

A Community of Stewards

**Volunteer Power and How to Educate the Public
about Invasive Species**

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The San Francisco Bay has many ecosystems

Volunteers at Point Pinole, Martin Luther King Day, 2014



Head Waters of San Pablo Creek

From love to stewardship...

- Play outdoors
- Nature walks and creek surveys are great ways to explore urban watersheds
- Keep message positive



Types of Volunteers

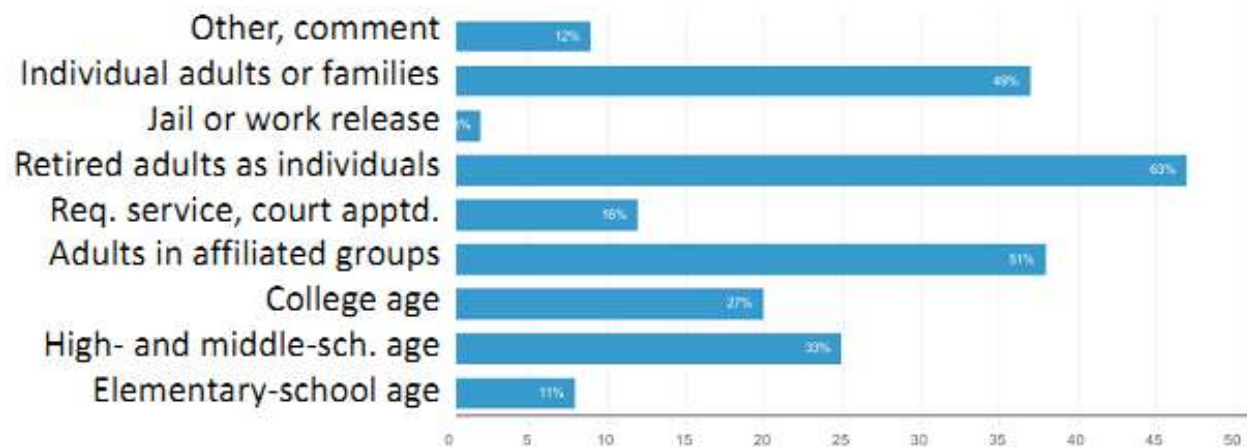
Targeting message and project complexity to a variety of audiences



Cal IPC survey for SF Bay

Where does your organization get most of its volunteers? PICK UP TO THREE.

Answered: 75 Skipped: 0



- Most organizations draw from several age groups.
- **Retired adults named most often.**
- **Adults more than youth** -- about equally from affiliated groups or as individuals or families.
- Service required by school or court does not seem major.
- *Volunteer-led*: Compared to others, fewer elementary-school, adult affiliated groups, required service, or jail; more retired, individual adults/families, and college-age.

Engaging different types of audiences

- **School kids**
- **Adult volunteers- retirees**
- Recent immigrants
- College students
- **High school-Community service and service learning projects**
- **Corporate groups**
- Gardening clubs

Small urban restoration sites provide ideal outdoor classroom settings

Youth and Kids

- We are committed to youth/kids and target our programming to engage those age groups
 - ▣ More exploration of the environment we are trying to restore
 - ▣ Connection to wildlife conservation
 - ▣ More hands on
 - ▣ Easy ID plants and large monocultures
 - ▣ Sheet mulching - boot camp



The Riparian Lab- After school by the Creek

Games and fun afterschool program for underprivileged kids along creek banks in Richmond CA

Urban Creek Restoration

Requires long term stewardship but provides neighborhood participation and enjoyment



Friends of the Creeks - CCC

- ❑ Friends of Five Creeks
- ❑ SPAWNERS
- ❑ Partners for the Rodeo Creek Watershed
- ❑ Alhambra Watershed Council
- ❑ Friends of Marsh Creek Watershed
- ❑ Friends of Walnut Creek Watershed



Urban Creeks-Habitat Restoration

Why We Do Creek Restoration of Urban Creeks:

- ❑ Reduce flood damage
- ❑ Reduce damages from stream bank erosion
- ❑ Preserve local biodiversity
- ❑ Encourage the return of birds and wildlife in urban areas
- ❑ Upgrade quality of life in urban areas
- ❑ Restore a local identity
- ❑ Provide green belts, open space
- ❑ Create educational opportunities
- ❑ Revive downtown, commercial economy
- ❑ Increase property values



Restoration can be viewed as the re-constitution of a pre-existing ecological condition, or range of conditions of a prior period.



Urban Stream

East Bay Urban Streams impacted by Ivy and black berry



Replacing invasive vegetation with natives

Volunteers help with erosion control measures and revegetation



Creek bank along Appian Creek – SF East Bay

This site was restored by volunteers who removed ivy and replanted it with native riparian vegetation



What brings the Volunteers Out

Learn about nature



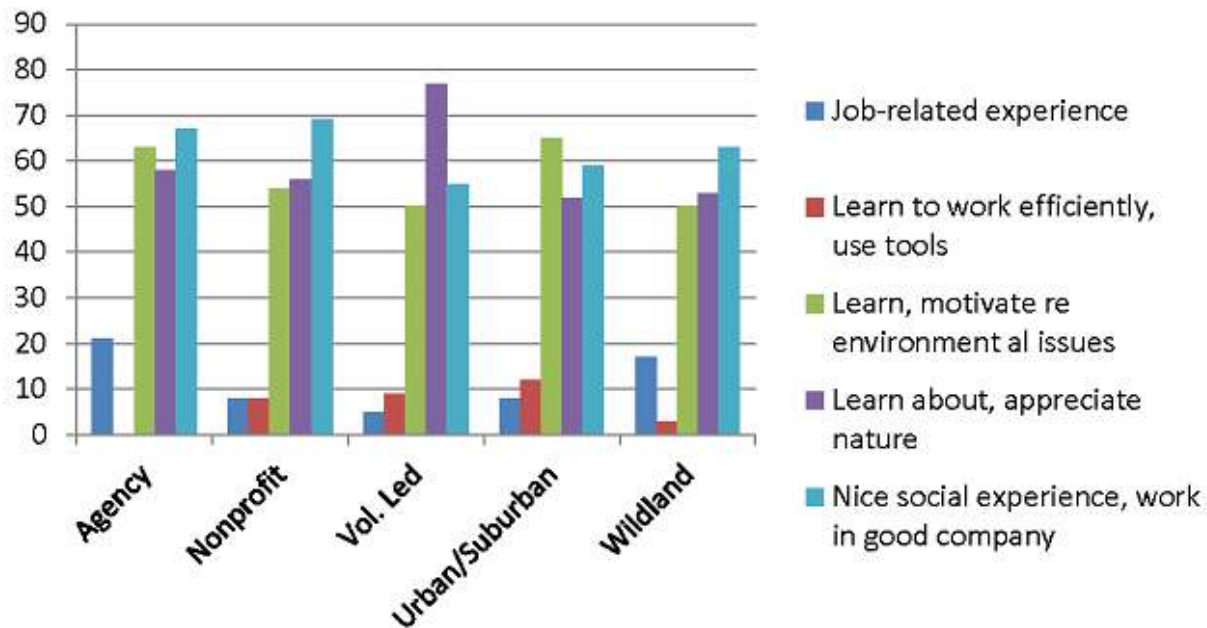
What brings the Volunteers Out

Have fun with other like minded people

Why do people volunteer?

- from the Cal IPC survey

Apart from the satisfaction of achievement, what are the most important things you think volunteers get from your events? Pick UP TO TWO (slide 2, response patterns)



Some differences in how respondents saw rewards or satisfactions of volunteering:

- Agencies and wildland groups cited job-related experience more.
- Volunteer-led cited “nature” more; agencies and urban groups mentioned “environmental issues”
- Nonprofits, agencies, wildland groups most likely to cite “nice social experience.”

Plant ID for the amateur

**How to teach the casual volunteer about
invasive plants**



Visual Aids for Plant ID

- Talk about invasive species in the context of different cultures and age groups
- Easy ID: Focus on one targeted invasive species using visual aids
- Help imagine the future diversity and understand its importance for local wildlife

Plant ID Cards

Fennel

Foeniculum vulgare

Invasive

ID Description:

- In the Carrot or Parsley Family
- Erect perennial herb. Can grow from 4-10 ft tall.
- Stems are stout, grayish green, marked with long vertical grooves. Jointed and sheathed by leaves at the nodes.
- Leaves are feathery looking.
- Looks similar to Poison Hemlock.

Habitat:

Disturbed Areas

Fact of Interest:

Originated from the Mediterranean. Romans ate the root and seeds. Bulbs are edible as well.



Invasive

the watershed project

<http://www.theWatershedProject.org>

Poison Hemlock

Conium maculatum

Invasive

Habitat:

Scrub, riparian, wetlands, open slopes, disturbed sites and roadsides.

ID Description:

- Biennial related to fennel. Grows 3-8 ft tall.
- Stalks are erect, ribbed, hollow, and sometimes purple spotted.
- Leaves are fern-like triangular and bright green.
- When crushed, foliage has unpleasant odor.

Fact of Interest:

- Unlike Queen Anne's lace, it has no hairs on its leaves or stem
- Poison Hemlock can kill humans if eaten! May cause dermatitis, nausea, and headaches if touched or inhaled after continual cutting or mowing.



Invasive

the watershed project

<http://www.theWatershedProject.org>

Plant ID Cards

Dallisgrass

Paspalum dilatatum

Invasive

ID Description:

- Coarse clumping perennial grass, light green in color.
- Leaves are rolled and have hairs on the lower portion near the ligule
- Seedheads contain 3-6 spikes. Seeds on both sides of spike

Habitat:

Pastures; Disturbed areas;
Roadsides

Fact of Interest:

Introduced from
Uruguay and Argentina.



Invasive

the watershed project

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Himalayan Blackberry

Rubus discolor

Invasive

ID Description:

- Perennial shrubby vine.
- Stems are deep red, turning woody with age
- Leaves are toothed, and have fine hairs underneath.
- Growing tips have 3 leaflets, older growth 5 leaflets
- Flowers have 5 whitish pink petals
- Thorns have triangular base.
- Often mistaken for the native Clifornia Blackberry!

Habitat:

Riparian Woodland

Fact of Interest:

Native to Eurasia. Purposefully
introduced to US in 1800s.
Great for pies and jams!



Invasive

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Choosing projects for large groups

- pickleweed/marsh
- level of expertise required/low
- Target invasive plant: ice plant.
- Select outlier populations. Seek total eradication and coordinate with landowner for post cleanup stabilization and replanting efforts.
- Accommodates up to 250 volunteers with 5 supervisors.
- Coastal prairie
- Level of expertise required moderate/high
- Target invasive plants: multiple grasses.
- Partner with California Invasive Plant Removal Council volunteers to direct work.
- Concentrate on single species.
- Look for edge patches
- Accommodates up to 30 volunteers with 5 supervisors per patch..



Ice plant provides a great multi-aged project

Trash and Large wood removal helps keep tasks diverse

Resources and tips for the do it yourselfer

- CCC has guides for how to run volunteer events
- Liability is always an important factor
- Work with land owners and NGOs to cover liability and provide waivers
- “*Weed Workers Hand Book*” has great tips for most common SF Bay invasive plant treatments and removal techniques



Questions?

Thanks

