

Weed Management

A weed is a plant whose virtues have not yet been discovered.
~ Ralph Waldo Emerson

What is a weed?

A weed is any plant growing where it is not wanted. Remember, "One gardener's weed is another gardener's wealth." The plants that we generally all agree are "weeds" are typically hardy, reproduce easily, and are very competitive with other plant species.

Why do we weed? What do we hope to accomplish?

We weed to reduce competition for sunlight, water, soil nutrients and space for the crop plants. We also weed to eradicate plants that we know are serving as habitat for garden pests. And finally, we weed to get rid of plants that we consider ugly or a nuisance.

In defense of weeds

Sometimes weed species are providing an important beneficial function in the garden. Weigh the potential benefits against problems they may be causing. They

- provide ground cover to otherwise bare soil
- improve the soil through root penetration and/or increased organic matter
- can provide habitat for birds, worms, insects (good and bad), and other critters
- can be powerful medicinal plants. Some are edible.
- can provide additional learning opportunities in an instructional garden

Weed prevention strategies

Prevention is the best strategy! Follow these guidelines to prevent weed problems:

- Water only where you want to see plants growing. As much as possible, keep irrigation water off non-crop areas.
- Mulch paths heavily with a material that keeps weed seeds from germinating and seedlings from emerging. A good choice is cardboard or landscape fabric covered with wood chips.
- Eliminate weeds when they are small, and it's relatively easy.
- As a last resort, remove bad weeds before they go to seed or otherwise propagate.
- Stay ahead of any perennial weeds in your garden such as Bermuda grass or nutsedge. Because perennials survive year-round, they can quickly become a persistent nuisance.

Weed elimination methods

You have to choose which of these works best with your weeds, your weeders, and the current conditions in your garden, such as soil moisture and weather:

- Hand pulling
- Digging
- Hoeing
- Mulching (with *some* species this works even once weeds are growing if you pile enough stuff on top of them)

- Mowing or using a Weedeater
- Solarizing (this works best if you use clear plastic during warm months)

Making your weeding efforts count

Particularly in school gardens, you may be working with a large group of helpers one week and with none the next, so consider the following to make your efforts worthwhile:

- **Soil moisture.** Is it appropriate for your chosen weed removal technique? For pulling you want a loose, wet soil. For scraping or cutting weeds off at the surface you generally want a dry surface.
- **Tool choice.** Which tool will most effectively do the job and is it sharp and ready to go? The people who weed for a living would never consider heading to the field with a dull hoe or without their sharpening tool in their back pocket.
- **Prioritize timely weed projects.** If you have a limited supply of labor at one time, choose which weeds should be given highest priority and tackle those first.

Recycling weeds

If the weeds you have removed do not have seeds or will not reroot easily (like creeping grasses), they can serve as great mulching or compost material. Pile them around beds, trees or other perennials where you want to cover bare soil, either to prevent new weeds from germinating or where to keep the soil shaded, cool, and wet during hot months. If you have a functioning aerobic compost system that stays hot (135 and above) for several days, even seedy weeds can go into it because seeds will be killed by the heat. If you are not sure that your compost is maintained at a high temperature, it is best not to include weed seeds or other persistent weeds in your compost pile.

Getting to know your weeds

The weeds and best methods for their control are different in every area and every garden. Get to know your own by examining them, researching them and considering these questions:

- Where are its seeds, and what do they look like?
- Do you know, or can you guess, if it propagates from seeds?
- What types of spaces does it seem to “like” in the garden?
- Are there many individuals of this weed growing?
- Does it appear to be warm season or cool season?
- Do you know, or can you guess, if it is an annual or a perennial?
- From what you can tell about it right now, what methods and/or tools would you suggest or try in order to control it?

Some bad weeds to look out for in California school gardens

- Bermuda grass
- Nutsedge

- Morning glory (bindweed)
- Foxtail
- Mallow (cheeseweed)
- Johnson grass
- Star thistle

Tips for weeding with kids

- When planning to have kids weed in the garden, be sure to water the weedy areas well so that the weeds come up easily. Kids get frustrated easily if they can't pull the weeds out, but feel great satisfaction if they can!
- Give kids a weeding demo. Assign a "Weed Manager." Designate sections for different groups. Have buckets ready.
- Have kids count their weeds; make a weed chart.
- Teach kids the difference between noxious weeds that cannot be composted and those that are OK to compost.

Additional resources

- Integrated Pest Management. Learn about your weeds with this online key to weeds. <http://www.ipm.ucdavis.edu/PMG/menu.weeds.html>
- Ecology Action. Download fact sheets on less toxic weed control. http://www.ecoact.org/PDF/ipm_factsheets/Weeds3.pdf 1.pdf
- *Gardens for Learning*, 69 – 75