



Cal-IPC News

Protecting California's Natural Areas from Wildland Weeds

Newsletter of the California Invasive Plant Council

Burning wildland weeds

Wildland firefighters conduct a prescribed burn of European beachgrass (*Ammophila arenaria*) along the coast at Vandenberg Air Force Base. Burning can be an effective part of an integrated management approach, but concerns about containment and air quality make permissions difficult to obtain. *Photo by Morgan Ball.*

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Protecting California's lands and waters
from invasive plants

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From the Director's Desk

Activism vs. managerialism

By Executive Director Doug Johnson

In our last issue, I wrote about the split between “intrinsic” and “instrumental” rationales for protecting nature. Basically, should we protect nature because it has an intrinsic right to exist, or because our quality of life depends on a healthy environment? My short answer was, “Yes to both.”

A related split occurs when we communicate about protecting the environment. A recent article in the *Earth Island Journal*, “The New Greenspeak,” asks whether the professionalization of the environmental field has swamped our communications with the language of green “managerialism.” We take “strategic approaches” to delivering “conservation outcomes.” We protect “ecosystem services” and “natural capital.” Does such language, as Orwell warned, hide true meaning? Do we risk diluting the passion that drives a gut-level commitment to activism on behalf of the environment?

Again, my answer would be that we need both. We absolutely need communications that tap into our connection with the natural world around us. That potent biophilia is a central part of what makes us human, and the activism it fuels is critical for lessening the damage we do (both to other organisms with their intrinsic right to exist as well as to the resources on which we depend).

However, we also need to operate in the world of business. The very fact that today one can make a living by working to protect the environment represents significant progress. But such work requires funding, whether through agency budgets, foundation grants, or donor contributions. To secure this funding, products must be delivered, conservation outcomes must be met, there needs to be a good return on investment. After all, we need to put our funding where we think it can do the most good. And using more managerial business terms reflects an awareness of how “the real world” works (though we may believe the actual “real world” lives far beyond business conventions).

As long as we maintain the ability to communicate our connection to nature, it can be useful to create handles like “ecological services” that convey the tangible benefits we receive from pollinators, upper watersheds, and other things we don't always remember to credit for our quality of life. Those of us working to “manage” wildlands just need to remember to keep feet in both worlds.

Dedicated volunteer Jim Roberts pulls Algerian sea lavender (*Limonium ramosissimum*), an early-eradication species, near Mission Bay in San Diego. San Diego's 50-year Multiple Species Conservation Plan stands as one of the country's most advanced planning efforts for protecting biodiversity, forming the perfect backdrop for this year's Symposium and parallel conference on the future of habitat conservation planning. *Photo by Carolyn Martus.*



Cal-IPC Updates

WCB funds Humboldt/Del Norte.

Cal-IPC worked with partners in the Humboldt and Del Norte Counties WMAs to propose a region-wide eradication project for knotweeds, arundo, rush skeletonweed, and shiny geranium. On May 21, the state's Wildlife Conservation Board approved \$450,000 for the five-year project.



Pulling leading-edge yellow starthistle under native shrubs in Tahoe National Forest. *Photo by Kathy Van Zuuk, USFS.*

2015 Sierra work. Cal-IPC will again be funding treatment of early eradication targets in Sierra counties thank to grants from the Wildlife Conservation Society, the National Fish & Wildlife Foundation, and the US Forest Service, State & Private Forestry Program. Additional work this year includes the California Conservation Corps removing musk and Canada thistle at the Smithneck Creek Wildlife Area in Sierra County.

Wildlife Action Plan. Cal-IPC drafted a chapter on invasive species for the California plan, which sets priorities for the California Dept. of Fish & Wildlife. A draft is out for public comment until July 2. Managing invasive species is the most cited action submitted by regional work groups around the state. See story page 14. www.wildlife.ca.gov/SWAP

Wildland Weed News

Home Depot signs on. The hardware giant has officially joined the PlantRight partnership, committing to carrying only non-invasive plants for landscaping in its California stores.

Cal-IPC connecting. Cal-IPC recently attended conferences of the California Council of Land Trusts, the California Native Grasslands Association, the Bay Area Open Space Council, SERCAL, and the National Park Service's "Science for Parks, Parks for Science" conference at UC Berkeley.

WMA funding. State Senator Cathleen Galgiani (Stockton) worked with Cal-IPC to submit a letter to legislative leadership that \$2.5 million be provided to CDFW's Weed Management Area program from the Greenhouse Gas Reduction Fund.

New projects. Cal-IPC has new grants supporting: risk assessment for emerging invasive plants; development of a national standard for assessing and listing plants; outreach to landscape designers regarding plants in horticulture; and a Wildland Volunteer Network in the San Francisco Bay Area.

Other News

California Invasive Species Action

Week is June 6-14. Year two of the event sponsored by the California Dept. of Fish & Wildlife, established to increase public awareness of invasive species issues and encourage the public to take action in preventing their introduction and spread. A student art contest, "Don't be a vector! Be a protector!" is open to grades 2-12. Cal-IPC drafted the legislative resolution formally declaring the week. www.wildlife.ca.gov/CISAW

WHO determination on glyphosate. An international panel for the World Health Organization has declared that glyphosate "probably causes cancer." Their detailed report has not yet been published. The determination is based on the extensive

body of existing studies, which to-date have not been deemed sufficient to support such a determination. The US EPA is expected to formally respond.

USDA weed unit expands. The Agricultural Research Service unit headquartered in Albany (with staff also located at UC Davis) works on biocontrol agents for weeds and other critical topics. They are hiring a new research leader, and have funding to expand the unit's work to include biocontrols for insect pests and pollinator health. Cal-IPC served on the interview panel for the research leader.

NFWF grants to California. The National Fish & Wildlife Foundation made grants for early detection/rapid response in the Mid-Klamath and Salmon River watersheds, and eradication of dune and tidal marsh weeds in Humboldt Bay.

New medusahead resource. UC Davis has developed a slide show with notes and a handout covering medusahead ecology and control. Download from the Weed Research & Information Center, wric.ucdavis.edu.

Aquatic weeds police. US Forest Service law enforcement officers in the Pacific Northwest are now authorized to enforce aquatic invasive species laws on National Forests. The one-year trial aims to provide leverage for public education.

New woolly mullein resource. Volunteer Richard Calkins has developed a webpage and flyer for control of *Verbascum thapsus* in the Sierra. Though the weed is widespread in California, removal can help limit its spread into new areas and reduce fire danger from dried stalks that firefighters have referred to as "matchsticks". Richard hopes to enlist outdoor recreationists in removal from campgrounds and river banks. See woolymullein.info.

Keep Current!

Remember to check your membership status on the mailing label of this newsletter. You can renew online or with the enclosed envelope. Thank you for your membership!

Cal-IPC partners to protect military lands

By Elizabeth Brusati, Cal-IPC

Military installations cover a large amount of land—Camp Pendleton in San Diego County alone covers 200 square miles—and like all land-management agencies, they have to contend with invasive plants. Land management on military installations is conducted to maintain the military mission. How do invasive plants cause problems for the military mission of an installation? At Fort Hunter Liggett in Monterey County, yellow starthistle tears parachutes during training exercises. At Beale Air Force Base, invasive yellow starthistle creates hazards on their runways. On other bases, invasive grasses create a fire hazard, a serious concern in a place where live ammunition is used. Military installations also protect habitat for endangered species, from California least terns to Quino checkerspot butterflies. In 2005, the National Wildlife Federation report “Under Siege” described the effect of invasive species on bases across the U.S.

Like any other place, military bases are vulnerable to incursion from invasive plants through traffic and land management activities. Some bases have frequent traffic; some receive training vehicles from far away. Camp Pendleton, one of the busiest military bases in the country, trains 60,000 service members each year. Fort Hunter Liggett, an Army Reserve garrison, hosts training events for the FBI, county sheriffs and other law enforcement agencies. This traffic can result in new introductions. For instance, *Pentameris airoides* (annual pentaschistis) was likely

brought in with military activities, the first detection of this grass in North America. Barbed goatgrass was found at



Yellow starthistle creates a safety hazard for aircraft by attracting birds near the runway at Beale Air Force Base in Yuba County. *Photo by Beale AFB.*

Detachment Fallbrook in 2006, likely brought in with cattle grazing, and is the only known population of this major weed in southern California.

Over the course of 2014, Cal-IPC worked with six military installations in California to enhance their strategic approach to invasive plant management, with an emphasis on early eradication and surveillance. While helping these installations, the project used these case studies to develop an approach that can be transferred to other military installations. We received funding from the Department of Defense Legacy Natural Resource Program (Project 13-621).

In partnership with natural resources management staff at each installation, we used the Cal-IPC Inventory, CalWeedMapper, Calflora and local interviews to conduct a full inventory of invasive plant species that could impact the installation. From this foundation we

worked to refine the information into a set of recommended high-priority species for early eradication and surveillance. This

complements the priorities that bases already have established to control more widespread weeds.

An important aspect of our approach was to incorporate a regional perspective beyond the installation itself. Effective management requires looking at source populations and dispersal vectors off-base. Many military installations are bordered by public lands and while the agencies coordinate

on some things, they don't often discuss invasive plants. Early detection is more effective when multiple organizations are looking out for the same species, and by establishing lists of high-priority species with regional input groundwork has been laid for collaborative landscape-level work to identify and treat new weeds promptly. The results were in some cases immediate. Natural resource managers at Fort Hunter Liggett detected stinkwort (*Dittrichia graveolens*) for the first time after the species was described by a regional partner. Beale AFB added the species identified onto their list for mapping by an environmental consulting firm.

New linkages were made through the regional coordination prompted by this project. In San Diego, for example, the San Diego Management and Monitoring Program had developed a list of priority invasive plants for western San Diego County. Three participating installations

SPECIAL ONE-DAY CONFERENCE FOR PLANNING PROFESSIONALS:

HABITAT CONSERVATION PLANNING AND INVASIVE PLANT MANAGEMENT

OCTOBER 29, SAN DIEGO CONVENTION CENTER

With this year's Symposium set for San Diego, ground-zero for habitat conservation planning, Cal-IPC is holding a special one-day conference on habitat conservation planning and its role in invasive plant management. This special one-day conference, held in parallel with the first day of the Symposium, will explore synergies between the evolving worlds of habitat conservation planning and landscape-level invasive plant management. Success stories from regions across the state will set the stage for discussing how tomorrow's planning can most



Register at www.cal-ipc.org

effectively support future efforts to stop the spread of wildland weeds.

With HCPs, NCCPs, MSCPs, RAMP, and now the Strategic Growth Council's statewide effort for integrated regional planning... how will evolving planning efforts mesh? Given new tools for designing effective landscape-level invasive plant management projects, how can we move beyond site-specific mitigation to distributed mitigation that takes advantage of key early-eradication opportunities? Join us for this special opportunity for setting future direction for environmental protection in California!

in San Diego County have now integrated this priority list into their installation's priorities. State Parks personnel in the county were working with Cal-IPC to develop early detection lists and identification guides, so we were able to incorporate military staff into the process. This resulted in surveillance guides that can be used by multiple organizations to educate field workers, including invasive plant contractors or biologists conducting species surveys.

The project strengthened connections between the installations and neighboring agencies and regional organizations such as the Weed Management Areas and Resource Conservation Districts. In some cases our meetings provided the first time that neighboring land managers had met each other in person. Ideally the relationships established in the process will continue, and having these new priorities in place will enable the installations to acquire funding for their invasive plant management.

Acknowledgements

Thank you to the installation staff who worked with us: Arlene Arnold

(Warner Springs), Deborah Bieber (Camp Pendleton), Chuck Carroll (Beale AFB), Kim Guillian (Fort Hunter Liggett), Dawn Lawson (US Navy), Ryan Lockwood (Detachment Fallbrook), Luanne Lum (Vandenberg AFB), Austin Parker (Camp Pendleton), Rob Pike (Fort Hunter Liggett), Lauren Wilson (US Air Force), and Christy Wolf (Detachment Fallbrook). Thank you as well to all of the partners from other agencies who attended meetings and provided information. Funding was provided by the Department of Defense Legacy Natural Resources Program (Project 13-621).



Surveillance guides will help installation staff and neighboring organizations identify species of concern for early detection and rapid response.

Calflora's Weed Manager expands tools for tracking weeds

By Cynthia Powell, Calflora

Calflora has rolled out a new tool called Weed Manager! Based originally on the GeoWeed tool, but developed to function “in the cloud,” Weed Manager is a system that provides a suite of individual applications that allow those in the field to track information, including management history, for their weed management projects.

Many public agencies and private organizations in the Cal-IPC community have helped plan and finance Weed Manager. This has helped make the tool flexible so that it can work for any agency and situation. Weed Manager can be adapted for your workflow. You can choose which data fields and attributes to collect in the field, matching the data collection protocol your organization requires. It is also easy to share data and results with other agencies or to keep them private.

Weed Manager benefits from Calflora's existing database of over 2 million plant observations, as well as Calflora's mobile and desktop features. The 2 million records in Calflora include feeds from the Consortium of California Herbaria (specimens), iNaturalist, and Calflora's free smartphone apps.

Weed Manager is available now!
www.calflora.org/entry/weed-mgr.html

Here's what some of our early users have to say. One user says, “Spray and pray’ wasn't good for our budget, and Weed Manager provides us with an effective tool to track our weed infestations.” Ed King from the Placer County Agriculture Department says, “I've been using Weed Manager beta for a year now, and it's helped me consolidate, organize and keep track of my invasive plant data,”

Weed Manager is set up to track weed infestations and treatments over time. Each treatment record can be entered into a “history stack” for a given population. You can even re-draw polygons around an infestation each year as it's treated



Taking data in the field with Observer Pro, part of the Weed Manager suite of applications. *Photo by Cynthia Powell.*

to gauge reduction in area. Cal-IPC and regional partners are already using these functions for tracking progress on collaborative landscape-level projects.

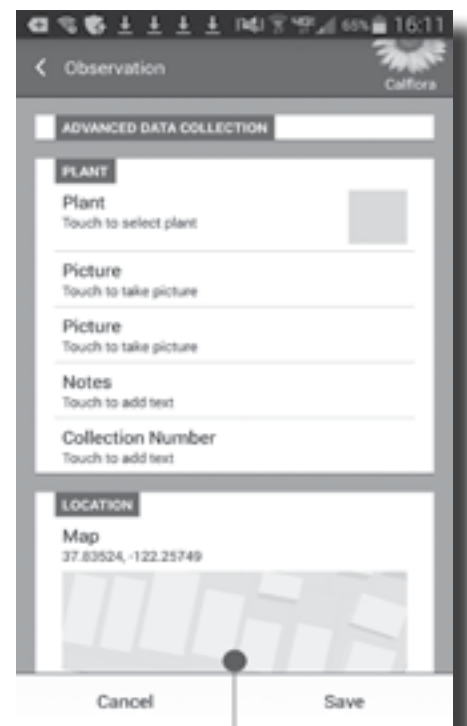
Organizations maintain the option of sharing the data they collect with other organizations, with other Calflora users, and with other systems such as CalWeedMapper. Each organization configures how they want to use the system. For instance, some organizations want two or three photos per field observation, some require percent cover as well as number of plants, and some require treated surface in square feet and ounces of chemical used. Calflora allows custom-made forms for each agency to fulfill these needs, while core data fields remain standardized to enable data exchange and integration.

As part of Weed Manager, Calflora offers two smartphone apps, Observer and

Observer. Pro. Observer Pro is available for all Android smartphones and tablets, without requiring a data plan. Data may be collected in the field, with polygon drawing over cached maps, then uploaded to Calflora when back within WiFi range. Observer Pro fields are set up to mirror each agency's custom data collection choices. Observer on the iPhone is not yet designed for Weed Manager but is effective for simple data collection.

Please contact Calflora to find out more about how Weed Manager can help your organization effectively track invasive plant management!

Contact Cynthia at cpowell@calflora.org.



Calflora is an equal opportunity provider and employer. Calflora would like to thank the following agencies for supporting the development of Weed Manager: National Park Service, Marin County Parks, Placer County Agriculture Department, US Forest Service, Yosemite Conservancy, Marin Municipal Water District, and Cal-IPC.

CDFA expands noxious weed list and revises process

By Dean Kelch, Primary Botanist, California Dept. of Food & Agriculture

The official list of noxious weeds in the California Code of Regulations is found in Agriculture Section 4500. So we often talk about “4500 list weeds” to indicate weeds that are under the highest regulatory control in California. If a plant occurs on this list, it cannot legally be grown, sold, or imported into California. Nurseries must be relatively free of such pests. Landowners should control any such weeds on their property and should definitely prevent their spread to neighboring properties.

Though the Section 4500 noxious weed list has been in broad agreement with the California Dept. of Food & Agriculture’s (CDFA) internal weed

ratings, over the years the internal list has grown to include some A- and B-rated weeds not included in Section 4500.

Therefore, we recently updated Section 4500 to include these weed species (see below for added species, and www.cdffa.ca.gov/plant/IPC/encyclo-weedia/weedinfo/winfo_table-sciname.html for the complete list).



Spongeplant is now listed. The aquatic weed joins water hyacinth and Brazilian waterweed in the Delta. Photo by USDA-ARS.

Species added to the list of noxious weeds for California in 2015:

<i>Aeschynomene</i> spp.	joint-vetch
<i>Asphodelus fistulosus</i>	onionweed
<i>Brachypodium sylvaticum</i>	slender false-brome
<i>Centaurea jacea</i> s.l. (including <i>C. pratensis</i> , <i>C. nigra</i> , and <i>C. nigrescens</i>)	meadow knapweed, black knapweed, brown knapweed
<i>Coincya monensis</i>	star-mustard
<i>Dittrichia graveolens</i>	stinkweed
<i>Euphorbia dendroides</i>	tree spurge
<i>Fallopia bohemica</i> (= <i>Reynoutria bohemica</i> ; <i>Polygonum bohemica</i>)	Bohemian knotweed
<i>Galega officinalis</i>	goatsrue
<i>Hydrocharis morsus-ranae</i>	frogbit
<i>Leptochloa chinensis</i> (= <i>Dinebra chinensis</i>)	Chinese sprangletop
<i>Limnobium laevigatum</i>	South American spongeplant
<i>Ludwigia decurrens</i>	winged water-primrose
<i>Ludwigia hexapetala</i>	water-primrose
<i>Mercurialis ambigua</i>	Spanish mercury
<i>Nymphoides peltata</i>	yellow floating heart
<i>Parthenium hysterophorus</i>	Santa Maria feverfew
<i>Rhagadiolus stellatus</i>	star endive
<i>Saccharum ravennae</i>	ravennagrass
<i>Salvinia auriculata</i> s.l.	giant salvinia
<i>Tribolium oblitterum</i>	Capegrass
<i>Volutaria canariensis</i> (now thought to be <i>V. tubuliflora</i>)	Canary Island knapweed

The official “4500 list” overlaps in part with Cal-IPC’s Invasive Plant Inventory, but they have significant differences. As a nonprofit organization, Cal-IPC does not have regulatory authority, while CDFA does. In terms of scope, Cal-IPC focuses on impact to wildlands while CDFA is required to focus on pests to agriculture, although it has broadened its emphasis somewhat in recent years.

The system for assigning ratings to weeds (and other pests) for CDFA also has been revised. Now a risk assessment will be performed for each potential pest and a rating (or no rating) will be proposed. Each draft pest rating proposal will be posted for a 45-day public comment period. After that, an official rating will be assigned. Ratings can change as new information is acquired or changes in status occur. Only a few pests have been evaluated under this new approach so far, but the list will grow with time. Pest ratings will be reviewed and revised as necessary at intervals. The pest rating webpage can be found at www.cdffa.ca.gov/plant/regs_pestrating.html.

Contact Dean at dean.kelch@cdffa.ca.gov.

2015 Cal-IPC Symposium

Plus special one-day parallel conference on habitat conservation planning on Oct. 29 - See page 5!

San Diego
Oct. 28-31, 2015
www.cal-ipc.org/symposia

Join fellow land managers, researchers, and conservationists at the San Diego Convention Center to catch up on the latest findings in invasive plant biology and management!

We'll have it all: speakers, posters, discussion groups, exhibitors, field trips, trainings, awards, photo contest and our annual social hour with silent auction and raffle! (We will apply for DPR continuing education credits, including 2 hours of Laws & Regulations.)

And this year, we also feature a parallel one-day conference on Habitat Conservation Planning (see page 5). The events overlap so attendees can intermix and attend sessions of their choice.

Wednesday, October 28

Trainings (day)
- Strategic Approaches
- Calflora's Weed Manager
DPR Laws & Regs session (eve)

Thursday/Friday, October 29-30

Paper and poster sessions
Discussion groups
Habitat Conservation Planning special conference (Thu.)
Social hour and raffle (Thu.)

Saturday, October 31

Field trips (to be confirmed)
- UAV demonstration
- Rancho Jamul
- Cleveland Nat'l Forest
and SoCal Botanists is leading a trip to Baja California

Register!

Register by September 28 for the early-bird discount. Other discounts are available to members, students, presenters, and Symposium volunteers.

www.cal-ipc.org/symposia

Lodging

We have a discounted room block at the Sofia Hotel (below), 10 blocks from the Convention Center on San Diego Bay. Take the trolley or walk through the historic Gaslamp Quarter. **Make your reservations by Sept. 27!** Visit our webpage for travel and lodging information.



Sessions

Include...

- Invasive Plant Management Tools & Techniques**
 - New Research on Invasive Plants**
 - Unmanned Aerial Systems in Conservation**
 - Strategies for Eradication Success**
 - Desert Weeds of Alta and Baja California**
 - Preventing the Next Invaders**
 - The Future of Habitat Conservation Planning**
- ...and more!

Trainings

Expand your invasive plant management skills at a training on Wednesday, Oct. 28

- Strategic Planning for Invasive Plant Management** (full day, Mission Trails Reg'l Park)
- Calflora's Weed Manager** (half day, site TBA)



Learn from instructors (and attendees!) *Photo by Bob Case.*



Catch up with colleagues... *Photo by Bob Case.*

Sponsor

Symposium sponsors receive complimentary registrations, exhibit space, recognition at the Symposium and Cal-IPC organizational membership. Visit our webpage or contact us at symposium@cal-ipc.org for information.

Fun

- Social hour with raffle and silent auction
- Awards
- Photo contest
- Downtown San Diego



Photo by Dana Morawitz.

Simplified permitting for small restoration projects

By Elizabeth Brusati, Cal-IPC, with information from Erik Schmidt, Sustainable Conservation

Projects for invasive plant control often require environmental permits from state or federal agencies. These may include permits/compliance required under the Federal and California Endangered Species Acts, California Fish & Game Code, Federal Clean Water Act, and California Environmental Quality Act (CEQA) for starters. Such permitting often represents a sizable portion of the work needed to move a project through to implementation.

This has presented a barrier for the many restoration projects that are small

and occur voluntarily on private lands. Even for this type of environmentally beneficial work, obtaining the proper permits can take years, discouraging many landowners (and even larger organizations) from pursuing projects in the first place.

The Habitat Restoration and Enhancement Act (Assembly Bill 2193) provides for a simpler and faster permitting process for small restoration projects. It was sponsored by the nonprofit Sustainable Conservation and signed into law by Gov. Brown in 2014 with support

from Cal-IPC, the California Native Plant Society, Resource Conservation Districts, land trusts, and other organizations. The new permit through the California Dept. of Fish & Wildlife (CDFW) provides a more efficient process for compliance with the Section 1600 Lake and Streambed Alteration Agreement (LSAA) and Section 2081 California Endangered Species Act (CESA), which is required when the project area overlaps with listed species and wetlands. It applies to voluntary restoration projects that cover no more than five acres or 500 linear feet of streambank or



Permitting for small restoration projects (less than 5 acres), such as removing this pampasgrass infestation in San Diego, just got easier. AB2193 combined three permits into a single streamlined application process. *Photo by Jason Giessow.*

shoreline. It can be used on projects such as removing invasive plants, increasing native vegetation along stream corridors, improving aquatic habitat, reducing sediment and pollution in waterways, and removing fish passage barriers.

Erik Schmidt, Senior Conservation Strategist at Sustainable Conservation in San Francisco, assists agencies with developing simplified regulatory approaches and assists property owners and partner organizations in using these approaches to complete restoration projects more efficiently. He believes that many small invasive plant management projects may be able to qualify for the new AB2193 approval process and other programmatic permits.

The five-acre limit applies to the net area of direct impact of the project. For example, patches of invasive plants scattered through a larger area can qualify if the total acreage of the plants to be removed, along with any site access areas affected by the project, is less than five acres. Similarly, the 500 linear foot limitation on stream bank or shoreline applies to the cumulative total of the treatment areas affected by the project. It is important for the organization conducting the work to map the project area before the permit application is completed, calculate the acreage, and submit documentation such as maps and explanatory text with the application.

Programmatic Permits

The Habitat Restoration and Enhancement Act approval is one of several programmatic permits or authorizations that are available around the state to make regulatory compliance for voluntary restoration projects simpler. Programmatic permits are “pre-written” and can apply to a range of restoration projects in all of California or a particular region. Using these permits requires less time and money because the applicant understands what is required upfront, and can design a project to include the agencies’ species, water quality and other protection measures without going through the time-consuming back-and-forth regulatory process – including an extended wait for final project approval.

However, using these permits requires the applicant to have a complete project description and application in place for agency review, unlike individual project permitting where significant modification of the project may be allowed based on input from the agency staff reviewing the application.

Three other programmatic permits that may be useful for invasive plant management projects are the CEQA 15333 Categorical Exemption, the State Water Resources Control Board 401 General Water Quality Certification, and the NOAA Fisheries Biological Opinions for the North and Central Coasts.

CEQA 15333 is a Categorical Exemption for small-scale habitat restoration projects that cover less than 5 acres and create no significant or cumulative impact after all included protection measures are implemented. If your project is less than 5 acres, and you can ensure adequate environmental protection measures such that the work will not have significant impacts, you should consider this exemption instead of a more time-consuming and costly environmental document. Project proponents taking this route should also consider using the State Water Board’s General Order for 401 Water Quality Certification, and the new AB2193 process for section 1600 (Lake and Streambed Alteration Agreement) and 2081 (CESA incidental take permit) permitting from CDFW, if needed.)

To use 15333, a Notice of Exemption (NOE) must be filed by a public agency acting as the “lead agency,” a Resource Conservation District (RCD), flood or water district, or open space district can fill this role for sites on private land. This exemption can be used for work at several sites grouped as one “project” provided the total size is less than 5 acres. The 15333 exemption might be appropriate for an early-detection/rapid response project that is dealing with small, incipient weed populations.

The State Water Resources Control Board 401 General Water Quality Certification provides permit coverage under section 401 of the Clean Water Act for habitat restoration projects smaller than five acres and 500 cumulative linear feet. A Notice of Intent (NOI) for

qualified projects must be filed with the Water Board by project applicants.

The NOAA Fisheries Biological Opinions (BOs) are issued by the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration. They apply to habitat restoration work along streams with anadromous fish (primarily salmon and steelhead) in coastal and Bay/Delta counties. Currently the BOs apply from the Oregon border to San Luis Obispo County; counties south of San Luis Obispo to the Mexico border may be added in summer 2015. In addition, the California Coastal Commission has approved a programmatic authorization for restoration projects funded or using technical assistance from the NOAA Restoration Center (NOAA RC), a non-regulatory program of NOAA Fisheries, that are located in the Coastal Zone, where obtaining Coastal Development Permits for restoration work can be challenging.

For more information

Sustainable Conservation’s Accelerating Restoration Program (including a list of all programmatic permits and authorizations for restoration): suscon.org/watersheds/acceleratingRestoration.php

Habitat Restoration and Enhancement Act – process and application: www.wildlife.ca.gov/Conservation/Environmental-Review/HRE-Act

State Water Board: www.swrcb.ca.gov/water_issues/programs/cwa401/generalorders_wb.shtml

Contact Erik Schmidt at eschmidt@suscon.org or (415) 977-0380 x334.

Early detection/rapid response around the state

South Coast



Moroccan knapweed in Orange County. In our last issue, we described work on removing Canary Island knapweed (*Volutaria canariensis*) in the desert at Anza-Borrego State Park. The same plant has now been found in Orange County, and the California Dept. of Food & Agriculture determined that plants from both locations are actually *V. tubiliflora*. For details on removal work by the Orange County Chapter of CNPS visit www.ocnps.org. *Photo by Ron Vanderhoff.*



Volunteers with the San Diego River Park Foundation (SDRP) learn about new invasive plants as part of their early detection program. Twice a year volunteers with the SDRP walk a section of the river and record invasive species, trash, and other environmental concerns. Work this year on several high-priority species is being funded by Cal-IPC with a grant from the Southern California Wetlands Recovery Project. *Photo by Carolyn Martus.*

Central Coast



Old man's beard (*Clematis vitalba*) is invading riparian areas near Santa Cruz, including seven miles along San Vicente Creek. The vine, native to Europe and Southwestern Asia, climbs and covers native vegetation. It is designated a noxious weed in the states of Oregon and Washington. *Photos by Ken Moore.*

Weedspotting down under

By Steve Schoenig, California Dept. of Fish & Wildlife

In September 2007 I had an amazing opportunity to fly halfway around the world to Perth, Australia for a global conference on the ecology and management of invasive plants. I had long known about the many great invasive species programs operating in Australia, but at that conference learned about some new ones that are pretty amazing. The Weed Spotters' Network Queensland really impressed me for its ability to channel volunteer efforts into a highly-effective, well-structured program that goes way beyond simple "crowdsourcing" into a facilitated multi-tiered network. What follows is material derived from their newsletters and websites.

The Weed Spotters' Network is a joint project between the Queensland Herbarium, the Queensland Dept. of Agriculture & Fisheries and local governments with funding support from the Queensland Land Protection Fund. The Network aims to find, identify and document those new occurrences of potential weeds at an early stage so that preventative actions can be taken. It seeks to continue a community-based weed alert system in Queensland, based on the

model developed by the previous Cooperative Research Centre for Australian Weed Management.

Queensland is one of eight mainland states and territories that make up Australia. At 715,309 square miles it is about four times the size of California, with only one-eighth of the population. Queensland is on the northeastern corner of the continent and is comprised of arid desert lands, a moderate dividing mountain range, and tropical rain forest in the north.

The Weed Spotter program is a three-tiered system. First, a statewide coordinator, Dr. Melissa Laidlaw, works out of the Queensland Herbarium. Second, 22 regional coordinators are the local weed experts able to answer questions about training, specimen preparation and weed identification in each area. They help identify and filter Weed Spotters' specimens and pass them onto the Queensland Herbarium. They also provide feedback to weed spotters in that region about new and emerging weeds found, and help with training, resources, and accessing government information.

Finally, the Weed Spotters themselves include more than 1,000 individuals who have received training. They can be landholders, gardeners or members of community groups such as Landcare Queensland, Bushcare, Society for Growing Australian Plants, along with Australian, state and local government officers, industry representatives, and anyone else interested in weeds and plants. Many members are weed professionals who work with weed identification, management and control on a daily basis. Others encounter weeds while taking part



An invasive cactus identification training.

in activities outdoors and join to stay informed about emerging weed issues in their region. Weed Spotters report, collect, identify and deliver specimens of potential new and emerging weeds in their region. They help to educate the community and notify Biosecurity Australia and other authorities of outbreaks needing control.

The Network makes a large number of significant finds each year. For example, in 2013 they reported 92 notifications of 49 species, including 11 Weeds of National Significance, 8 species on the Northern Australian Quarantine Survey, and 12 species on the National Environmental Alert List. Dr. Melanie Laidlaw, the Network's Coordinator, says, "Queensland is a vast state of diverse landscape and climates, much of which is remote from cities and towns. Our dedicated biosecurity staff and local pest management officers rely on Weed Spotters and the broader community to complement their work by bringing new and emerging weed threats to their attention."

Weed Spotters website:

www.qld.gov.au/environment/plants-animals/plants/herbarium/weed-spotters/

Weed Spotters Guide:

www.usq.org.au/Publications/CRC%20WS%20regional%20guide_WEB.pdf



Provide input to state's Wildlife Action Plan

From: <https://calswap.wordpress.com>

The California Department of Fish and Wildlife (CDFW) has released the draft California State Wildlife Action Plan 2015 Update (SWAP 2015) and is seeking public input. Public input will help shape the final SWAP 2015, which will be completed by October 2015. The draft SWAP 2015 is available online at www.wildlife.ca.gov/SWAP. Written comments on SWAP 2015 can be submitted on the website, by emailing SWAP@wildlife.ca.gov or by mail to SWAP 2015 Update, California Department of Fish and Wildlife, 1416 Ninth Street, 12th Floor, Sacramento, CA 95814. The comment period is open from May 18 through July 2, 2015.

SWAP 2015 is a comprehensive, statewide plan for conserving California's fish and wildlife and their vital natural habitats for future generations. It is part of a nationwide effort by all 50 states and five U.S. territories to develop conservation action plans and participate in the federally authorized State and Tribal Wildlife Grants (SWG) Program.

Congress created the SWG program in 2000, recognizing the need to fund programs for the conservation of wildlife diversity. California's first SWAP was completed by California Department of Fish and Game (now CDFW) and approved by the U.S. Fish and Wildlife Service (USFWS) in 2005. CDFW has received approximately \$37 million in federal support for the state's wildlife conservation activities through the SWG program from 2005 through 2014. The SWG program

requires that SWAPs be updated at least every 10 years. CDFW has now prepared the draft SWAP 2015, which is the first comprehensive update of SWAP 2005. SWAPs are required to include provisions to ensure public participation in the development, revision and implementation of projects and programs.

Public meetings to provide information about SWAP 2015 will be held in Sacramento, Oakland, San Diego and Los Angeles. See www.wildlife.ca.gov/SWAP for more details.

The draft SWAP is available at: www.wildlife.ca.gov/SWAP/Interim-Products

Comment period open until July 2



Cal-IPC perspective... and what you can do!

The SWAP provides a blueprint for future action by CDFW, the Wildlife Conservation Board, conservancies, and other agencies and programs that include wildlife protection as part of their mission.

Invasive plants clearly damage wildlife habitat. The regional workshops held as part of the SWAP process demonstrate the level of concern on the ground. Table 4.1 in the draft document shows that among pressures on wildlife, invasive species was by far the most oftentimes mentioned, with strategies of direct management, management planning, partner engagement, data collection and analysis, and outreach and education being among the most mentioned strategies.

This on-the-ground reality should be reflected in the overall findings of the report. The report should explicitly state that invasive species management is a top priority to protect wildlife, and that resources need to be dedicated to addressing this challenge.

There are specific chapters for each region of the state, listing priority conservation actions, including some on invasive species. Cal-IPC members can review the actions prioritized for their region and comment accordingly.

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Stewardship Circle	\$1000
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Student	\$ 25

Members receive *Cal-IPC News* and discounts on Symposium registration!

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2015 Spring Campaign

Our 2015 Spring Campaign raised \$43,000 through more than 300 contributions to strengthen decision-support tools like CalWeedMapper that lay the strategic foundation for landscape-scale early-eradication projects across the state.

Thank you for your support!

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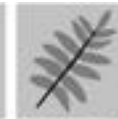
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Your mailing label includes your membership renewal date. Renew online at www.cal-ipc.org or by using the envelope included inside this newsletter. Thank you for your membership!



THE WILDLAND WEED CALENDAR

California Invasive Species Action Week
June 6-14, statewide
www.wildlife.ca.gov/Conservation/Invasives/Action-Week

UC Davis Weed Day
July 16, UC Davis
wric.ucdavis.edu

UC Davis Weed Science School
August 18-20, UC Davis
wric.ucdavis.edu

Ecology & Management of Alien Plant Invasions (EMAPi 2015)
September 20-24, Waikoloa, HI
www.emapi2015.hawaii-conference.com

CNPS Vegetation Rapid Assessment
Mid/late October, Redding
cnps.org/cnps/education/workshops

North American Invasive Species Management Association (NAISMA)
October 18-21, Vancouver, Canada
www.naisma.org

Nevada Medusahead Symposium
October 26-29, Reno, NV
agri.nv.gov/Plant-Industry

Cal-IPC Symposium
October 28-31, San Diego
www.cal-ipc.org/symposia

Tamarisk Coalition
February 9-11, 2016, Grand Junction, CO
www.tamariskcoalition.org

“The wildest and remotest places on Earth, the most imperiled species on Earth, the chain of life sustaining human life on Earth will be protected **only if urban people care about nature.”**

- From “Urban Protected Areas: Profiles and Best Practice Guidelines” recently published by the International Union for Conservation of Nature.

“If you keep hitting the plant with a right hook, you can beat the population down to a point, but you need to switch it up with some uppercuts to finish the job. **There’s never one silver bullet that will fix the problem.”**

- Jon Hall, Land Conservancy of San Luis Obispo County, talking about experimental treatments for removing invasive veldt grass in coastal sand dunes. New Times, 4/1/15.