



ALTERNATIVES CORNER

Contending with Weeds

If there were a Plant Olympics, weeds would be the gold medal winners. They are adaptable and do well in a variety of conditions. To root out weeds, use the following guidelines and controls.

- Build good soil to make weeding easier.
- Manage irrigation to keep weeds down.
- Use dense ground covers or thick foliage to shade out weeds.
- Learn the growth habits and life cycles of your weeds.
- Weed when the soil is moderately moist.

Pulling weeds usually involves using a tool to loosen the soil and then pulling the plant by hand. Depending on the size of the plant you're working with, a hand fork, spading fork, or mattock can make weeding easier; for big shrubs, a Weed Wrench is very effective and satisfying to use. Wearing gloves is always a good idea.

Scraping can help you take out shallow-rooted plants or kill weeds when they're young. The most common tool for this is a hoe. While scraping is an effective control for both annuals and perennials, avoid cultivating the soil any more than necessary to remove the weeds. You don't want to turn over the soil and bring up new weed seeds, or disrupt the food web in the soil, or damage soil structure.

Cutting down weeds may be necessary if there are extensive weed problems or you're dealing with large plants. Cutting may also be needed to remove bushy overgrowth, such as blackberry vines, before you can remove the roots. Where "soft" weeds such as grass predominate, use an electric mower or weed whacker to keep growth in check and prevent plants from flowering. For vines and shrubs, cut them away with pruners, loppers, or a pruning saw, then dig them out or cover them with mulch.

Mulching works in two ways - by blocking sunlight and creating a barrier to growth. It prevents many annuals from germinating. Since perennials have sturdy underground structures, mulch alone is less effective at suppressing them. Used in combination with a barrier such as newspaper, cardboard, or decomposable fabrics (nondecomposable fabrics become both a blight and disposal problem), mulch will keep most perennials down. The best approach is

to pull or cut down perennials first, then lay down a barrier and mulch.

Applying least-toxic herbicides. There are a few less-harmful products on the market that can be used in combination with other weed control efforts. Corn gluten meal — a waste product of corn syrup processing — is a fine, yellow powder applied to soil. It suppresses germination of many common annual grasses and broadleaf weeds, but its effect is short-lived, so applications must be carefully timed to coincide with seed germination. Herbicidal "soaps" and acetic acid (vinegar) kill plant tissue that they contact by disrupting plant cell membranes. They are more effective against annuals than perennials — tough weeds resist these herbicides or resprout from roots. In many cases it is just as effective to pull, cut, and mulch as to use least-toxic herbicides because they have to be used again and again.

To find local stores that carry less toxic herbicides go to www.ourwaterourworld.org and click on "Where to Buy Products."

To request a copy of the 72-page book, "Bay Friendly Gardening" and/or a fact sheet with more information on weeds, call (650) 599-1325, email spratt@co.sanmateo.ca.us, or download both documents at www.flowstobay.org.

Adapted from "Bay-Friendly Gardening"



Weed and Feed, Your Health and the Environment

Weed and feed is often broadcast over large areas such as a lawn. As a result unneeded pesticides are applied to nonweed vegetation and soil. The quick release fertilizer can cause a flush of growth, which attracts pests, leads to more pruning or mowing and can result in soil depletion. If there is a storm or if over watered, runoff contaminates waterways, causing oxygen depletion and poisoning fish.

In relation to human and animal health, the pesticide in Weed and Feed, 2,4-D, is associated with neurological disorders, reproductive problems, kidney and liver damage, non-Hodgkin's lymphoma and other cancers, and disruption of the endocrine (hormonal) system.