING *(invited session, Top of the Harbor)* Moderator: Edie Allen, UC Riverside

9:00 There's an app for that: Tracking weeds with mobile technology – *Christy Brigham, Santa Monica Mountains National Recreation Area.*

9:30 BAEDN, LAEDN, MAEDN, SAEDN, California EDN? Can we build a coordinated network of early detection networks to protect California from new invasions? – *Dan Gluesenkamp, Audubon Canyon Ranch*

10:00 Cal-IPC's statewide weed mapping & modeling projects – *Dana Morawitz, Cal-IPC*

10:30 BREAK

ANNUAL MEMBERSHIP MEETING *(Top of the Harbor)*

11:00 Weed Alerts – *Joseph DiTomaso, UC Davis*

11:15 Cal-IPC's Achievements 2009-10 – *Exec. Dir. Doug Johnson and Board Pres. Jason Giessow*

11:30 Keynote Address – Weeds and wildlife, impacts and interactions: A case study from Santa Cruz Island, California - *Scott Morrison, The Nature Conservancy*

12:00 LUNCH (provided - *Top of the Harbor)*

DPR LAWS & REGULATIONS *(invited session, San Miguel A)* Moderator: David Chang, Santa Barbara, Ag. Commissioner's Office

1:00 Risk management and liability insurance in habitat restoration and weed control – *Jeanette Heinrichs, Van Beurden Insurance*

1:30 Wildlife protection during habitat restoration and weed control – *Natasha Lohmus, California Dept. of Fish and Game*

1:50 The inspection process: What does the Agricultural Commissioner look for? – *Rudy Martel, Ventura Co. Agricultural Commissioner's Office*

2:10 Rules to follow for the use of aquatic pesticides. *Mike Blankinship, Blankinship & Assoc.*

2:30 Pesticide Safety "Jeopardy!" – *The Cal-IPC Players*

STUDENT PAPER CONTEST *(San Miguel B)* Moderator: Katherine Suding, UC Berkeley

1:00 Herbicide treatment of an invaded grassland following a prescribed fire –*Michael D. Bell, UC Riverside*

1:20 Resident community species diversity and invader genetic diversity do not affect the establishment of an annual exotic grass – *Heather McGray, UC Irvine*

1:40 The effects of climate change on the growth of barbed goatgrass (*Aegilops triuncialis*) in serpentine grasslands – *Elise Morrison, UC Davis*

2:00 Ecological Correlates of fountain grass (*Pennisetum setaceum*) in California coastal sage scrub – *Lynn Sweet, UC Riverside*

2:20 Origins of invasive French broom – *Annabelle Kleist, UC Davis*

2:40 Exotic plant invasion interrupts chaparral ecosystem resistance, resilience and succession – *Sara Jo Dickens, UC Riverside*

3:00 POSTERS & SPONSOR EXHIBITS *(Bayview & Top of the Harbor)*

Posters listed on page 5.

MANAGING INVASIVE PLANTS *(San Miguel)* Moderator: Ann Dorsey, Santa Monica Mtns Nat'l Rec Area

4:00 DISCUSSION GROUP

4:00 Strategic planning for control of *Arundo donax* and restoration of riparian vegetation in semi-arid landscapes: A case study from the lower Santa Clara River, CA – *Bruce Orr, Stillwater Sciences*

4:20 *Euphorbia terracina*: Why worry? – *Ann Dorsey, Santa Monica Mtns Nat'l Rec Area*

4:40 Testing efficacy of control methods of the invasive shrub *Cytisus scoparius* in forest habitat of the Pacific Northwest – *Karen A. Haubensak, Northern Arizona University*

5:00 Solar tents demonstrated to be effective in several California climatic areas for inactivating plant propagative material – *James J. Stapleton, UC Kearney Agricultural Center*

First floor breakout rooms. See flyer in your packet for descriptions and rooms.

1. Mobile technologies for weed management – *Christy Brigham, NPS; Dan Gluesenkamp, BAEDN; Eric Yuen, UCLA*
2. A management decision tool for perennial pepperweed – *Christine Whitcraft, CSU Long Beach, and Bill Winans, San Diego*
3. "Weed-free" materials programs –*Martin Hutten, Yosemite NP*
4. Communicating your message – *Yvonne Menard, Channel Isl. NP*

5:20 SOCIAL HOUR, RAFFLE, AND SILENT AUCTION *(San Miguel)*

7:00 BANQUET *(included with registration, Top of the Harbor)*

8:00 AWARDS PRESENTATION & LIVE AUCTION *(Top of the Harbor)*

- Jake Sigg Award for Service and Vision
- Golden Weed Wrench (Land Manager of the Year)
- Wildland Weed Organization of the Year
- Ryan Jones Catalyst Award
- Policy and Media Award
- Student Contest
- Photo Contest

~ FRIDAY, OCTOBER 15 ~

Invited sessions on invasive plants and wildlife organized with the Western Section of The Wildlife Society.

7:00 REGISTRATION *(lobby)* & BREAKFAST *(Top of the Harbor)*

BALANCING MANAGEMENT FOR INVASIVE PLANTS & WILDLIFE *(invited session, Top of the Harbor)*
Moderator: Rhys Evans, Western Section of The Wildlife Society

8:00 How will tamarisk biocontrol affect wildlife? – *Tom Dudley, UC Santa Barbara*

8:30 Effects of Sahara mustard, *Brassica tournefortii*, on the biodiversity of a desert landscape – *Michelle Murphy, UC Riverside*

9:00 Impacts of California's invasive plant species on invertebrate fauna: A review – *Denise Knapp, UC Santa Barbara*

INVASIVE PLANT IMPACTS TO WILDLIFE *(San Miguel)*

8:00 Effects of an exotic herbaceous perennial, *Cynara cardunculus*, on small mammals and songbirds – *Sandra A. DeSimone, Audubon's Starr Ranch Sanctuary*

8:20 Controlling the invasive offspring of historic olive trees on Santa Cruz Island, Channel Islands National Park – *Paula Power, Channel Isl. NP*

8:40 Biological traits and and ecological dynamics of Uruguayan primrose-willow (*Ludwigia hexapetala*): Implications for management of invaded wetlands critical to fish and wildlife – *Brenda J. Grewell, USDA-ARS*

9:00 Simulating avian weed spread and control strategies: A simulation model of *Rhamnus alaternus* on Rangitoto Island, New Zealand – *David Moverley, Te Ngahere Native Forest Management*

9:30 BREAK

GRAZING, WEEDS, & WILDLIFE (*invited session, Top of the Harbor)* Moderator: Shea O'Keefe, USDA-NRCS

10:00 Targeted grazing for weed and wildlife

HABITAT RESTORATION *(San Miguel)* Moderator: Ingrid Hogle, San Francisco Estuary Invasive Spartina *Project*

management – *Morgan Doran, UC Cooperative Extension*

10:30 Species composition changes, habitat effects and the role of livestock grazing in improving recovery potential for Ohlone Tiger Beetle in Santa Cruz County – *Jon Gustafson, USDA NRCS*

11: 00 Influence of a large herbivore reintroduction on plant invasions and community composition in a California grassland – *Brent Johnson, Pinnacles Nat'l Monument*

10:00 Patch-level treatment monitoring: An Invasive Spartina Project end-game strategy – *Ingrid Hogle, San Francisco Estuary Invasive Spartina Project*

10:20 Pacific Gas and Electric Company's use of Safe Harbor agreements to enhance habitat for endangered species in the San Francisco Bay Area – *Mark F. Dedon, Pacific Gas and Electric Company*

10:40 Avoiding inadvertent introductions of the invasive Argentine ants during native plant restoration projects – *Jessica Wade Shors, TRA Environmental Sciences*

11:00 Post-fire recovery plan for Solstice Canyon in Malibu, CA – *Erin Avina, Santa Monica Mtns Nat'l Rec Area*

11:20 The Matilija Dam Ecosystem Restoration Project – *Craig Zaich, Natures Image, Inc.*

11:40 LUNCH (on your own)

Student lunch (free to students) – Anacapa Brewing Co., 472 E. Main Street
California Early Detection Network meeting – location TBD

MANAGING WEEDS & WILDLIFE ON THE CHANNEL ISLANDS *(invited session, Top of the Harbor)* Moderator: John Knapp, Native Range, Inc.

1:30 The Anacapa Challenge – 'Iceplant Free by 2016!' – *Sarah Chaney, Channel Isl. NP*

2:00 Scorpion Rock seabird habitat restoration: Native plant community restoration and weed control techniques to enhance nesting habitat for Cassin's aucklets (*Ptychoramphus aleuticus*)– *David Mazurkiewicz, Channel Isl. NP*

2:30 Herbicide treatment techniques of *Vinca major* growing with endangered *Galium buxifolium*, an island endemic – *Kathryn McEachern, USGS*

1:30 DISCUSSION GROUPS
First floor breakout rooms. See flyer in your packet for descriptions and rooms.

1. Designing restoration projects to meet invasive plant and wildlife goals – *Tom Dudley, UCSB*
2. Avoiding non-target effects to wildlife when using herbicides – *Susan Kegley, Pesticide Research Institute and Marc Lea, San Luis Obispo Co. Dept. of Agriculture*
3. Job skills for natural resource management: Tailoring your resume to a job announcement – *Cal-IPC Student Chapter*

3:00 BREAK

BRINGING IT ALL TOGETHER *(invited session, Top of the Harbor)* Moderator: Valerie Eviner, UC Davis

3:30 Title TBA – *Rob Klinger, US Geological Survey*

4:00 Understanding research on herbicide impacts: Toxicology resources for today's habitat restoration worker – *Susan Kegley, Pesticide Research Institute*

4:30 Hey, what are they doing over there? What we can learn from animal and pathogen prevention & control projects – *John Randall, The Nature Conservancy*

5:00 ADJOURN

~ SATURDAY, OCTOBER 16 ~ FIELD TRIPS

All participants meet at 8:00am in front of the Crowne Plaza.

SANTA CRUZ ISLAND – Choose from two options!

Leaders: Sarah Chaney (NPS), Dr. Coleen Cory (TNC), Dr. Rob Klinger (ex-TNC), John Knapp (NRI), Dr. Lyndal Laughrin (U.C. Field Station), Dr. James Leary (Hawaii- HBT), Dr. John Randall (TNC), and Peter Schuyler (ex-TNC).

Invasive plants: fennel and many others!

Details: One-day or two-day option (see below). Transportation and meals provided. Boat returns to dock approximately 5:30-6pm.

Santa Cruz Island is the largest and most biologically diverse of the eight California Channel Islands, renowned as "California's Galapagos". The Nature Conservancy (TNC) owns and manages 76% of the island and the National Park Service (NPS) owns and manages the remainder. The global significance of the island is underscored by its inclusion in:

- United Nations' Man and the Biosphere Channel Islands Biosphere Reserve,
- State of California Area of Special Biological Significance,
- University of California's Natural Reserve System,
- Channel Islands National Park, and
- Channel Islands National Marine Sanctuary.

The island is home to 12 single-island endemic species and 19 state and/or federally listed endangered, threatened, or species of special concern. Santa Cruz Island has a history of ecological disturbance resulting from the introduction of non-native ungulates and plants used for ranching and agriculture in the mid 1800s. TNC and NPS have worked cooperatively for nearly 30 years to change the trajectory of disturbance and impact towards one of recovery. In 2007, after nearly 200 years of disturbance, the island was declared free of non-native ungulates with the eradication of feral pigs. The island is recovering but this process is threatened by non-native invasive plants and Argentine ants. Island managers have implemented a multi-faceted habitat restoration and enhancement program to address these threats.

Both field trips will include the following topics:

- Feral ungulate removal and vegetation response
- Island-wide invasive plant survey and mapping
- Early detection and rapid response
- Endangered Island Fox management
- Varied outcomes of prescribed burns to control fennel
- Management plan development and implementation
- Aerial support for conservation projects
- Herbicide Ballistic Technology (paint-ball gun applications)

All attendees will travel to the island via Island Packers catamaran power boat, which will offer chances for whale watching. Attendees will hike approximately 2.5 miles along a relatively flat primary dirt road.

One-Day Field Trip (including overnight participants): A mixed driving and hiking tour of the Isthmus, eastern Central Valley, and Canada del Puerto Canyon, with lunch provided at the historic Main Ranch complex. Returns to dock approximately 6pm.

Overnight (Two-Day) Field Trip: Overnight attendees will tour with one-day attendees on Saturday, and then depart on an extensive driving tour during the remainder of Saturday and Sunday. Housing will be provided in co-ed bunk rooms at the U.C. Field Station. All meals will be provided; attendees will assist with cooking the evening meal and accommodation clean-up. Attendees will have the opportunity to see the southern and western portions of the island, with much more detailed discussion of multi-taxa eradications and management. Helicopter survey and applicator deployment will be demonstrated as well. Returns to dock approximately 6pm.

HABITAT RESTORATION: SOUTHERN SANTA BARBARA COUNTY

Leaders: Joddi Leipner (County of Santa Barbara), Karen Flagg (Growing Solutions), William Abbott (Land Trust for Santa Barbara County) Speaker TBD (Friends of the Ellwood Coast), Cris Sandoval (UCSB), Darlene Chirman (restoration consultant)

Invasive plants: tocalote, garland chrysanthemum, eucalyptus, tamarisk, myoporum, acacia, cape ivy, pampasgrass, smilograss, fountaingrass, onionweed, fennel, Italian thistle, and castor bean.

Details: 8:00 am - 4:00 pm. Transportation and lunch provided.

Tour three distinct restoration/conservation projects. This field trip begins with a visit to the Foothill Open Space (part of the County of Santa Barbara's award-wining Integrated Waste Management Program) where a closed county landfill is being restored with native plants to improve wildlife habitat, enhance trails and provide passive community open space. Growing Solutions' native plant nursery is also on-site. Then we will visit the Land Trust for Santa Barbara County's Coronado Butterfly Preserve and the neighboring City of

Goleta's Ellwood Main Monarch Grove, one of the largest monarch over-wintering sites in California, where we hope to see a few early arriving monarchs on their way to clustering sites in the eucalyptus there. The Land Trust has been working for ten years to manage weeds and enhance the property with native plant communities and as monarch butterfly habitat. Finally, we will visit the beautiful oceanfront Coal Oil Point Reserve. Restoration activities here are partly directed at protecting and increasing the population of the threatened snowy plover; plus restoring the slough margin with native plant communities to support birds and other wildlife.

SANTA CLARA RIVER WATERSHED TOUR

Leaders: Adam Lambert (UC Santa Barbara),Tom Dudley (UC Santa Barbara), Bruce Orr (Stillwater Sciences) , Sophie Parker (TNC), Sandy Hedrick (Friends of the Santa Clara River, Hedrick Ranch Natural Area), Santa Clara Estuary Natural Preserve

Invasive plants: giant reed, Mediterranean mustard, black mustard, tocalote, yellow star thistle, chrystalline iceplant, Russian thistle, fennel, tamarisk, smilograss, castor bean

Details: Half-day, 8:00 am – 12:45 pm, lunch not provided

This half-day field trip will take attendees to view research, restoration, and conservation projects throughout the Santa Clara River Watershed. The Santa Clara River is one of the few major river systems in the State which retains much of its natural hydrology and is home to 17 endangered species. We will visit three sites within the watershed that have been impacted to varying degrees by invasive plants and discuss restoration initiatives associated with each site. Our first stop will be at the Hedrick Ranch Natural Area, a 225 acre preserve along the Santa Clara River managed by Friends of the Santa Clara River. Volunteers are working to restore 45 acres of Arundo dominated riparian and wetland habitat and incorporate sustainable agriculture into the landscape. We will then visit the Hanson-Villanueva property, a 1,000-acre property owned by TNC, which has extensive riparian and upland mixed habitats, and is a target site for large-scale invasive species management and restoration, and endangered species protection. This is also the future facilities site of the University of California, Santa Clara River Research Station and Preserve, which focuses on watershed-wide issues of human interaction with riparian systems. Finally, we will visit the Santa Clara River estuary where tour leaders will discuss ongoing efforts to maintain and enhance habitat for native plants and wildlife.

~ POSTERS ~

Alphabetical by presenter. Please see abstracts for the complete list of authors on each poster.

STUDENT POSTER CONTEST

Contrasting effects of *Carpobrotus edulis* on arthropods in a coastal dune ecosystem - *Denise A. Knapp, UC Santa Barbara*

Using native shrubs to control re-establishment of giant reed (*Arundo donax*) - *Kai T. Palenscar, UC Riverside*

Effects of exotic mustard on native insect communities in California grassland - *Tadj K Schreck, UC Irvine*

CONTRIBUTED POSTERS

Control of barbed goatgrass in serpentine grasslands - *Paul A. Aigner UC Davis McLaughlin Reserve*

Effects of invasive *Limonium ramosissimum* on native salt marsh communities in a changing environment - *Autumn Cleave, San Francisco State University*

Eriogonum hybrid eradication program on Santa Cruz Island, California: Eliminating one island endemic to protect another - *Coleen Cory, The Nature Conservancy*

Use of non-native plants by island foxes: Conservation implications – *Brian Cypher, CSU Stanislaus*

Linking vegetation dynamics with physical processes to develop invasive plant control and riparian restoration strategies for a semi-arid river and its floodplain - *Zooey Diggory, Stillwater Sciences*

Preventing invasion through mineral materials inspections - *Martin Hutten, Yosemite National Park*

Trials of aminopyralid and a cut-and-dab method for Himalayan blackberry control - *Laura Jones, Yosemite National Park*

Herbicide control of velvet grass in Yosemite National Park - *Laura Jones, Yosemite National Park*

Adaptive integrated vegetation management of invasive *Spartina densiflora* in the San Francisco Estuary – *Drew Kerr, San Francisco Estuary Invasive Spartina Project*

Santa Clara River Research Station: Developing a preserve with a watershed focus – *Adam M. Lambert, UC Santa Barbara*

The spread and control of *Dittrichia graveolens* - *Meg Marriott, US Fish & Wildlife Service*

Avian response to *Arundo donax* invasion on the Lower Santa Clara River - *Devyn A. Orr, UC Santa Barbara*

Prioritizing invasive plant eradication in the San Francisco Bay Area - *Mike Perlmutter, Bay Area Early Detection Network*

Predicting the spread of invasive plants in the Sierra Nevada –*Elizabeth Brusati, Cal-IPC*

Successful tactics for controlling the invasive fennel (*Foeniculum vulgare*) on Santa Cruz Island, Channel Islands National Park – *Paula Power, Channel Isl. NP*

An evaluation of flooding risks associated with giant reed (*Arundo donax*) – *David F. Spencer, USDA ARS*

Developing time*temperature inactivation models for thermal death of black mustard (*Brassica nigra*) seeds - *James Stapleton, UC Kearney Agricultural Center*

Invasive pine tree impacts on coastal scrub vegetation in the Marin Headlands - *Robert Steers, National Park Service, Inventory and Monitoring Program*

Prescribed burning controls barb goatgrass (*Aegilops triuncialis* L.) in Central Valley rangeland for up to five years - *Sara Sweet, The Nature Conservancy*

Effects of the invasive species *Arundo donax* on bank stability in the Santa Clara River, Ventura, CA - *Jiana ten Brinke, UC Santa Barbara*

Can carbon addition be used to reverse the effects of atmospheric nitrogen deposition? - *Don Thomas, San Francisco Public Utilities Commission*

Mapping flammable invasive weeds in the South Shore area of Lake Tahoe - *Ian Turner, Tahoe Resource Conservation District*