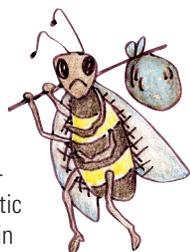


Published by the
San Francisco Estuary Partnership

Green Your Garden/ Keep the Bay Blue

You can make your garden greener while keeping the San Francisco Bay Estuary healthy and blue. Pesticides, herbicides, and fertilizers can make their way into storm drains, creeks, and the Estuary—no matter how sparingly you use them.

Send pests packing in a less toxic way. Pesticides may seem like a quick and easy way to ward off pests. But even one spray of your favorite anti-ant chemical can kill aquatic critters in its path once rain or other water washes the chemicals into a storm drain and on to the San Francisco Bay Estuary. Remember that not all insects are harmful; the presence of some—like ladybugs and lacewings—will naturally keep unwanted ones away.



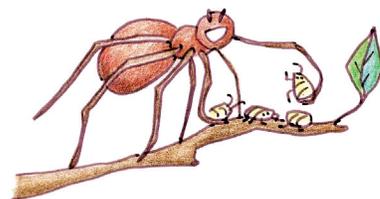
There are substitutes for toxic pesticides. You can make your own natural pest deterrents; many recipes are available online. If you choose to buy a pesticide, find the least toxic one available that is specifically designed to target the pest you want to get rid of. Ask the store staff for help, or look for in-store fact sheets and shelf labels that identify which products are less toxic to creeks and the Bay (there's more Information about these at www.ourwaterourworld.org). Follow instructions exactly; don't assume that using more is more effective, and use protective gear if applicable. Do not dump unwanted or unused pesticides down an indoor or outdoor drain or put them in the garbage can. Instead, take containers to your local hazardous waste facility. The best solution is to not use these chemicals in the first place, but to let beneficial bugs do the work for you.

Familiarize yourself with plant species that are most adaptable to your local climate and consult experts or other outside resources for help. Be willing to see damage; don't overload your garden with toxic chemicals that do more harm to the

environment than good. Using organic or natural methods for removing pests not only better your quality of life in the long run, but also helps eliminate toxic chemicals in our waterways.

If ants from your garden are heading indoors, your first line of defense should be to follow the ant trails from the indoors out and caulk any cracks or openings in your house, particularly along drain pipes, etc. If the ants are still entering, don't spray the perimeter of your house with toxic insecticides—these may wash off into the storm drain and harm aquatic life. Rather make or purchase boric acid/sugar water baits, or spray the ants with peppermint soap—very effective!

Slow snails and slugs. Keep snails and slugs from munching on your plants by hand-picking them from your garden. The best time to hand-pick these creatures is after 10:00 or 11:00 pm when they typically emerge to feed. After a few nights of hand-picking, set up traps or barriers. Use beer traps to lure snails and slugs away from plants, or use a natural deterrent like coconut oil, which can be applied around individual plants. Better yet, put a few slices of cucumber in a pie tin in problem areas—snails and slugs hate the chemicals given off by the cucumber and aluminum. Snails and slugs thrive on moist environments, so avoid over-watering your garden.



Go native; avoid aphids. Although large numbers of aphids can cause problems, a small population is beneficial to any garden because aphids attract other beneficial insects like lacewings, spiders, and ladybugs that will attack other garden pests. Bushtits and other insect-eating birds gobble aphids as well. Native plants attract fewer



aphids than many non-native ornamentals. If you do have an aphid infestation, spraying them with a strong jet of water can keep them in check. If an aphid population becomes too difficult for your garden to sustain, choose an insecticidal soap that will kill aphids without leaving toxic residue on your plants. Maintain your garden without excessive pruning, as over-pruning will encourage aphid growth.

Lose the lawn. Forgo the front lawn and opt for alternatives like native grasses or groundcovers. Or plant a more diverse native garden as habitat for birds, butterflies, and bees. Even a small lawn requires copious amounts of water, fuel for mowers and weed whackers, and possibly toxic and harmful pesticides and fertilizers. Native plants need little maintenance and do not need fertilizer or pesticides.

Native species are also the most adaptable to your garden's climate. California's frequent droughts call for using less water, so look for native wildflowers, shrubs, or bunchgrasses, whose long roots find water and nutrients at distances that other plants can't reach. Wildflowers provide great habitat for birds and butterflies. Check out your local native nursery: see http://www.cnps.org/cnps/grownative/where_to_buy.php for a list. Other resources include *Cal-*



Water your plants sparingly and before 9:00 am or after 6:00 pm when evaporation is less significant than in the middle of the day. Fertilize the ones that need it—and enhance your soil—with composted food scraps from your kitchen.

Be a weed warrior, and you won't be tempted to spray. Keep your garden weed-free all year long by adding 3 to 4 inches of organic mulch to discourage weed growth. If you find a weed, make sure to pull it out completely by digging out the roots—simply removing the top won't kill the entire plant. Remove all dead plants right away to keep the others healthy and disease-free.



Save your soil. Minimize runoff—and soil loss—from your property by spreading straw or wood mulch over bare soil to add extra absorbency. If your garden is on a hill, plant it with trees, shrubs, or bunchgrasses, as their long root systems will soak up irrigation water and rain.

Illustrations: Lisa Krieshok
Research: Suzanne Spencer
Editing: Lisa Owens Viani
Design: Bobbi Sloan

Photos of native plants: Pete Macchia (clockwise from top: a drought-tolerant native garden in El Cerrito; island bush snapdragon; yarrow; wild grape; buckwheat; elderberry.)



California Native Plants for the Garden, by Carol Bornstein, David Fross and Bart O'Brien, and *Designing California Native Gardens: The Plant Community Approach to Artful, Ecological Gardens* by Glenn Keator and Alrie Middlebrook.

To see what various native plants look like, go to <http://www.calflora.org/>.

Stash the gas and spare the air and the Estuary. Use a broom and a rake, not a hose or leaf blower, to clean up garden or yard trimmings. Air pollution can end up in the Estuary too. Don't sweep debris into a storm drain or gutter; instead, transfer grass clippings or leaves into your yard waste bin or leave clippings on your lawn as fertilizer.



San Francisco Estuary Partnership
1515 Clay Street, 14th Floor
Oakland, CA 94612
(510) 622-2304
www.sfestuary.org

Other useful links: <http://www.ipm.ucdavis.edu>; <http://www.stopwaste.org/home/index.asp?page=8>