

I am using this 'Newsletter' to distribute information about weed and invasive issues and trainings. If your group is doing something that you think may be of interest to the rest of the group please send it to me at jaroncoroni@ucdavis.edu and I will put it in the 'Newsletter.' I recently attended the Western Society of Weed Science Annual Conference in Spokane. Many of the attendees presented posters and papers on invasive plants. In the coming months I will include research reports and articles in the Newsletter.

The two items in this issue of the newsletter describe the process from BAEDN to voucher the presence of a new weed and a couple of field training sessions on this technique offered by BAEDN and Cal-IPC.

My name is not listed as a resource for identifying weeds in Napa (my fault). But please send me a picture, or bring a live sample down and I will give it my best shot- or I can bring it to UCDavis.

Looks like the rain is going to continue for awhile-

There may be plant invaders everywhere this spring,

John

*The Bay Area Early Detection Network
& California Invasive Plant Council present:*

Field Techniques

for Recording and Reporting Invasive Plants

**Don Edwards National Wildlife
Refuge,
9500 Thornton Avenue
Newark, CA
Wednesday, April 6, 2011
8:30am – 5:00pm**

**Sky Oaks Watershed Headquarters,
49 Sky Oaks Road,
Fairfax, CA
Friday, April 8, 2011
8:30am – 5:00pm**

This hands-on one-day course, being taught in two locations, is designed to train both volunteers and professionals in field techniques for mapping and reporting invasive plant occurrences.

Learn field techniques, including:

- Field safety, tips & tricks
- Estimating and measuring distance and cover
- Vouchering techniques
- Occurrence reporting
- Mapping & data-gathering standards and techniques
- Data management
- Training and communication for your program



Expert Instructors: Andrea Williams, Dan Gluesenkamp, Robin Breckenridge, Katie Filipini, and more to be announced.

Who Should Attend: These trainings are for both volunteers and professional who are involved with invasive plant occurrence reporting.

Registration: Course Fee: \$40. Cal-IPC membership is included with registration. Members receive a quarterly newsletter from Cal-IPC with the latest news on control methods, policy, and projects, discounts on Cal-IPC Wildland Weed Field Courses and updates on breaking news.

Register at www.cal-ipc.org

This course includes continental breakfast and reference information about course topics. Lunch will not be provided; please bring a brown bag lunch.



For more information contact BAEDN through www.baedn.org or the California Invasive Plant Council at 510.843.3902 or visit www.cal-ipc.org

Collecting Voucher Specimens

Having a physical voucher of a plant, especially a potentially new record for a county or a park, is still the preferred method of proving an observation. Vouchering adds third-party expert certification as well as a physical record that can be later re-examined. The Bay Area Early Detection Network (BAEDN) encourages vouchering high-priority early detection plant species as a means of bolstering the certainty of photographs and reports associated with early detections.

If you do not know what a plant is, and there are fewer than 20 in an area, do not collect it but take good location information and photographs and send them to unknown@baedn.org. Volunteers and inexperienced observers should take only photographic vouchers of any unknown species. More experienced botanists may field-key or choose to voucher.

Collection restrictions and safety considerations should always be weighed prior to collecting voucher specimens. Some land management agencies such as the National Park Service require permits for collecting. Collections along roadsides should be made only when it is safe and legal to do so. It is not safe or legal to stop on along highways to collect plant samples.

Vouchers should be collected in the following situations:

- for expert identification of an unknown;
- to record a new species for a site's plant list;
- to record a significant range expansion for a species (*e.g.*, first county record);
- to document species that will be treated by BAEDN;
- to support and verify your study, monitoring, or treatment of the species.

A collection should also be accompanied by photographs of the plant *in situ* to capture characteristics that may be lost during pressing.

An example of a mounted herbarium specimen is provided here (click on the image to see it enlarged) http://ucjeps.berkeley.edu/cgi-bin/new_detail.pl?JEPS104252.

Collecting Tips

Plants are best keyed fresh, so field-key when possible. Tiny-flowered plants are especially difficult to key when wilted or pressed. If field-keying is unsuccessful, press some and bag some in a plastic baggie. Blow it up with air and keep it moist (a small piece of wet paper in the bag helps); refrigeration will help keep your specimen fresh. Remember to label both the bagged and the pressed plants! A plastic sandwich container will also work well for delicate structures. Key or submit fresh samples immediately!

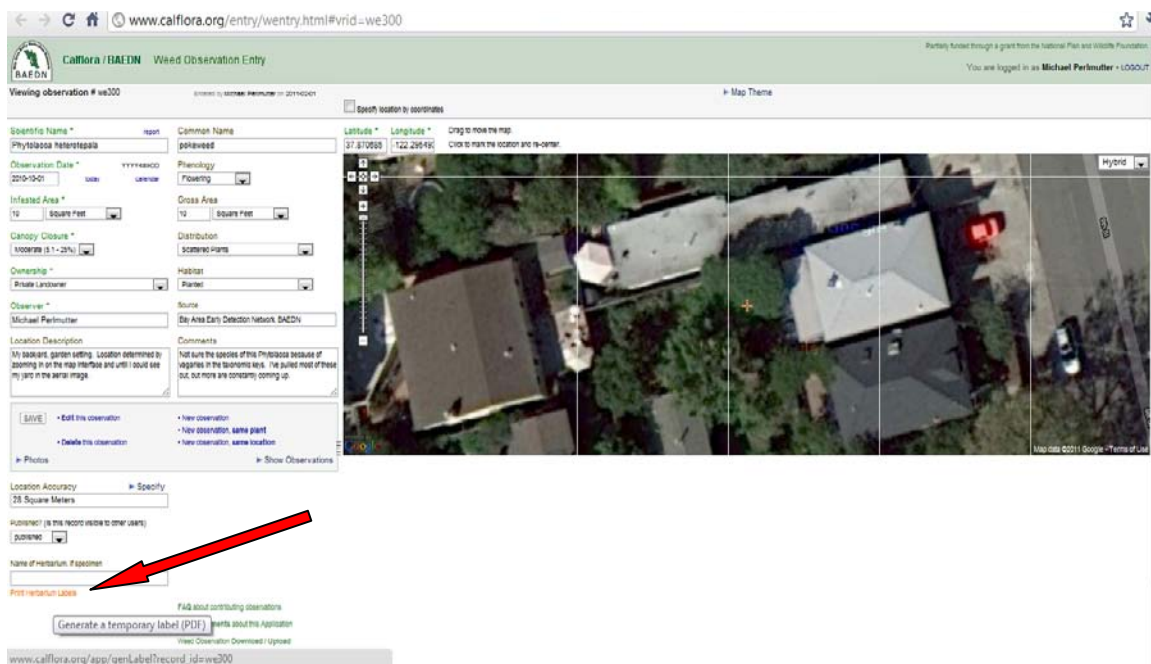
If you are collecting with the intent of creating a pressed and mounted specimen:

- Collect a representative example of the species, not the largest or smallest. Try to include many phenological stages (flowering and fruiting), since many keys use characteristics of fruit and flower. If possible, collect at least two specimens allowing for accessioning by both the CDFA and Jepson herbaria. Additional material collected for ID/keying should be labeled as such. Collect as much of the individual plant as possible, *including roots* (or a portion if rhizomatous), bulbs, vegetative and flowering/fruiting matter. If the plants are tiny, collect enough to fill about half an herbarium sheet.
- Wash as much dirt as possible from the roots and pat dry before pressing.
- If flowers are large enough, cut one or two open and press flat so the interior/cross-section can be seen. Do the same for fruits. Turn over at least one leaf so the underside will be visible in the final mounting.

Bay Area Early Detection Network: Voucher Collection Guide

- Press carefully. Typically specimens are pressed in folds of newspaper, with the label slipped in with the plant material. The standard plant press is the same size as a standard herbarium sheet (11"x17"). You can make your own plant press or purchase one, see <http://sdplantatlas.org/pdf/files/equipment.pdf> for ideas. How you place the plant in the press will generally be how it will look mounted. If a plant is large, fold it or cut it to fit, keeping branching and general form intact. Note original dimensions and photograph if possible. Plants requiring more than one sheet for proper representation should be noted by labeling the sheets "[1] of [total number of sheets]," "[2] of [total number of sheets]," etc. The herbarium will typically mount the specimen on herbarium sheets
- All records should be entered into the Calflora database to ensure digital preservation of the data. A best guess genus and species label should be assigned for uncertain identifications, along with a note regarding the uncertainty. If you are only confident of the genus, enter this preceded by an asterisk (ex: **Petasites*), and if even the genus is not known, report it as "*Unknown*." In all cases, the record should be edited once the species name is determined by experts. Additional Calflora reporting instructions for non-native plants are posted at the reporting tab at www.BAEDN.org.

Figure 1. Calflora interface



- Take copious **notes**, including the following information: **date**; **collector** and **collection number** (the collector's name and the number of specimens the collector has collected to date—e.g., Andrea Williams' 1000th specimen would be coded as "A. Williams 1000."); exact **location** in Lat/Long or UTM (from GPS—if GPS is used, specify datum such as NAD83); elevation; descriptive location (e.g. about 1 mile up Coastal Trail from Rodeo Lagoon parking lot, Wolf Ridge, Marin Headlands; do not use "local" nicknames not on any map!); county; **habitat** description (dominant species); **associated species**; characteristics that may be lost in pressing (smells, flower color, habit, stature, bark, branching patterns, etc.); study name and number/plot number if applicable. Some information (elevation, sensitivity, county) may be filled in at the office. **Many specimens are eventually discarded due to a lack of collection information—don't let this happen to yours!**

Bay Area Early Detection Network: Voucher Collection Guide



- Herbarium labels can be created directly from Calflora. After completing and saving the online occurrence record, click the “Print herbarium label” button in the left hand bottom corner of the page to generate the label. Print enough copies for each specimen. All duplicates (parts of the same plant) and individual specimens with multiple sheets should bear the label information.

Figure 2. Sample collection label printed from Calflora

Date: 2010-10-01	Collector: Michael Perlmutter	Calflora ID#: we300	Determination:
<i>Phytolacca heterotepala</i>	H. Walter		
Phytolaccaceae	pokeweed		
Coordinates: 37.870685, -122.295493 NAD83			
Location Description: My backyard, garden setting. Location determined by zooming in on the map interface and until I could see my yard in the aerial image.			Det. by:
Comments: Not sure the species of this Phytolacca because of vagaries in the taxonomic keys. I've pulled most of these out, but more are constantly coming up.			Det. date:

Remember to specify units and give any useful details!

- Notes and labels should be printed on acid free cotton bond paper and also provided electronically (a spreadsheet can be used to document multiple labels).

Early detection vouchers, as well as unknown non-native plant species, should be mailed or brought to:
Dean G. Kelch, Senior Plant Taxonomist CDA Herbarium
Plant Pest Diagnostics Center
California Department of Food and Agriculture
3294 Meadowview Road
Sacramento, CA 95832-1448
Tel. (916) 262-1733 Fax (916) 262-1190
dkelch@cdfa.ca.gov.

Alternatively samples can be brought to the local County Agriculture Commissioner’s Office (see following pages for locations and hours), where the biologist will assist in identification and/or filling out a Pest Damage Record. Regionally important specimens, or those that cannot be identified by county biologists, will be sent to the California Department of Food and Agriculture’s (CDFA) taxonomists for identification and accessioning to the herbaria.

Bay Area Early Detection Network: Voucher Collection Guide



County Agricultural Commissioner Contacts

County	Address	Phone	Email	Notes
Alameda	3575 Greenville Road, Livermore, CA 94550	925-245-0849		Every weekday from 8:30AM - 12PM a biologist is "On Duty." You can call us or bring a sample to our office for help. For general identification, bring in a sample of flowers, fruit or seeds (if present) and a stem portion with leaves attached, approximately 12 inches long.
Contra Costa	2366 A Stanwell Circle, Concord CA 94520-4807	925-646-5250		Office Hours 8AM - 5PM. For general identification, bring in a sample of flowers, fruit or seeds (if present) and a stem portion with leaves attached, approximately 12 inches long.
Contra Costa	Branch office: 3020 Second St., Knightsen, CA 94548	925.427.8610		Office Hours 8AM-8:30AM and 1PM-2PM
Marin	1682 Novato Blvd. Suite 150-A , Novato, CA 94947	415-499-6700		
Napa	1710 Soscol Ave # 3, Napa, CA 94559-1311	707-253-4357	agcommissioner@countyofnapa.org	You can bring in a specimen to the UC Cooperative Extension's Master Gardeners for identification. The Agricultural Commissioner's staff can also help identify landscape plants or unwanted weeds. Napa County Master Gardeners are available: Monday, Wednesday and Friday 9:00 am - 12 noon. 1710 Soscol Avenue, Suite 4 , Napa, CA 94559. (707) 253-4221.
San Francisco	501 Cesar Chavez St., Suite 109-A, San Francisco, CA 94124-1209	415-252-3830		
San Mateo	728 Heller Street, P.O. Box 999, Redwood City, CA 94064-0999	650-363-4700	smateoag@co.sanmateo.ca.us	A Biologist is available Monday through Friday in the afternoon at the main office (728 Heller Street, Redwood City) to assist homeowners and pest control businesses with the identification of landscape, home and structural insect pests, weeds and plant diseases.

Bay Area Early Detection Network: Voucher Collection Guide



County	Address	Phone	Email	Notes
San Mateo	Half Moon Bay Field Office	650-726-2514	smateoag@co.sanmateo.ca.us	
San Mateo	San Bruno Field Office	650-877-5763	smateoag@co.sanmateo.ca.us	
Santa Clara	1553 Berger Drive, San Jose, CA 95112	Main: 408-918-4600; Agricultural Biologist Office Duty line: 408-918-4610	scc.agriculture@aem.sccgov.org	(Biologist office hours are from 1PM - 5PM)
Santa Clara	605 Tennant Avenue, Suite G, Morgan Hill, CA 95037	Main: 408-465-2900; Agricultural Biologist Office Duty line: 408-465-2908	scc.agriculture@aem.sccgov.org	(Biologist office hours are from 8AM- 12PM)
Solano	501 Texas Street, Fairfield, CA 94533	707-784-1310	AgComm48@solanocounty.com	Samples can be dropped off Monday – Friday: 8AM to noon and 1PM to 5PM. Every weekday from 2PM to 4PM, a Biologist is on duty to answer questions, i.e., identify insects and assist with regulatory requirements. An 'Identification Slip' should be filled out for all samples.
Sonoma	133 Aviation Boulevard, Suite 110, Santa Rosa, CA 95403	707-565-2371		Bring in a sample of the plant for possible identification by the UC Cooperative Extension's Master Gardeners, 133 Aviation Blv., Ste 109, Santa Rosa Sonoma: 19722 8th St E. The sample should be freshly acquired and just packaged in clear freezer bag--not put in a bag, left to mold for a week, and then brought in. A good size sample is required, showing leaves, bark, stem and flower, if applicable.