



Cal EPPC News

***Protecting California's Natural Areas
from Wildland Weeds***

Vol. 11, No. 2, Summer 2003

Quarterly newsletter of the California Exotic Pest Plant Council



Symposium 2003! We are excited to be holding our annual meeting October 2-4 at the North Tahoe Conference Center in Kings Beach. The theme of this year's symposium is "Planning Weed Management for Ecosystem Recovery," and the Tahoe basin offers an superb setting for exploring the role of invasive plant control in the greater restoration context. Registration details are enclosed.

Tahoe!

[Photo of Rubicon Trail courtesy of Tahoe artist Lorraine DiMaggio, whose work can be found at Cabin Fever in Tahoe City.]

Inside:

The hunt for red Sesbania
Wildland weeds climb the Sierra
New Cal-EPPC weed list report
Pampas grass ad draws ire
Pathways to invasion



California Exotic Pest Plant Council

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A California 501(c)3 nonprofit organization

Our Mission

CalEPPC works to protect California's natural areas from wildland weeds through research, restoration, and education.

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Editor: Doug Johnson, dwjohnson@caleppc.org

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From the Director's Desk

Where are we headed?

Better yet, where do we *want* to be headed? The California wildland weed community has spent significant energy exploring this question recently in an effort to create a vision and a blueprint for future work.

In January, The Nature Conservancy held a workshop to discuss establishing a California Invasive Species Council to better coordinate state government programs. Then on April 2, one hundred invasive plant experts gathered in Sacramento for a Weed Summit, at which attendees fleshed out details of a draft state weed plan modeled after the national management plan and Montana's action plan. The draft will receive broad review before being finalized and distributed for endorsements.

Finally, CalEPPC's Board of Directors met May 3, to identify and rank thirty-five projects that will move wildland weed work forward in California. These various efforts produced a high degree of agreement on certain issues.

For instance, we need improved economic analyses that convincingly demonstrate the ecological and societal impact of invasive plants. Such analyses will get the attention of elected officials and the public; without it, our task is much more difficult.

We need leadership and authority, both in government agencies and in the private sector, backed up by science-based invasive plant lists. We need to secure steady funding for local management efforts through WMAs. We need to partner with nurseries and gardeners. We need to support research evaluating potential invasiveness of various horticultural cultivars. We need to streamline regulatory requirements.

While we envision such expansions, the weed programs at CDFA and UC Cooperative Extension are taking large cuts (30-50%) to staff and operating expenses. The cuts to CDFA programs target early detection and biocontrols, two priorities identified in the upcoming state plan. At times it feels like one step forward and two steps back.

In the long term, these programmatic losses may be but temporary setbacks. The current burst of planning efforts has harnessed extraordinary knowledge and concern. If we can build on this momentum, we will be laying a solid foundation for tomorrow's effective programs.



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Avoid suspicious hitchhikers

Wildland Weed NewsNewsNewsNewsNews

Celebrate **California Invasive Weed Awareness Week**, July 20-26. Time to write a newspaper op-ed, invite your County Supervisors to tour a restoration site, set up an exhibit in libraries... use your imagination!

A multi-year project conducted at Fort Hunter-Liggett in Monterey County won the **National Invasive Weed Awareness Coalition's 2003 Award** for exceptional on-the-ground efforts and success in the battle against invasive plants in the United States. The project is testing integrated approaches combining spring and summer herbicide applications, prescribed burning, and biological control agents. Project collaborators include the US Army, UC Davis, The California Department of Food & Agriculture, the Monterey County Department of Agriculture, and Dow AgroSciences.

Adjuvants are often of more ecological concern than the active ingredients in herbicides used for wildland weed control. The Nature Conservancy's Wildland Invasive Species Team has added a new chapter to their Weed Control Methods Handbook to examine adjuvants.
<tncweeds.ucdavis.edu/handbook.html>

S 144, the **Noxious Weed Control Act of 2003**, proposes \$100 million in funding for local WMAs. The bill passed the US

When people hear the word "ivy," they say, "Ah," then sign the petition.

Senate unanimously on March 4. The companion bill, HR 119, has been referred to the Natural Resources Committee in the House, chaired by California Rep. Richard Pombo (R-Stockton). The committee has yet to move on the bill, which it needs to do in order for the House to vote on it. You can fax letters to Rep. Pombo at (202) 225-0861.

Researchers studying **roadside infestations** found that cover of non-native plants was more than 50% greater in interior sites



Walking the halls of Congress—the California delegation to NIWAW4. This February, Wendy West (Eldorado County Agricultural Commissioner's office), Nelroy Jackson (National Invasive Species Advisory Committee), and Jake Sigg (California Native Plant Society), together with CalEPPC Director Doug Johnson, attended the fourth National Invasive Weeds Awareness Week in Washington, DC. Together with invasive plant management advocates from around the country, the delegation attended presentations by top officials in the Departments of Interior and Agriculture. They also met with legislative aides in the offices of a dozen key California representatives to Congress.

adjacent to paved roads than in those adjacent to 4-wheel-drive tracks. (*Conservation Biology*, April 2003)

Hawaii's Governor Lingle signed legislation last month establishing the **Hawaii Invasive Species Council** (HISC). The council is intended to direct local, state, federal, and international efforts to control, eradicate, and prevent the introduction of harmful exotic species to the islands.

The citizens of Mercer Island, east of Seattle, need 2,500 more signatures to put an initiative on the November ballot which would, if approved, create a 10-year levy providing \$1.25 million tax dollars for the control and eradication of **English Ivy**. According to Ivy committee member Virginia Arnon, when people

hear the word "ivy," they say, "Ah," then sign the petition.

Ducks Unlimited, the **Mule Deer Foundation**, and the **Rocky Mountain Elk Foundation** all signed on in support of Congressman Mike Thompson's federal funding request for biocontrols development for brooms and gorse. These groups have made invasive plants a priority because they degrade wildlife habitat.

..... continued page 6

Thanks to **CalEPPC Project Intern Bree Richardson** for her help with this issue of *CalEPPC News*. If you are interested in volunteering at the CalEPPC office in Berkeley, please contact Doug Johnson at <dwjohanson@caleppc.org>

The Hunt for Red Sesbania

Biology, Spread, and Prospects for Control

By John C. Hunter and Gerrit A. J. Platenkamp
Jones & Stokes, Sacramento, CA

In the last few years, red sesbania has been eliciting increasingly strong concern in the Sacramento area and along the San Joaquin River. This article provides a primer on a relatively new infestation in California.

Red sesbania (*Sesbania punicea*), aka scarlet wisteria, is a small tree in the pea family (Fabaceae). It has a graceful form, striking scarlet flowers, and winged pods. It also has proven itself a successful invader.

This South American native rapidly became a problematic invader in South Africa during the 1970s, has naturalized in the Southeast from Florida to Texas, and is now being reported from several riparian areas in California's Central Valley. Red sesbania's reproductive biology and recent spread in California show that this plant could become a major threat to ecosystem integrity and flood conveyance along many streams in California. Comprehensive control measures are urgently needed to avert the potentially catastrophic situation that developed in similar environments in South Africa.

BIOLOGY

Red sesbania is well suited to life in the riparian zone. Its pods, which have spongy inner tissues (the mesocarp), float for up to ten days, even after splitting open (Hunter, unpublished data). These pods fall from the branches throughout winter and spring. The seeds, like those of many legumes, germinate when abraded. When comparing different germination treatments, we found that 37% of seed germinated after shaking in a jar with small pebbles, versus only 8%

germination following soaking, stratification, or no treatment (difference statistically significant at $P < 0.01$). Furthermore, seeds that do not germinate can persist in a seed bank until abraded in subsequent years. At one site along the Lower American River, we sieved seed of previous years from the upper 3 cm of soil. On average, there were over 1,000 seed per m^2 , and 16% germinated after abrasion. This combination of dispersal and germination mechanisms should be effective at placing red sesbania seedlings in sites disturbed after flood flows along our rivers. Furthermore, because of its large seed (typically > 5 mm long), it is able to establish under a wider range of sites and conditions than Fremont cottonwood and willows, which effectively require a moist exposed substrate with little competing vegetation.

Red sesbania grows and reaches maturity rapidly. Within several days of germinating, the seed gives rise to a large seedling (5-10 cm long). This seedling elongates and produces leaves throughout the growing season. Seedlings that we planted grew more than 1 m during their first year. During the first year or two, plants typically grow as a single unbranched shoot. Later, they produce widely diverging lateral shoots and develop a broad crown that reaches 4-5 m in height. Plants typically begin reproducing in their second year. Reproductive individuals produce 100-1,000 pods each year, with 5-10 seeds per pod. Frequently, red sesbania produces dense thickets, where reproductive output can exceed 500 seeds per m^2 each year.

In addition to its ability to disperse widely, germinate in response to disturbance, and rapidly reach reproductive

maturity, red sesbania has the ability to dominate sites and may retain that dominance for several generations. The species forms dense thickets with 100% cover over areas up to several thousand m^2 , and can cover over 50% of areas greater than a hectare (Eva Butler & Associates 2000). It also has some degree of shade tolerance, and we have observed red sesbania saplings growing beneath a red sesbania canopy. Because it has the potential to form dormant seed banks and to regenerate in its own shade, red sesbania may be able to maintain its dominance on a site through recurrent recruitment.

SPREAD

This problematic invader is rapidly spreading along Central Valley rivers. Though introduced to California as an ornamental prior to 1930 (Bailey 1930), red sesbania was not documented in riparian vegetation until 1987, and was not included in a regional flora until 1994 (Oswald and Ahart 1994). Since 2000, it has been reported at multiple sites and is already abundant along the Lower American River and the San Joaquin River near Fresno (Ondricek-Fallscheer *et al.* 2003).

For approximately 11 miles of the Lower American River in Sacramento, red sesbania occurs along channel banks, bars, and islands. In 1999, it was mapped on over 137 acres, with over 25% cover on 13 acres (Eva Butler & Associates 2000). These sites are low in the riparian zone and inundated by typical spring floods (Jones & Stokes 2002). Along the American River the primary vegetation types with red sesbania are herbaceous wetland and riparian scrub dominated by

narrow-leaved willow.

It also occupies similar sites along 15 miles of the San Joaquin River near Fresno. There it grows on 15 acres along the channel and adjacent gravel pits (Moise 2002). Most of this vegetation has been mapped as open willow scrub dominated by narrow-leaved willow. However, red sesbania also occurs in herbaceous and mixed riparian vegetation and on sparsely vegetated sites.

Colonization of channel banks, sand and gravel bars, and instream islands with dense red sesbania thickets may result in a substantial increase in hydraulic roughness. Dense shrub thickets have approximately twice the roughness of open banks, herbaceous cover, and gravel bars (Marsh et al. 2001, Chin 2000). The consequences of this roughness for flood stage depends on site-specific attributes, but can be considerable. Based on our estimate of potential changes in composite (overall) roughness, red sesbania thickets could increase the stage of a 10-year flood event by more than a foot at representative sites along the San Joaquin River near Fresno.

Unless controlled, red sesbania probably will spread further along the American and San Joaquin Rivers, and along other Central Valley rivers. It already has been recorded along the Feather and Sacramento rivers, and at several locations in the Sacramento-San Joaquin Delta (Ondricek-Fallsheer et al. 2003). It is likely to become abundant throughout the region's riparian zones, displacing native plants, altering wildlife habitats, and increasing hydraulic roughness (and thus reducing flood conveyance).

CONTROL

To control red sesbania, biological, chemical, and mechanical treatments have all been used successfully. In South Africa, a combination of three insects from Argentina has provided effective biological control of red sesbania (Hoffmann and Moran 1998). The sesbania flower beetle (*Trichapion latrivetre*) can reduce pod production by up to 98%, though its effectiveness depends on climate. The sesbania seed weevil (*Rhysomatus marginatus*) reduces



The large winged pods of red sesbania can float for miles before lodging and starting a new infestation. Photo by John Hunter.

seed production by up to 84%. The third species, sesbania stem borer (*Neodiplogrammus quadrivittatus*), damages and kills trees, and together with the other species provides almost complete control. Successful chemical treatments include repeated foliar applications of glyphosate to kill small plants (up to 3 feet high), and brushing the cut stumps of larger plants with triclopyr (Erasmus et al. 1996). Mechanical treatments include hand pulling of first year plants and using a weed wrench to remove larger individuals. Fortunately, red sesbania does not produce root sprouts when the shoot is damaged, which increases the effectiveness of mechanical treatment.

Red sesbania's invasion of the Central Valley is at a critical stage. Unless effective control efforts are initiated immediately, control costs will rise

exponentially and within several years may become prohibitive. Some efforts are underway along the American and San Joaquin Rivers, but additional efforts are needed to eliminate newly established populations beyond these major infestations, so that these nascent populations do not themselves expand over large areas. If substantial control efforts are initiated now, this species may be successfully controlled, and its impacts on our riparian ecosystems avoided. However, if substantial control efforts are not initiated now, this species will likely displace and preempt native vegetation from thousands of riparian sites, as have Himalayan blackberry, perennial pepperweed, and others.

MAPPING

Robin Fallscheer with the California Department of Fish and Game is main-

On April 22, USFS Chief Dale Bosworth gave an **Earthday speech** at the Commonwealth Club in San Francisco. Invasive species were one of his “big four” issues affecting the health of our forests and grasslands.

Invasive species were deemed the greatest ecological and economic threat to the Great Lakes region during the **Aquatic Invasive Species Summit**, held in Chicago this spring. Scientists, engineers, and invasive species experts gathered to discuss possible solutions to the “revolving door” for aquatic invasives that exists between the Great Lakes and the Mississippi River drainage basins.

“Alien Invasion,” an article by Yvonne Baskin in the May 2003 issue of **Country Living**, identified some of the worst ornamental invaders and suggested ways that readers could help prevent the spread of this ‘green asphalt.’

Scientists at the USGS Forest and Rangeland Ecosystem Science Center in Corvallis, Oregon documented **invasive species helping each other**. Non-native fish are eating native dragonfly nymphs that would normally eat non-native bullfrog larvae, essentially promoting the bullfrog invasion. On the flip side, efforts to

Sweet relief – from predation pressure

[From *Scientific American*, April 2003, “Data Points: Invaded Nation”]

Life in a new country can be a lot easier. Two studies, which examined 473 European plant species and 26 animal species that have invaded the U.S., confirm long-standing thinking that such species tend to have fewer enemies and infections in their new digs. They are therefore better able to survive and to crowd out indigenous flora and fauna. Invasive species are considered the second biggest threat to biodiversity, after habitat destruction.

Percent drop in fungal infections in European plants after invading U.S.: **84**

Percent drop in viral infections: **24**

Percent drop in all diseases: **77**

Average number of parasites on a species in its indigenous range: **16**

Number of parasites that accompany an invader to its new range: **3**

Number the invader subsequently picks up: **4**

[Data source: *Nature*, 6 February 2003]

control the fish may also control the bullfrogs. The study appears in the April issue of *Ecology Letters*, on-line at <www.blackwellpublishing.com/journals/el>.

Scientists at the Cooperative Research Centre for Australian Weed Management (Weeds CRC) and the Department for Environment and Heritage in South

Australia have developed **DNA fingerprinting** for the 14 species of European blackberry that invade 8.8 million hectares in Australia. Accurate identification of plants will support more efficient control. <kathy.evans@dpiwe.tas.gov.au>

red *Sesbania*...

...continued from previous page

taining a database of occurrences of red sesbania in California. You can help track the spread of red sesbania in California by reporting new occurrences to Robin at <rfallscheer@delta.dfg.ca.gov>.

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Lake Tahoe Basin Weed Coordinating Group: Fighting Weeds in the Tahoe Basin

By Sue Donaldson, University of Nevada Cooperative Extension, LTBWCC Chair

Lake Tahoe is frequently featured in news reports lamenting the loss of the lake's famed water clarity. What you'll rarely read, however, is that the basin is being rapidly infested by a number of invasive weeds.

At one time, for instance, we thought perennial pepperweed (*Lepidium latifolium*) infestations were limited to riparian habitats at lower elevation. Not true! In 1998, after locating a plant growing on a roadside in Incline Village, a public campaign to identify other populations yielded 35 verified infestations, with the largest spanning about ¼ acre. As of the summer of 2003, 93 sites have been documented, and the majority have been treated (with herbicides after agencies and regulators agreed that the danger posed by this weed justified chemical applications despite concerns raised by Lahontan Regional Water Quality Control Board [LRWQCB]).

Last year, in recognition of the growing threat posed by invasive weeds within the basin, various interests banded

together to form the Lake Tahoe Basin Weed Coordinating Group. The group is establishing a cooperative effort to identify, map, and control invasive weeds. Representation is broad, from agencies to land managers to residents (listed below). The group is also dedicated to raising levels of awareness about the problem, and working together to ensure weed management is seamless and effective.

At the initial meeting held in January 2002, participants determined the status of weeds within the basin. Fifteen weed species were prioritized for detection and management (see table). We have since added hoary cress (*Cardaria draba*) to our list.

By the end of 2002, after our first season of organized mapping, we had documented infestations of 13 of the 15 priority weeds. Eurasian watermilfoil was not mapped by the group, although infestations are known to occur at most marinas ringing the lake. While we knew the potential existed for invasion by all the priority species, we found significant infestations of spotted knapweed and the toadflaxes, and the first known incidence of yellow starthistle in the basin.

Efforts this summer will focus on continuing our mapping efforts, and working with LRWQCB to achieve consensus on the appropriate use of herbicides. Our major push will be an attempt to find and eradicate spotted knapweed.

You'll have an opportunity to view some of the weed control projects this October at the 2003 Symposium,



© Lorraine DiMaggio, 2003

which is being held in Kings Beach.

Below are the groups that will sign the Coordinating Committee MOU (the Committee also has resident volunteers from Incline Village and the west shore):

El Dorado County Dept. of Agriculture; Placer County Dept. of Agriculture; Washoe County, NV Public Works Dept; Douglas County, NV Parks & Recreation Weed District; U.S. Forest Service; Natural Resource Conservation Service; Tahoe Regional Planning Agency; Lahontan Regional Water Quality Control Board; CA Tahoe Conservancy; NV State Parks; CA Dept. of Food and Agriculture; NV Department of Agriculture; CA Dept. of Parks and Recreation; NV Division of Forestry; CA Department of Forestry and Fire Protection; NV Department of Transportation; CalTrans; City of South Lake Tahoe; U.C. Cooperative Extension; University of Nevada Cooperative Extension; Sierra Pacific Power Co.

Email Sue at <donaldsons@unce.unr.edu>

Priority weeds in Tahoe basin

Species	No. Infestations
Bull thistle (<i>Cirsium vulgare</i>)	154
Perennial pepperweed (<i>Lepidium latifolium</i>)	105
Spotted knapweed (<i>Centaurea maculosa</i>)	30
Dalmatian toadflax (<i>Linaria dalmatica</i>)	30
Klamathweed (<i>Hypericum perforatum</i>)	22
Diffuse knapweed (<i>Centaurea diffusa</i>)	18
Oxeye daisy (<i>Chrysanthemum leucanthemum</i>)	10
Scotch broom (<i>Cytisus scoparius</i>)	8
Yellow toadflax (<i>Linaria vulgaris</i>)	8
Russian knapweed (<i>Centaurea repens</i>)	3
Canada thistle (<i>Cirsium arvense</i>)	2
Yellow starthistle (<i>Centaurea solstitialis</i>)	2
Musk thistle (<i>Carduus nutans</i>)	1
Eurasian watermilfoil (<i>Myriophyllum spicatum</i>)	many
Scotch thistle (<i>Onopordum acanthium</i>)	?

Pathways to invasion

We apologize, Pathways to invasion is not available in PDF format.

[One of three diagrams from a “pathways team” comprising representatives from the Invasive Species Advisory Council, the National Invasive Species Council, and federal agencies.]

Letters

In reply to your general query regarding invasive Californian plants—these are examples of three that are a problem in specific New Zealand environments:

- Tree lupin (*Lupinus arboreus*) is a problem in braided river beds, roadsides and on sand-dunes/beach foreshores.
- Californian poppy (*Eschscholzia californica*) is a problem in braided riverbeds and roadsides.
- Monterey pine (*Pinus radiata*) is a problem in our high country tussocklands, sand dunes, scree slopes and disturbed and open forest.

Anna Paltridge, Weed Surveillance Officer,
Canterbury Conservancy, Christchurch

I just skimmed thru the “Weed warning from downunder” article in the Spring 2003 *CalEPPC News*, and was interested to see that *Psoralea pinnata* was highlighted as a potential pest in California. I had this plant growing for several years in my yard in Berkeley, and then removed it in part because the numerous seedlings that volunteered indicated to me a serious pest plant potential. Same story, by the way, for *Dorycnium hirsutum*. It made me wonder if CalEPPC could serve as a clearinghouse for similar yellow-flag observations of horticultural novelties, before they escape into the wild...

Keep up the good work!

Barbara Ertter, Research Botanist and
Collections Manager, Jepson Herbarium,
UC Berkeley

Home Depot follows suit, dumps pampas grass

Chris Hopkins, regional nursery buyer for Home Depot, has removed pampas grass from the list of items that California Home Depot stores can buy for resale. After current stock runs out, there should be no more pampas grass for sale at Home Depot.

CalEPPC members have also reported pampas grass seed (from “Plantation Products”) for sale. Both Chris and Linda Prendergast of WalMart have said they will get rid of those, too. Thanks to all who are helping your local retailers weed out the invasives on their shelves.

To write a thank-you note to Chris Hopkins, mail to 3800 W. Chapman St., Orange, CA, 92868. Thanks for your notes to Linda Prendergast. In a recent email she said, “I have received so many kind cards and letters from your people. It has really made me feel I have done something significant.”

Ornamental, yes—but invasive, too

Many members spotted this ad in the Sunday *Parade* section of their newspapers. It could almost make a humorous parody if it weren't real—and all too common.

Earlier this year, the Yolo County RCD received a mail order catalog from Van Bourgondien nursery in New York, advertising “Pink Cascade” *Tamarix ramosissima*. Vegetation Intern Denee Caterson organized information to send to the supplier. In their reply, the company's president wrote, “We were totally unaware of the problem with Tamarisk in the western part of the United States. We will not accept any more orders from the six states mentioned, nor will we ship those orders we have received.” That's a job well done. But we need more.

CalEPPC has formed a Nurseries Committee to stem the flow of invasive plants through the horticultural industry. Researcher and CalEPPC Board President Joe DiTomaso estimates that of the approximately 450 invasive plant species for which we know the route of initial introduction, 73% came into California as ornamentals. Many highly invasive species continue to be sold, so this is a top priority pathway to stop.

The committee focuses on making allies out of gardeners, nurseries, and commercial growers. We are working to support members engaged in dialogue about invasive plants with their local nurseries, and at the same time we ourselves have begun a dialogue with industry associations. We hope that this combined top-down and bottom-up approach will convince producers and consumers that it is in their best interest to avoid using invasive plants.

A brochure of landscaping alternatives is in the works, and more materials will be available soon. If you would like to get involved or to get updates on the committee's projects, please email Doug Johnson at <dwjohnson@caleppc.org>.

Plant Now—Watch It Tower This Year!

White Feather Pampas Grass

“The King Of Ornamental Grasses”

WE SHIP HARDY LIVE PLANTS READY FOR PLANTING!

Shoots Up To 10 Feet Tall!
You've seen waves of majestic Pampas Grass growing wild in the countryside. Now watch it tower from 8 to 10 feet tall...right in your own backyard! Huge lofty plumes draw the eye wherever you plant them. They're stunning in your garden and highly prized for indoor dried arrangements. Each plant yields multiple shoots. Plus, they're practically trouble-free, with no need to spray for insects. Our hardy plants grow in most any soil. Order now at this great low price—used save!

- Easy To Grow
- Blooms With Big, Majestic Puffy White Plumes
- Adds Color, Texture & Height
- Dries Beautifully & Easily For Dried Flower Arrangements
- Elegant Landscape Accent
- Attractive Privacy Screen

We ship your order to your area of the nearest participating nursery.

New and Contributing Members

Thank you for your generous support! This list reflects membership renewals and new members since the last newsletter. Let us know if we forgot you or got your information wrong! All personal contact information is kept confidential.

New Members

Mike Ensminger (Syngenta Crop Protection, Visalia) · **Devin Wixon Keller** (Albion) · **Kathy Damas** (City of Boulder Open Space, Colorado) · **Mike Daily** (Santa Cruz) · **Sarah Egan** (ECORP Consulting, Roseville) · **Jeff Crooks** (Tijuana River Reserve, Imperial Beach) · **Stephen Kirkpatrick** (Cal Poly SLO, Morro Bay) · **Sarah Estrella** (Cal. Dept. of Fish & Game, Stockton) · **Susan Lambrecht** (UC Santa Cruz, Environmental Studies) · **Mario A. Abreu** (Mendocino Coast Botanical Gardens, Albion) · **Kathy Kramer** (San Pablo) · **Barbara Kossy** (San Mateo County Resource Conservation District, Moss Beach) · **Bailey Smith** (San Luis Obispo) · **Brendan O'Neil** (Sebastapol) gift from Peter Warner (Little River) · **Kristina Finstad** (Newport Beach) · **Jud Monroe** (San Anselmo) · **Ina Sylvewood** (Sylvester Trees, Potter Valley) · **Ron Felzer** (Merritt College, Oakland) · **Erin McDermott** (Berkeley) · **Gerrit Platenkamp** (Jones & Stokes, Sacramento) · **Pete Pulls** (Star Creek Ranch, Belmont)

Contributions to Cape ivy Biocontrols Development

Los Angeles/Santa Monica Mountain Chapter of CNPS · **San Diego Chapter of CNPS** · **Jean Conner** (San Francisco) · **Alan Brubaker** (Kenwood) · **Jake Sigg** (San Francisco) · **Elizabeth Crispin** (Mt. Shasta)

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Jim & Barbara Peugh (Friends of Famosa Slough, San Diego) · **Ralph Waycott, Jr.** (Los Angeles) · **Daniel & Cheryl Wilson** (Tower Indoor Garden, Fresno) · **Lisa Stallings** (Life Science, Inc., Woodland)

Contributing Members

Valerie Thomas (Bureau of Indian Affairs, Juneau, Alaska, on deployment in Kuwait) · **Ellen Simms** (UC Botanical Garden, Berkeley) · **John Messina** (EDAW, Inc, San Diego) · **Stan Weidert** (Shingletown) · **Robert E. Gilbert** (Soquel) · **Mary Platter-Rieger** (John Rieger & Associates, San Diego) · **Andrew Werner** (Santa Cruz)

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East Bay Regional Parks District (Oakland) · **Monsanto** (Phoenix, AZ) · **Filoli Center** (Woodside) · **Quail Botanical Gardens** (Encinitas)

Readings & Resources

MAKE IT A POLICY

Exotic Pests & Diseases: Biology and Economics for Biosecurity

Daniel A. Sumner, Editor
Iowa State Press, 2003. 276 pages. \$80
<www.isupress.edu>

This new volume analyzes policy measures designed to protect against the introduction and spread of exotic pests and diseases, and provides needed analysis of the policies on this important topic. The book grew out of an interdisciplinary project at the University of California Agricultural Issues Center, and includes ten case studies that focus on specific pests or diseases that represent a range of threats to U.S. agriculture, wild lands and the urban landscape, as well as possible government responses to these threats. In one of the case studies, Karen Klonsky and Karen Jetter of U.C. Davis discuss biocontrol of Yellow starthistle.



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Weed Reaper

BACK TO SCHOOL

Weed Ecology in Natural and Agricultural Systems

B. D. Booth and C.J. Swanton, Dept. of Plant Agriculture, University of Guelph, Canada; S.D. Murphy, Dept. of Environment and Resource Studies, University of Waterloo, Canada

CABI Publishing 2003. 288 pages, \$60.
<www.cabi-publishing.org>

This new textbook links ecological theory to our understanding of natural and agricultural weeds - providing a bridge between basic and applied ecology. It includes examples from weed and invasive species literature to illustrate the ecological principles discussed.

MAPPING THE RIVER

Russian River Watershed GIS

NOAA Fisheries and Circuit Rider Productions, Inc.

<www.noaarussianriverwatershedgis.org/>

This compilation of standardized spatial data was designed to support recovery planning for threatened salmonid species in the Russian River basin, but it is an excellent mapping resource for anyone doing weed work in the watershed.

RUNNING WILD

Feral Future: The Untold Story of Australia's Exotic Invaders

Tim Low

University of Chicago Press, 2001.
394 pgs. \$35.

A comprehensive and passionate look at Australia's struggles with invasive species, such as feral cattle and pond apple. Examining the history of these invasions uncovers ecological implications for Australia as well as for other invaded ecosystems around the world. The book also looks at many Australian species that have invaded elsewhere.

ISLANDS AND INVASIVES

Turning the Tide: The Eradication of Invasive Species

Dick Veitch and Mick Clout, Eds.

IUCN Publications
424 pages, \$37.
<www.iucn.org/bookstore>

Contains 52 papers from presentations at the International Conference on Eradication of Island Invasives held at the University of Auckland, February 2001. Contents are listed at <www.issg.org>. In the context of the conference, "islands" were taken to be many things, including an isolated or fragmented habitat.

SALT CEDAR SOCIETY

<www.tamariskcoalition.org>

From Colorado, an organization pooling information on tamarisk removal and other habitat issues in arid land riparian areas.

The WILDLAND WEED CALENDAR

California Weed Awareness Week

July 20-26, 2003

A week to plan local weed tours, newspaper articles and other outreach events. For ideas from WMAs that sponsored events last year, contact Steve Schoenig at <sschoenig@cdfa.ca.gov>

Western Regional Panel on Aquatic Nuisance Species

September 9-10, 2003

San Diego

Caluerpa response, Spartina control, ballast water, ANS issues in Mexico, updates from western states, non-profits, industry and federal efforts. <bettina_proctor@fws.gov>

North American Weed Management Association (NAWMA)

September 9-11, 2003

Park City, UT

"Improving the Pro in Professional Weed Management." Certification courses available. <www.nawma.org>

Natural Areas Conference

September 24-27, 2003

Madison, Wisconsin

Exploring landscape ecology, river systems, fire ecology, and private lands protection, with a full day workshop on invasive plants. <www.naturalarea.org/>

SERCAL

September 28-October 1, 2003

Asilomar Conference Center (Monterey)

"Restoration: What's working, What's not, and How do we know?" covers on-the-ground and philosophical restoration topics, with trainings available. Dunes field trip. <www.sercal.org>

CalEPPC Symposium 2003

October 2-4, 2003

North Tahoe Conference Center

Don't miss it! Our annual meeting, with eight sessions, field trips, and a dinner banquet. See registration materials on newsletter insert. <www.caleppc.org>

Western Section of The Wildlife Society

October 14-16, 2003

Sacramento

Invasive species symposium on accidental and purposeful introductions of animals, investigating species interactions across trophic levels. <www.tws-west.org>

Santa Barbara County WMA's 2003 Noxious Weeds Seminar

November 3, 2003

"Invasive ornamentals--The problem and alternatives" will explore the invasive ornamental problem, the impact of *Cortaderia* on California landscapes, and native plant landscaping. <www.countyofsb.org/agcomm/WMA.htm>

IPINAMS/EMAPI7

November 3-7, 2003

Ft. Lauderdale, FL

Two conferences in one: "Invasive Plants in Natural and Managed Systems: Linking Science and Management" and the "7th International Conference on the Ecology and Management of Alien Plant Invasions." <www.esa.org/ipinams-emapi7/>

Quotable:

"The fact that such [invasive species funding] efforts increase Federal spending is not as serious a concern as that Federal jurisdiction is being established for a practically infinite list of plants and animals. The looming danger is that a sharp environmental lawyer from Defenders of Wildlife or the Sierra Club...will get a sympathetic judge to agree that since eliminating non-natives is the Federal responsibility, the goal for the Federal responsibility must be the re-establishment of pre-Columbian ecosystems... Will not there be takings "necessary" to stop reinfestations? Will not there be a need to acquire biologically "sensitive" corridors? Will not it be necessary to tell private property owners what they must do and what they cannot do in order to control X or stop the reinfestation of X? ...Will not the interest groups that want to stop hunting, fishing, trapping, logging, and even grazing and ranching have a field day with this?"

Jim Beers, retired BLM, from Invasive Species Update #4, April 15, 2003 at <www.eco.freedom.org/2003toc.shtml> Mr. Beers also testified at the April 29, 2003 Joint Oversight Hearing on the Growing Oversight of Invasive Species.

"Invasive plants and animals pose an

extremely serious problem for agriculture... Invasive species also exact a heavy environmental toll. Many invasive species threaten plant, animal or human health... Invasive species are especially a problem in my home state of California. California is extremely diverse in terms of land uses and ecosystems. As a result, we produce an extremely wide array of crops that include most of the crops grown in the United States. We also experience most of the problems with different types of invasive species that are encountered elsewhere across the country... Farm Bureau strongly supports an aggressive program at the local, state and federal levels to prevent the introduction of invasive species into the United States, and to control or eradicate invasive species that are already here. The management plan developed by the National Invasive Species Council (NISC) titled "Meeting the Invasive Species Challenge" provides a framework for addressing these issues."

Bill Pauli, President of the California Farm Bureau Federation, from testimony given at the April 29, 2003 Joint Oversight Hearing on the Growing Oversight of Invasive Species, House Subcommittee on Fisheries Conservation, Wildlife and Oceans, and House Subcommittee on National Parks, Recreation and Public Lands.

CalEPPC Membership Form

We're working to protect California's wildlands from invasive plants—join us!

CalEPPC's effectiveness comes from a strong membership, including scientists, land managers, policy makers, and concerned citizens. Please photocopy the form below, complete, and mail with your payment. Additional donations are always welcome to support our projects; we are a 501(c)3 nonprofit organization, and donations beyond regular membership rates are tax deductible.

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- Family \$40
- Contributing \$50
- Sustaining \$100
- Life \$1,000

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- Regular \$100
- Contributing \$250
- Patron \$500
- Sustaining \$1,000

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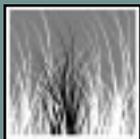
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- Cape ivy biocontrols research \$ _____
- Cal-EPPC News and operating costs \$ _____

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