

Cal-IPC News

Protecting California's Natural Areas from Wildland Weeds

Vol. 17, No. 3

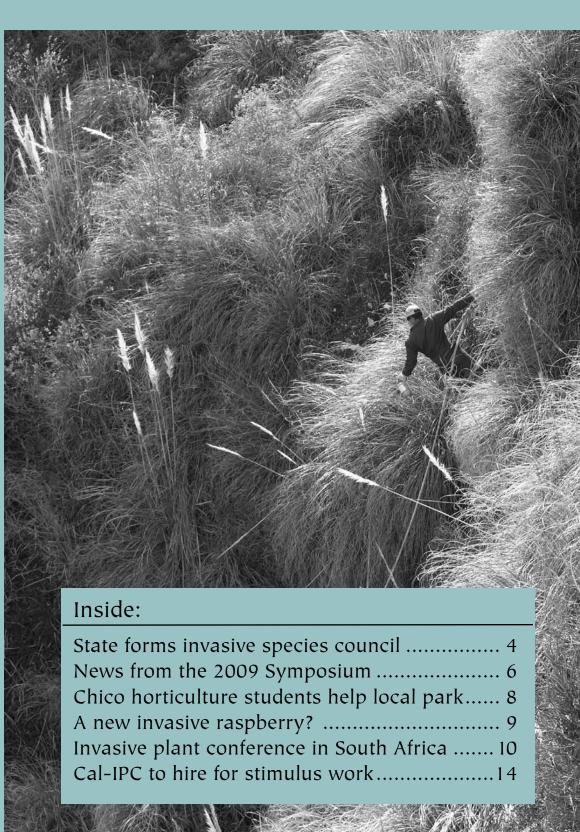
Fall 2009

Quarterly Newsletter of the California Invasive Plant Council

Going to great lengths to tackle weeds...

After being transported by helicopter to a remote pampas grass (Cortaderia selloana) infestation on Santa Cruz Island, a Native Range, Inc., applicator repels down an 800 foot cliff to treat the last remaining infestation on the island. The Nature Conservancy and the Channel Islands National Park are collaborating to eradicate this species.

Photo: John Knapp, Cal-IPC Photo Contest 2009.





Cal-IPC

1442-A Walnut Street, #462 Berkeley, CA 94709 (510) 843-3902 fax (510) 217-3500 www.cal-ipc.org info@cal-ipc.org

A California 501(c)3 nonprofit organization

Protecting California's natural areas from wildland weeds through research, restoration, and education.

STAFF

Doug Johnson, Executive Director dwjohnson@cal-ipc.org

Elizabeth Brusati, Program Manager edbrusati@cal-ipc.org

Heather Brady, Project Coordinator hjbrady@cal-ipc.org

Bertha McKinley, Program Assistant bmckinley@cal-ipc.org

DIRECTORS

Jason Giessow, President (2009) Santa Margarita/San Luis Rey Weed Management Area

> Wendy West, Vice President (2009) U.C. Cooperative Extension

Doug Gibson, Treasurer (2010) San Elijo Lagoon Conservancy

John Knapp, Secretary (2009) Native Range, Inc.

Dan Gluesenkamp, Past President (2009) Audubon Canyon Ranch

Edith Allen (2010) University of California-Riverside

Jason Casanova (2010) Los Angeles/San Gabriel Rivers Watershed Council

Henry Gonzales (2010) Ventura County Department of Agriculture

Julie Horenstein (2010) California Department of Fish & Game

Marc Lea (2010) San Luis Obispo County Department of Agriculture

> Jean-Philippe Marié (2009) Putah Creek Riparian Reserve

Cheryl McCormick (2010) San Pedro, CA

Tanya Meyer (2009) Yolo County Resource Conservation District

> Mark Newhouser (2009) Sonoma Ecology Center

Peter Schuyler (2009) Santa Barbara, CA

Affiliations for identification purposes only.

Last year of term noted.

Cal-IPC News

Fall 2009 - Volume 17, Number 3

Editors: Doug Johnson, Elizabeth Brusati, Heather Brady

Cal-IPC News is published quarterly by the California Invasive Plant Council. Articles may be reprinted with permission from the editor. Submissions are welcome. Mention of commercial products does not imply endorsement by Cal-IPC. We reserve the right to edit all work.

From the Director's Desk

"Snakes on a Plane"

What the heck is "Q-37"? (It's a section of federal code that describes regulation protocol for importing plants.) And why should you care? Read on.

You have, no doubt, heard about the invasion of Burmese pythons in Florida. Released by pet owners when they grew too big, they are successfully breeding in the wild, with a population now in the tens of thousands. Video of them eating alligators and sheep have made the rounds on broadcast news. And now we learn that these are actually the nice pythons. The really mean ones, the African rock pythons, have also now been found in the wild in Florida. And there is potential for the two species to interbreed and create new, even more aggressive hybrids. Specialists fear that the South American anaconda is not far behind. Being trapped in a plane with snakes made for a sensational movie plot. Though bigger than a plane, continents are for the most part closed spaces, too. And these snakes are for real.

So are the emerald ash borer in the Midwest, the zebra mussels in the Great Lakes, and yellow starthistle here in California, but these species don't quite raise the adrenaline level like snakes do, especially when they're longer than a car. But of course the ecological damage of such invasive pests can be just as severe as that of top predators. Those working to manage invasive weeds can look for ways to leverage additional public awareness from striking (sorry—and these are constrictors, anyway) examples like snakes. But most importantly, there are critical prevention lessons to learn from this situation. First, many of our invasive species are introduced through legal trade in risky organisms. Second, once the snake's out of the bag, forget about trying to get it back in. Can we learn from these lessons?

We currently have a golden opportunity to do just that by preventing risky plant imports. The USDA, at long last, has published a proposal to update the way they screen plant imports through their "Q-37" regulations. The horticultural trade has historically been a major source of invasive plant introductions. International plant exploration and new product development are key parts of horticultural enterprise, but under current law there is little oversight of what gets brought in. The proposed guidelines would strengthen screening by creating a category called NAPPRA (stands for "not authorized pending pest risk assessment") for plants that have demonstrated themselves to be invasive elsewhere in the world. These plants could not be imported to the US without first completing a thorough risk assessment showing they are likely to be safe. This is common sense. It is not an infringement on free trade—it is a protection of the common good.

Five years ago, a similar proposal received significant resistance from nurseries. This fall, support for the proposal was overwhelming, and included endorsements from the American Nursery and Landscape Association and other trade groups. I believe this reflects the success of efforts like Cal-HIP, the California Horticultural Invasives Prevention partnership, in bringing together business, agency and environmental interests to find mutual solutions to the problem. Working together works. Now we need to make sure that the USDA has the resources and political support to implement the new regulations promptly and effectively.

Comments supporting Q-37 revisions: 88%

Number of states represented: 39

Number of countries: 5

Top states in comments per capita: Hawaii, Indiana, Wisconsin

Most comments submitted: California

Statistics from 263 comments posted at www.regulations.gov by Oct. 21, 2009.

Wildland Weed NewsNewsNewsNews

Cal-IPC Updates

Running 100 miles for wildlands
Board member Cheryl McCormick
(pictured at right) successfully ran 100
miles on August 27 to raise nearly \$5000
for Cal-IPC. Starting at 5:30am, she ran
a route around the Monterey Peninsula.
Visit Cheryl's blog to see video taken
during her run. Thank you to all who
contributed to this important fundraiser.
(We're still accepting donations in
recognition of Cheryl's amazing feat/feet!)

More maps online

runforthewildlands.blogspot.com

Our website now contains distribution maps for many more weeds as well as potential spread with climate change for some species. www.cal-ipc.org/ip/mapping/statewide_maps



Funding

Thank you to the True North Foundation for a grant toward general operating support. See page 14 for exciting news on federal stimulus funding for Cal-IPC.

Election results

Please welcome the board members who will begin their two-year terms in January: Peter Beesley (PG&E), Valerie Eviner (UC Davis), Brent Johnson (Pinnacles National Monument), Shea O'Keefe (USDA Natural Resources Conservation Service), Peter Schuyler (Ecological Consultant), and Katherine Suding (UC Berkeley). J-P. Marié (Putah Creek Riparian Reserve) was appointed to a one-year term to fill a vacancy in the board. Officers for 2010 will be Jason Giessow (returning as President), John Knapp (Vice-President), Julie Horenstein (Secretary) and Doug Gibson (Treasurer). Members also approved the bylaws revision to eliminate the Past-President as a board officer.

The California Department of Food and Agriculture has a new hotline and website for reporting invasive species. The website contains links to county agricultural departments, instructions for submitting specimens for identification, and a Pest Sighting Form. www.cdfa.ca.gov/phpps/reportapest, 1-800-491-1899

In May, the West Coast Governors Agreement released a draft work plan to coordinate the eradication of non-native cordgrass (*Spartina* species) in California, Oregon, and Washington. Plants are carried among states on ocean currents. The plan proposes to add non-native *Spartina* to the California Noxious Weed List and improve efforts in prevention, early detection of infestations, and rapid response. www.westcoastoceans.gov/teams/#spartina

The fast-growing Asian kelp *Undaria* pinnatifida, or wakame, has moved from Southern California to Monterey and now San Francisco Bay. It fouls both natural and manmade structures and competes with native marine algae (seaweeds). The Smithsonian Environmental Research Lab on SF Bay is working with state and federal agencies to remove it and track new infestations. www.serc.si.edu/labs/marine_invasions/MIRL_at_RTC/undaria.aspx

The Chief Officer of a cargo ship became the first person charged under the Nonindigenous Aquatic Nuisance and Prevention Control Act. He pled guilty to falsifying ballast water records and violating pollution and safety laws due to fuel leaking into the ballast tanks. (Ballast is water held in tanks of cargo ships to stabilize them.) Many invasive species in bays are believed to have been transported in ballast tanks and released when the tanks were emptied. (US Department of Justice, July 15, 2009)

Kudzu, "the vine that ate the South", has now reached the Great White North, i.e. Canada. A small patch of kudzu was found growing along the shore of Lake Erie in Ontario this summer. The Ontario Ministry of Agriculture plans to monitor it. (Toronto Globe and Mail, September 24)

At least it's good for something... Two new studies show that kudzu may provide benefits as a nutritional supplement and a treatment for alcoholism. Scientists in Alabama and Iowa found that root extracts from kudzu may be a dietary supplement to help regulate metabolic syndrome, which affects 50 million people in the US. Science Daily, www.sciencedaily.com/releases/2009/08/090826110122.htm

Meanwhile, researchers at pharmaceutical company Gilead Sciences have synthesized a compound from kudzu extract that shows promise in reducing cravings in alcoholics. Rats that had been habituated to wanting alcohol showed less interest in it after being giving the extract. Another team, at Harvard Medical School, is working on an similar herbal supplement. (National Geographic News. news.nationalgeographic. com/news/2009/08/090812-kudzu-alcoholic_2.html)

One invasive plant may be losing potency in its invasive range. Garlic mustard (Alliaria petiolata) injects a toxin into the soil that kills the soil fungus that many native plants need to thrive. However, garlic mustard populations evolve to produce less of the toxin (glucosinolate) over time. Illinois researchers grew garlic mustard seeds from 44 populations across the Eastern U.S., after determining the approximate age of each infestation from herbarium records. Populations that were at least 30 years old produced less toxin than newer populations. The researchers suggest that control programs should focus on newer infestations which may be the most damaging. news. illinois.edu/news/09/0901garlicmustard.html

State forms Invasive Species Council

The State of California has taken a major step forward in addressing invasive species by creating the Invasive Species Council of California (ISCC). The council, comprising the heads of six state agencies, will coordinate prevention and control efforts. The council has formed a 24-member advisory committee (the California Invasive

Species Advisory Committee, CISAC) with broad-ranging representation. Cal-IPC Executive Director Doug Johnson has been selected to chair the committee. In forming these bodies, the state recognizes the need to strengthen programs to address the major impacts of invasive species on California's environment and economy.

Cal-IPC has worked over the last several years in partnership with other organizations to support the formation of an interagency

council, and we are excited to see it coming together. Much of the credit for its formation is due to the support of Secretary of Food and Agriculture A.G. Kawamura, who was awarded the 2009 Policy Award at the recent Cal-IPC Symposium in Visalia.

Given the state's precarious financial standing, why establish yet another government body? Because the ISCC can make the invasive species work of state agencies more effective and more efficient. The council serves to improve communication among high-level officials who are responsible for setting each agency's direction. The invasive species challenge has an incredibly broad scope, including border inspections (Department of Food and Agriculture), quagga mussel control (Department of Fish and Game), Sudden Oak Death monitoring (Department of Forestry and Fire Protection), Spartina eradication (Coastal Conservancy), roadside management (Caltrans),

and aquatic weed management in the Delta (Department of Boating and Waterways), to name a few. These programs in turn interface with state regulatory agencies and public health agencies, and with related programs at the federal and local level. Establishing this forum for regular structured communications is an essential step in



California Secretary of Food and Agriculture A.G. Kawamura (center) at the Cal-IPC office with Invasive Spartina Project Director Peggy Olofson and Cal-IPC Executive Director Doug Johnson.

coordinating an effective response.

The advisory committee complements the ISCC by bringing a range of invasive species expertise and perspectives together to develop recommendations. The committee's first major task is to generate a list of top invasive species across all taxa, using consistent criteria for assessing their threat to California. Along with compiling an assessment of existing invasive species in the state, the committee will also work to identify new invasive species that are most likely to be introduced to the state, in an effort to prepare for future challenges.

CISAC will work to engage the public in the state's response to invasive species. Public support for programs must be earned by openly discussing the impacts of invasive species as well as the impacts of management activities. CISAC has formed a working group to focus on making decisionmaking processes transparent and inclusive, while recognizing the importance of timely response when faced with invasive species that can spread rapidly. It is particularly vital to address human health concerns. The committee will encourage participation from the public health community, and has direct representation from the California

Conference of Local Health Officers (www. calhealthofficers.org).

Others appointed to the advisory committee include past Cal-IPC board presidents Joe DiTomaso of UC Davis and John Randall of The Nature Conservancy; Christiana Conser of the PlantRight program at Sustainable Conservation; and Andrea Fox of the California Farm Bureau Federation, a long-time Cal-IPC partner in Sacramento advocacy and co-recipient of Cal-IPC's Policy Award in 2006 for her leadership in helping to secure renewed funding for the state's Weed

Management Areas.

The six agencies represented on the ISCC are the Department of Food and Agriculture (whose head serves as chair), the Natural Resources Agency (whose head serves as vice chair), the California Environmental Protection Agency (which includes the Department of Pesticide Regulation); the Business, Transportation and Housing Agency (which includes Caltrans); the Health and Human Services Agency; and the Emergency Management Agency. Robert Leavitt of the Department of Food & Agriculture (CDFA) serves as acting executive director of CISAC, and David Pegos of CDFA serves as agency liaison to ISCC.

For more information on the ISCC and CISAC, see www.iscc.ca.gov.

Symposium at the "Gateway to the Sequoias"

This year's Symposium in Visalia brought many weed workers to the San Joaquin Valley despite the challenging economic times. We started on Wednesday with the new Herbicide Control Methods Field Course where attendees received an overview of when different types of chemical control are appropriate, proper methods for using herbicides, and legal requirements.

The main Symposium began Thursday morning with three invited speakers ad-

dressing "Wildland Weed Management on the Leading Edge". Thirty-four speakers, 21 poster presentations, and eight discussion groups gave the 250 attendees the opportunity to learn about everything from "Herbicide Ballistic Technology" to how selecting the most competitive native plants in restoration may keep invasive weeds from returning. A round of Pesticide "Jeopardy!" designed by former Cal-IPC board member David Chang livened up the Laws and Regulations session. Climate change cannot be far from land managers' minds these days so we invited three speakers to address

that topic Friday morning. On Saturday, attendees visited restoration projects at Sequoia-Kings

> Canyon National Parks, Atwell Island, and Kaweah Oaks Preserve. The program and presentations are posted at www.cal-ipc.org; Symposium Proceedings will be available soon.



Cal-IPC is increasing its efforts to reach out to students and others new to weed work as a profession. The Cal-IPC Student Chapter organized a panel discussion on career opportunities and a lunch to help students learn how they can get involved in Cal-IPC.

In addition to providing attendees with the latest information on invasive plants, the Symposium offers an opportunity to catch up with other weed workers and even have some fun during the raffle and happy hour! The raffle and live/silent auction raised \$5,590 to support Cal-IPC's programs thanks to the donors and all who purchased tickets or bid on auction items.

Finally, we congratulate all of our award winners, including the Student Paper and Poster Contest winners (see next page).

Above: Bruce Delgado models Ken Moore's custom-designed tool belt, a prize in the live auction, and also shows off his new Cal-IPC bandanna. *Photo: Bob Case*

Below: The Grand Weed Tour field trip in front of the General Sherman Tree, largest in the world by volume, at Sequoia National Park. *Photo: Heather Brady*

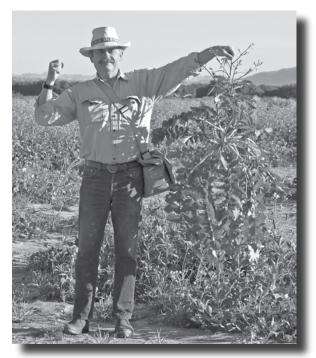




Attendees at the Herbicide Control Methods Field Course learn how to calibrate chemical application rates (water was used for the demonstration).

Turn the page for more on the Symposium...

More from the Symposium...



"Africa weed hunter strikes again!" Saharan mustard (Brassica tournefortii) in Anza-Borrego Desert State Park By Sonja Lane, submitted by Paul Johnson. 2009 Photo Contest.



2009 Student Contest Winners Heather Schneider (paper) and Kristin Weathers (poster), both from UC Riverside.

Thank you Symposium sponsors!

Gold Sponsors

ACS Habitat Management

California Dept. of Food & Agriculture – Integrated Pest Control Branch

California Native Plant Society:

Channel Islands, East Bay, El Dorado, Kern Co., Los Angeles/Santa Monica Mtns., Marin Co., Mount Lassen, Orange Co., Riverside/ San Bernardino, Sacramento Valley, Santa Clara Valley, Santa Cruz Co., Sierra Foothills, and Yerba Buena chapters, and the State CNPS office.

DeAngelo Brothers, Inc.

Dudek/Habitat Restoration Sciences, Inc.

Pacific Gas & Electric (PG&E)

RECON Environmental, Inc.

Santa Ana Watershed Association

USDA Forest Service

Silver Sponsors

Hedgerow Farms
National Park Service - CA Exotic Plant Mgmt Team
Natures Image, Inc.
Target Specialty Products

Bronze Sponsors

Dendra, Inc.

Dow AgroSciences

DuPont Land Management

Habitat West, Inc.

ICF International (formerly ICF Jones & Stokes) Laguna de Santa Rosa Foundation

Green Sponsors

American Conservation Experience B&J Trading, LLC California Native Grasslands Association

California Soc. for Ecological Restoration (SERCAL)

Forester's Co-Op

San Elijo Lagoon Conservancy

Congratulations to the 2009 award winners!

Jake Sigg Award for Vision & Dedicated Service: Steve Schoenig of the California Dept. of Fish & Game, formerly with the California Dept. of Food & Agriculture.

Golden Weed Wrench Award for Land Manager of the Year: Joanna Clines, botanist on the USDA Sierra National Forest.

Ryan Jones Catalyst Award: Graduate students Sara Jo Dickens and Heather Schneider of UC Riverside for starting the Cal-IPC Student Chapter.

Invasive Plants Policy Award: A.G. Kawamura, California Secretary of Food & Agriculture, for leading the creation of the state's new Invasive Species Council and supporting Weed Management Areas.

Wildland Weeds Program form Award Organization of the Year: The Nature Conservancy's Global Invasive Species Team for the resources they provided to weed workers around the world before they fell victim to budget cuts earlier this year.

Student Paper Contest: Heather Schneider, UC Riverside, "Evening the odds: Evaluating the combined effects of nitrogen fertilization and exotic annual removal on native annual forbs in the Colorado Desert."

2nd Place: Sara Jo Dickens, UC Riverside. 3rd Place: Gavin Archbald, San Francisco State University.

Student Poster Contest: Kristin Weathers, UC Riverside, "Adapting an agricultural technique for use in wildlands: Testing variations on solarization for invasive control in a severely disturbed plant community." 2nd Place: C. J. Rowe, University of Nevada-Reno. 3rd Place: Irina Irvine, UC Irvine.

Photo Contest: "If Only Crack Killed Weeds" By Alicia Medina, submitted by Lana Meade of Año Nuevo State Reserve.



Above: We knew yellow starthistle was bad but who knew it could be deadly? "Big Bad Thistle. Mount Diablo State Park, Contra Costa County." *Photo: Cyndy Shafer, 2009 Photo Contest.*

Right: Attendees came by car, train, and bicycle to Visalia!

See more photos at www.flickr.com/photos/cal-ipc



Hands-on learning in Chico

Lise Smith-Peters, City of Chico

Chico High School horticulture students are learning first hand about California's native plants while also removing invasive plants in Bidwell Park, a 3,670 acre City of Chico park. Through a partnership between the City's Bidwell Park Volunteer Program and Chico High, students will start their second year of cultivating over 25 different native plant species in their school's greenhouse.

As the volunteer coordinator for Bidwell Park, I approached CHS horticulture teacher Quinn Mendez in the summer of 2008 to see if her students could grow plants for the Park. It was a natural fit to have horticulture students, who are already learning about cultivating plants to grow plants for the Park's restoration areas. For the 2009-2010 school year students will learn how to prepare and cultivate the seeds and then start seeds collected through the summer by volunteers and Park Division staff.

These students are junior and seniors and according to their teacher Ms. Mendez, "It is a great opportunity for the students to learn about the Park's diverse native flora while being exposed to the multitude of careers in habitat restoration, environmental

science, biology/botany and plant propagation for nurseries." An added bonus comes from the students working alongside local professionals in their greenhouse as well as in Bidwell Park.

At least one of their field days will involve removing invasive weeds from the Park and afterwards planting in their place some of the native species they started and cared for in their greenhouse. Each year, Bidwell Park volunteers contribute thousands of hours toward restoring the Park's diverse habitat throughout the Big Chico Creek watershed. Volunteers of all

ages and backgrounds help remove non-native invasive weeds and plant native trees and understory plants grown in the Chico High School greenhouse.

For more information about the Park Division's native plant project with Chico High School, contact Lise Smith-Peters at 530-896-7831.

In memory of John Copeland

Susan Mason, Friends of Bidwell Park

Chico's intrepid weed warrior John Copeland passed away recently at age 90. Upon retirement from a long career as a pediatrician, John renewed his childhood interest in botany and natural habitats. He became the California Native Plant Society Mt. Lassen Chapter's Exotic Species Chair and, for many years, provided a display at their Wildflower Show to educate people about the impacts of invasive plants. He was also a member of the Bidwell Park and Playground

Commission for almost 10 years, offering a natural resources management perspective to the group.

John didn't just talk about native plants and weeds, though. In his retirement, he led numerous CNPS field trips. About 15 years ago, John started what was probably the first volunteer invasive plant re-



moval program in Butte County, pulling out Spanish broom from the Bidwell Park portion of the Big Chico Creek watershed. This effort has since expanded to encompass the entire upper watershed. In order to successfully remove those broom plants, he was the first local person to buy a weed wrench (back when they were put together with cotter pins).

Up to last fall, John was still wielding a weed wrench in Bidwell Park, removing invasive European hackberry and Japanese privet saplings. John was a role model for those of us who want to have an active and productive retirement. A lifelong learner, his enthusiasm and willingness to share his knowledge inspired many others to become active in restoration. His passion for the work will live on in those he inspired.



Chico High School students cultivate native plants for Bidwell Park. *Photo: Lise Smith-Peters*

A new invasive raspberry?

Rich Marovich, Streamkeeper, Lower Putah Creek Coordinating Committee

At first I thought it was kudzu. I was making trails through a dense thicket of Himalayan blackberry (Rubus armeniacus) and occasional clumps of arundo on a 17-acre riparian parcel on the south bank of Putah Creek about 2 miles west of Winters in Yolo County. We had just leased an ASV RC100 tractor with 18-inch wide rubber tracks and enough power to open trails in a landscape that had not seen human visitors in several decades. The area had been extensively mined for gravel and stripped of all vegetation until the early 1970s. Then it was abandoned to native riparian vegetation and invasive weeds. The forest canopy was occupied by native trees, chiefly cottonwood and willows but the understory was a nearly solid thicket of Himalayan blackberry ranging from four to eight feet high.

As I pushed a trail through the berries with a root grapple, my visibility was often limited to a thin strip of daylight at the top of the front window. Deadfall and storm debris littered the ground underneath. I pushed aside logs that were too large to lift and pushed wads of blackberry off to the side. My goal was to make parallel transects every 100 feet for subsequent access to spray the blackberries and arundo with a sprayer mounted on an Argo, an 8-wheel amphibious ATV. Eventually I came to a clump of arundo that I thought was along the edge of the creek. I slowly pushed a hole through the arundo and out the other side. There I was amazed to see a lush green vine completely covering all vegetation like a tent, except for the very tops of trees that protruded above. It was clearly not Himalayan blackberry.

The spines and fine white hairs on the undersides of the leaves suggest a hybrid of *Rubus leucodermis*, whitebark raspberry, according to Larry Alice of the Department of Biology, Western Kentucky University, who is working on identification of *Rubus* hybrids for a book on flora of North America. According to the USDA Plants Profile (plants.usda.gov), whitebark raspberry ranges in size from one to three meters. The apparent hybrid that I observed was six meters or greater in height. Most striking

was the absence of winter dormancy. In February 2005, the surrounding thicket of *Rubus armeniacus* retained green leaves but there was no sign of new growth. We treated all of the *Rubus armeniacus* at this site in 2005 while the riparian forest was dormant and returned to tread the hybrid raspberries the following winter with an aquatic-safe formulation of glyphosate herbicide, buffer, surfactant and activator.

Control was nearly complete from one application, except for the trails where the vegetation had been scoured and therefore did not receive treatment. The hybrid raspberry that once covered approximately an acre has been reduced to a small number of escapes that we will sample and send to Larry Alice for further identification. There have been no other sightings of this hybrid in our watershed.

Please report any additional sightings of this plant to Cal-IPC. Contact the author at RMarovich@scwa2.com.



Hybrid raspberry taking over an area of riparian forest of Putah Creek west of Winters in February 2005. *Photo: Rich Marovich*



Spraying Rubus armeniacus from an Argo sprayer. Photo: Rich Marovich

Invasive plant conference in South Africa

Gina Darin, California Department of Water Resources,

Nearly 30 nations from around the world were represented by 230 researchers, land managers, government representatives and students in Stellenbosch, South Africa, this August for the tenth international conference on the Ecology and Management of Alien Plant Invasions (EMAPi10). California attendees included Carla Bossard, St. Mary's College (poster presentation), Marcel Rejmánek, University of California, Davis (invited keynote speaker), and myself (paper presentation).

Program session topics ranged from the biology and ecology of invasive plants to policy and management, and focused mainly on environmental weed issues (sounds like an international Cal-IPC Symposium!). Several themes emerged throughout the conference:

- 1) Can we live with aliens by choosing a lesser of two evils or using aliens to our advantage, such as in biofuels or phytoremediation?
- 2) Don't say more than you can back up with good data because expert opinion has limitations; and
- 3) The greatest impacts of plant invasions are to the poorest of people, such as rural Africans, whose livelihoods depend on the natural environment around them. (Fishermen are injured or killed by hippo attacks because water hyacinth on the shoreline forces them to canoe out to deeper water.)

Three presentations that demonstrate the diversity of topics covered are 1) "Better the devil you know than the devil you don't: Submerged aquatic weed invasions in South Africa" by Julie Coetzee, 2) "The Canadian approach to weed risk assessment: Plants as

riverbank formerly covered in *Sesbania punicea* (red sesbania) had hardly a plant to be seen thanks to a suite of biocontrol agents, including a bud-feeding weevil (*Trichapion lativentre*); a seed-feeding weevil (*Rhyssomatus marginatus*); and a stem-boring weevil



A cheetah lounges in front of some giant reed (*Arundo donax*) at Cheetah Outreach in Spier, South Africa. *Photo: Gina Darin*

pests" by Ken Allison, and 3) "Causes and consequences of plant invasions: Our current understanding" by Marcel Rejmánek.

One working lunch focused on helping the South African government improve its early detection and rapid response system. As the only United States representative in the room, I offered some of California's experiences from the Department of Food and Agriculture's Noxious Weed Eradication Program and the National Park Service's

Strike Team, and I introduced the Bay Area Early Detection Network.

On the second day of the conference, my husband and I joined the field trip to biological control sites in the Slanghoek Valley outside Stellenbosch. On the field trip we saw galls of *Dasineura rubiformis* on invasive *Acacia mearnsii*, hillsides recently cleared of *Hakea seericea* thanks to the combined effects of a seed-feeding weevil biocontrol agent (*Erytenna consputa*) and mechanical clearing. A

(Neodiplogrammus quadrivittatus). Since we were in wine country (South Africa's Napa Valley!), we stopped for lunch at a winery and had a great time.

In his concluding remarks, Dave Richardson of Stellenbosch University stated, "It has been 17 years since EMAPi began, and in that time the EMAPi franchise has become the premier event for intellectual discourse on plant invasions from the most basic research to applied management techniques. Europe has made astounding progress mapping and understanding their plant invasions, but in Africa things are completely different. As a global community we need to engage to spread the word and invest in the poorest countries."

The next EMAPi conference, EMA-Pi11, will be hosted by Savaria University (founded 2,000 years ago!) in Szombathely, Hungary, September 2-5, 2011. For those of you who like to plan ahead, rumor has it that EMAPi will be in Brazil in 2013 and Canada for 2015. For more information, see the conference website at www.emapi2009. co.za.

 $Contact\ the\ author\ at\ gsdarin@water.ca.gov.$



Carla Bossard, Marcel Rejmánek, and Gina Darin (all of California) enjoy a tea break with Dave Richardson of South Africa. *Photo: Gina Darin*

CNPS removes weeds at Pt. Cabrillo

Photos by Mario Abreu, Dorothy King Young Chapter, California Native Plant Society

The Dorothy King Young Chapter of the California Native Plant Society held their first annual weed removal day at Point Cabrillo Lighthouse in Caspar, Mendocino County. The chapter covers the entire coastal area of Mendocino County and the northern coast of Sonoma County. Membership includes the communities of Jenner, Gualala, Sea Ranch, Point Arena, Mendocino and Fort Bragg. For more information on their activities, visit their website at www.dkycnps.org.





Above: Cape ivy ready for disposal. **Left:** Volunteers carry bags of weeds towards the lighthouse.

NEW T-SHIRTS, BANDANNAS, & PINT GLASSES!

CALL 510-843-3902 OR GO TO WWW.CAL-IPC.ORG/SHOP TO ORDER.

T-SHIRTS have short sleeves in army green, pre-shrunk, 100% cotton, with a Cal-IPC logo on the front and "Weed Warrior" on the back in yellow and black. Sizes S-XL, \$20 plus \$6 s/h.

BANDANNAS are 20 in.², 100% cotton, hand tie-dyed by former Cal-IPC board member Marla Knight. "Weed Warrior" and our logo in opposite corners. Choose blue/green, orange/pink, green/brown, or light green. \$10 plus \$6 s/h.

See color photos of t-shirts and bandannas on the website above.

PINT GLASSES from the Cal-IPC Student Chapter feature a garden gnome holding a plume of pampasgrass. Proceeds benefit the Student Chapter. Contact calipcsc@gmail.com to order.







Thank You for Supporting our Work!

Recent Donors

Your tax-deductible donations are extremely valuable in supporting our programs. Thank you!

Stewardship Circle (\$1,000 and above) **Jake Sigg** (San Francisco)

Patron (\$500-\$999)

David Chang (Santa Barbara) Lillian & Gary Giessow (St Louis, MO)

Champion (\$250-\$499) T. Charles Moore (Sunnyvale)

Contributor (\$100-\$249)

Gloria Gonick (Los Angeles) Henry Gonzales (Ventura) John Osborn (Oakland) Elizabeth Earthman & Reid Bryson (Davis)

Friend (up to \$99)

Jason Allen (San Diego), Robert Berman (Albany), Skyler Bishop (Del Mar), Patricia Boaz (La Jolla), Alice Cartwright (Carmichael), Gina Darin (West Sacramento), Dana Drucker & Tivon Schardl (Sacramento), Marcia Gibbs (Winters), Eril Groessl (Leucadia), Alicia Herts (Agoura Hills), Simon Horenstein (Encino), Mike Kelly (San Diego), Carlos & Jolie Kelvin (Rancho Santa Fe), Celia Kutcher (Capistrano Beach), Diane Langager (Encinitas), Patrick McConnell (San Diego), Tiffany Meyer (Davis), Judith Mitchell (Fallbrook), Carri Pirosko (Burney), Elizabeth Proctor (San Francisco), E. Ringelberg (Woodland), Brad Roth (Cardiff), Geoff Smith & Camille Armstrong (San Diego), Jean Starkweather (San Rafael), Cindy Steinschriber (Los Angeles), Sara Sweet (Galt), Craig Thomson (Davis), Morgan Vondrak (Escondido), Becky Waegell (Sacramento), Andrea Yribe (Roseville), Anonymous (United Way: Bay Area, Sacramento, and Capital Regions)

"Run for the Wildlands"

Dorothy Abeyta (San Jose), Charles Ables (Carmel), John Anderson (Winters), Joan Bockman (Oceanside), Myra Booher (Thomasville, GA), Cynthia Brinkhurst (Grass Valley), Linda Brodman (Santa Cruz), David Brown (Newfield, NY),

Jason Casanova (Los Angeles), Bob Case (Concord), Cameron Chabre (Monterey), David Chang (Santa Barbara), CNPS Monterey Bay Chapter (Monterey), CNPS Yerba Buena Chapter (San Francisco), Aimee Cooper (Gainesville, FL), Claudia DeCastro (Albany, NY), William Denneen (Nipomo), Nicholas Diacetis (Richmond, VA), Eli Dickerson (Atlanta, GA), Donna Dormody (Carmel), Sarah Estrella (Davis), Sharon Farrell (El Cerrito), Nancy Forster (Davis), Ellen Gartside (Half Moon Bay), Jason Giessow (Encinitas), Paul Gobster (Chicago, IL), Marc Gomes (Monterey), Shana Gross (South Lake Tahoe), Jon Hall (Morro Bay), Jim Hanson (Oakland), Andy Hergert (Seaside), Stan Hooper (Los Altos), Julie Horenstein (Sacramento), Ann Howald (Sonoma), Susan Hubbard (Salinas), Tim Hyland (Felton), Marie Jasieniuk (Davis), Doug Johnson (Albany), Drew Kerr (Berkeley), Helen Lindqvist (Tiburon), Lucy Lynn (Felton), Stephanie Madson (College Park, GA), Ed Martin (Nevada City), Patrick McCormick (Richmond, VA), Christina McKnew

(Marina), Sean McStay (Santa Cruz), Michael Meisenburg (Gainesville, FL), Peggy Moore (El Portal), Jeanne Nakazawa (Berea, KY), Joseph Navaraez (Monterey), Lynn Overtree (Royal Oaks), James Pea (San Diego), Carri Pirosko (Burney), Barbara & Roland Pitschel (San Francisco), Kristen Puryear (Topsham, ME), Don Race (Victor, NY), Steve Schoenig (Davis), Anni Self (Burns, TN), Kelly Shuler (McArthur), Jake Sigg (San Francisco), Dan Songster (Lake Forrest), Kate Symonds (Cotati), Rob Thompson (Monterey), Shana Udvardy (Atlanta, GA), R. Van Alstyne (Ft Bragg), Wendy West (Placerville)

Symposium Raffle & Auction Items

Edie Allen, Anchor Distilling, John Anderson, Charlie Blair, Elizabeth Brusati, Cache Creek Vineyards, California Dept. of Fish & Game, Center for Invasive Plant Management, Jason Casanova, Bob Case, David Chang, Gina Darin, Athena Demetry, Joe DiTomaso, Molly Ferrell, Doug Gibson, Jason Giessow, Hedgerow Farms, Julie Horenstein, Jessica Hughes, Island Pack-



Former board member Carolyn Cromer (left) returned from Kentucky to help Cal-IPC Program Assistant Bertha McKinley supply Symposium attendees with books, t-shirts, and other Cal-IPC gear. *Photo: Bob Case*

ers, Judy Johnson, Steve Junak, Tom Killion, John Knapp, Marla & Rachel Knight, Susan Levitsky, Gary Lindquist, Marine Room, Mr. McDonald, Bertha McKinley, Tanya Meyer, Rich Minnich, Ken Moore, Bill Neill, Laurel Neme, Ron Oswald, Carri Pirosko, River Ridge Ranch, Mona Robison, Rominger West, Steve Schoenig, Shawn Taylor/Exclusive Mechanical Systems Ltd., Ceiridwen Terrill, Trader Joe's, Tulare County RCD, Lotus Vermeer, Wendy West, Hugh Williamson.

Symposium Student Fund

Edith Allen, Charles Blair, Mike Blankinship, Robert Case, Ronald Clark, John Ekhoff, Jim Hanson, Ingrid Hogle, Jim Versteeg, Peter Warner

New Members

Eric Aanrund (Delano), Emily Allen (Winters), Jason Allen (San Diego), Claudia Allen (Visalia), Rebecca Andrade (Petaluma), Erin Avina (Thousand Oaks), Melanie Baer-Keeley (Three Rivers), Bob Bain, Brian Baldauf (Redondo Beach), Korinne Bell (Santa Paula), Mike Blankinship (Davis), Wendy Boes (Nevada City), Candice Byrum (San Francisco), Chelsea Carey (Merced), Seta Chorbajian (El Portal), Tessa Christensen (Paicines), Ronald Clark (Bonsall), Carole Combs (Three Rivers), Lissa Daniels (Scotts Valley), Denise Defreese (El Cerrito), Erin Degenstein (Three Rivers), Curt Deuser (Boulder City), Ann Dorsey (Thousand Oaks), Mason Dungy (Hollister), Jim Etters (Brooks), Kevin Fox (Newark), Michael Fry (San Ramon), Cory Gallagher (Lake Forest), Ellen Gartside (Half Moon Bay), Dorie Giragosian (Bakersfield), Liz Goebel (Winters), Jihadda Govan (Delano), Jennie Haas (Groveland), Sean Hardy (Sacramento), Will Harrison (Santa Fe Springs), Michelle Hart (Lemon Cove), Jesse Heiny (Santa Rosa), Patricia Hickey (Point Reyes Station), Kelly Hickman (South Lake Tahoe), Denny Hoeh (Modesto), John Holt (San Diego), Ann Huber (Three Rivers), Joshua Huffman (Susanville), Susan Hult (Bakersfield), Irina Irvine (Thousand Oaks), Jean Kaiwi (San Diego), Rachel Kesel (San Francisco), Ernie Klemm (Ramona), Beth Koh (Berkeley), Karl Kraft (Bakersfield),

James Leary (Kula, HI), Mark Linton (Porterville), Heather Liu (Goleta), Joe Loehner (Springville), Shannon Lucas (Whittier), Leah MacCarter (Avalon), William Maslach (Mendocino), Jamie McFarlin (San Francisco), Lana Meade (Felton), Lizo Meyer (Three Rivers), David Minnesang (Temecula), Amber Morris (Sacramento), Caroline Nelson (El Portal), Tyler Nielsen (Dublin), Cathy Nowak (Silverado), Mary Ose (Sacramento), Greg Paboojian (Reedley), Tom Person (La Cresenta), Robert Phillips (Visalia), Jeff Quiter (Winters), Christine Rainbolt (Fresno), Robert Rhew (Berkeley), Vincent Rico (Reedley), Sharon Roach (Pollock Pines), Dee Rosario (Oakland), Eddie Rosas (Escondido), Chris Sauer (Napa), Paula Schiffman (Northridge), Brian Schmid (Sacramento),

Price Sheppy (San Francisco), Zachary Silber-Coats (Capitola), Heather Smith (El Portal), Richard Spjut (Bakersfield), Warren Steiner (Cheverly), Kristiaan Stuart (Chico), Greg Suba (Sacramento), Jim Sullins (Visalia), Lynette Sullivan (Cedarville), Tony Summers (Avalon), Amelia Swenson (Avalon), Sarah Swope (Albany), **Kathryn Taylor** (Sacramento), Larry Teves (Tipton), Ed Thompson (West Lafayette), David Thomson (Alviso), Ella Thurston (Raymond), Michael Tom (Honolulu, HI), Erica Uhor (Paicines), Ruth Vallejo (San Diego), Evan Walden (Sacramento), Thomas Warner (Three Rivers), Stan Williams (Escondido), Heather Wood (Yreka), Craig Zaich (Lake Forest)



Above: The Symposium is a great place to catch up with old friends: Cal-IPC founding members Mike Kelly (left) and Nelroy Jackson (center) with former board member Bill Winans (right). *Photo: Bob Case.*

Bottom: Field trip to Kaweah Oaks Preserve. Photo: Elizabeth Palmer



Readings & Resources

Know of a resource that should be shared here? Send it to edbrusati@cal-ipc.org.

DITTRICHIA GRAVEOLENS-

NEW THREAT TO SANTA ARA COUNTY

Stinkwort brochure

The Santa Clara Weed Management Area offers a brochure on the lifecycle and control of stinkwort (*Dittrichia graveolens*). The brochure also contains a phone number for reporting new stinkwort populations in Santa Clara County. www.cal-ipc.org/WMAs/Santa_Clara_WMA.

Invasive plants and wildfires

A new, free publication from the University of California describes how to recognize and control invasive plants in Southern California ecosystems to reduce the risk of wildfire. anrcatalog.ucdavis.edu/Items/8397.aspx

Updated WMA website

CDFA has redesigned its website on California Weed Management Areas with new information on projects funded through WMA Supplemental Grants. www.cdfa.ca.gov/phpps/ar/ipc_wma.html

National Parks early detection program

The Bay Area Network of National Parks has completed its protocol for "Early Detection of Invasive Plant Species in th San Francisco Bay Network: A Volunteer-based Approach" and the report is available on their website as a pdf file (5 MB). science.nature. nps.gov/im/units/sfan/vital_signs/Invasives/docs/SFAN_EarlydetectionV1.4.pdf

Free web seminar series

The Center for Invasive Plant Management and the Western IPM Center will offer a free online seminar series on *Invasive Plant Inventory and Survey Methods for Landowners* in January and February 2010. Advance registration required. www.weedcenter.org

BMPs for aquatic weeds

The Aquatic Ecosystem Restoration Foun-

dation recently updated their Best Management Practices for Invasive Aquatic Weeds. "Biology and Control of Aquatic Plants - A Best Management Practices Handbook" may be downloaded from the AERF website. www.aquatics.org/bmp.htm

Biofuels recommendations

The federal Invasive Species Advisory
Committee has released recommendations
on developing biofuels that will not spread
invasive species. "Biofuels: Cultivating
Energy, not Invasive Species" gives
recommendations on evaluating potential
biofuel crops, choosing appropriate places
for cultivations, and strengthening federal
programs on early detection and rapid
response. www.invasivespecies.gov/home_
documents/BiofuelWhitePaper.pdf

Website for horseowners

Weed Free Feed is a partnership of horseman protecting public lands from invasive weeds. Its emphasis is on assisting horseowners who are public land trail riders, horsecampers and packers. Their website contains information on weed free forage certification and weed identification. www.weedfreefeed.com

Continued page 15

Cal-IPC to hire for stimulus-funded projects in 2010

Thanks to federal stimulus funding through the American Recovery and Reinvestment Act, Cal-IPC expects to expand our programs for mapping invasive plants and training weed workers in 2010. Below are positions we anticipate advertising when ARRA contracting is complete. Please circulate to potentially interested colleagues.

Mapping Project Manager (full-time for two years, located in Berkeley) Will oversee statewide mapping effort, focused on collecting expert opinion data in partnership with Weed Management Areas. Will coordinate development of online data inventory system and early detection tools. Oversees Mapping Specialist positions (below) and contractors.

Mapping Specialists (two positions, full-time for two years, location flexible) Will serve as direct liaisons with Weed Management Areas, collecting distribution data from expert opinion, GIS datasets, and field mapping.

Training Project Manager (full-time for two years, located in Berkeley) Will oversee development of curriculum and training tools on invasive plant control to reach new audiences, especially

to those losing jobs in the forestry field. The program will work on creating a certification program for wildland weed management.

Training Specialist (full-time for two years, location flexible) Will support the Training Project Manager. Responsible for logistics of organizing trainings.

Business Manager (full-time, permanent, located in Berkeley) Will oversee contracting, accounting, grant management, human resources, and facilities for the federal stimulus contract (50%) and support grant writing, donor campaigns, and program budgeting for other Cal-IPC programs (50%).

Contractors Some funding will support outside contractors to implement particular aspects of the mapping and training projects. In particular, development of an online data inventory system will included extensive work by contractors.

Full position descriptions and application instructions will be posted at www.cal-ipc.org when ARRA contracting is complete.

THE WILDLAND WEED CALENDAR

November-December

Central California Invasive Weeds Symposium

"Fire, Water, Action"

November 13

Santa Cruz Co. fairgrounds, Watsonville bree@elkhornslough.org

Cal-IPC Field Courses (new dates!)

December 9 - Control Methods December 10 - Mapping

Audubon Center at Debs Park, Pasadena www.cal-ipc.org/fieldcourses

National Conference on Grazing Lands

December 13-16

Reno/Sparks, NV Society for Range Management www.glci.org

January-February

National Invasive Species Awareness Week

(Formerly National Invasive Weeds

Awareness Week)

January 10-14

Washington, DC

www.weedcenter.org/nisaw

California Weed Science Society

"Looking into the Future of Weed Control"

January 11-13

Visalia

www.cwss.org

Northern California Botanists Conference January 11-13

California State University - Chico www.norcalbotanists.org

Natural Resources Communication Workshop

January 11-15

California State University - Chico Sponsored by The Wildlife Society -Western Section joomla.wildlife.org/Western

The Wildlife Society - Western Section Conference

January 26-29

Visalia

joomla.wildlife.org/Western

Society for Range Management & Weed Science Society of America

February 7-10

Denver, CO

www.rangelands.org/denver2010

March and beyond

Western Society of Weed Science

March 8-11

Waikoloa, HI

www.wsweedscience.org

Invasive Weed Awareness Day at the Capitol

March 10

Sacramento

www.cal-ipc.org

SERCAL Annual Conference

May 19-22

Mammoth Mountain www.sercal.org

International Conference on Aquatic Invasive Species

August 29-September 2

San Diego

www.icais.org

Cal-IPC 2010 Symposium

October 13-16

Ventura

www.cal-ipc.org/symposia

Readings and Resources, cont'd

Invasive mussel videos

The Idaho Department of Agriculture has produced an online video to educate boaters and other lake users on quagga and zebra mussels and to describe the state's boat inspection program. www.youtube. com/watch?v=J4EVAy8adMk (or search for "invasive mussels" on YouTube.)

Invasive animal video

Defenders of Wildlife has created a short video showing Burmese pythons as a way to encourage legislation to regulate the live animal trade and prevent more invasions. www.defenders.org/invasion

Quotable

Community is everything. This event was not about me doing something extraordinary. It was about an ever-expanding community of people rallying around one of their own in order to accomplish something extraordinary."

- Cal-IPC Board Member Cheryl McCormick, writing on her blog after running 100 miles on August 27 (see page 3).
- Invasive foreign pests and diseases are scarring landscapes in neighborhoods, city parks, ski slopes and hiking trails, and killing the trees that bring us maple syrup, fine furniture and Major League Baseball bats."
 - Faith Campbell, The Nature Conservancy, in TNC's press release supporting updated Q-37 regulations for importing ornamental plants (see page 2).



1442-A Walnut Street, #462 Berkeley, CA 94709

ADDRESS SERVICE REQUESTED

Is it time to
renew your membership?
Look above your name
at right....

Non-Profit Org. U.S. Postage PAID Berkeley, CA Permit No. 1435

Cal-IPC Membership Form

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

Cal-IPC's effectiveness comes from a strong membership that includes scientists, land managers, policy makers, and concerned citizens. Please complete this form and mail with check or credit card number. Additional donations support our projects. We are a 501(c)(3) non-profit organization, and donations are tax deductible. Join or donate online at www.cal-ipc.org.

Membership		Donation		
☐ Regular	\$40	☐ Amount of gift		
☐ Student/Volunteer	\$20	Friend (\$1 - \$99)	Name	
☐ Organization*	\$150	Contributor (\$100 - \$249)	Tvarrie	
* Receives member benefits for three individuals. Attach contact information for add'l individuals.		Champion (\$250 - \$499) Patron (\$500 - \$999)	Affiliation	
Joint Memberships		Stewardship Circle (\$1,000+)		
☐ SERCAL only ☐ CNGA only ☐ SERCAL & CNGA	add \$25 add \$35 add \$65	☐ I would like to consider a legacy gift. Please send infor- mation on planned giving.	Address	
_	ılendar year. Those year. Joint member		City	State Zip
Check here if you would prefer to receive the <i>Cal-IPC News</i> as a link to a pdf file online rather than a paper copy.			Phone	
Occasionally, we share members' addresses with like-minded organizations. Check if you <i>do not</i> want your information shared.			E-mail	
Mail this form with check (payable to "Cal-IPC") or credit card info to: Cal-IPC, 1442-A Walnut Street #462, Berkeley, CA 94709			Credit Card No.	Exp. Date