

MANAGING WEEDS

By Fred Rosenstiel

A weed free garden is a theoretical ideal and a practical impossibility. Chemical weed killers eliminate most weeds above the ground, but the risks involved to nearby plant life, the soil, and people's health is great.

Since community projects usually do not lack muscle power it is far better to rely on sound garden practices, e.g., weeding, mulching and cultivating.

The number and variety of weeds on an empty lot tell gardeners much about its soil condition: for instance, tall grasses and pigweed denote good fertility whereas an abundance of sheep sorrel indicates an acid, infertile soil; reeds and purple loosestrife grow in wet, poorly drained areas and purslane prefers well-drained, light, porous soil.

After taking stock of the available weeds, the urban gardener will want to consider which may be worth preserving, even propagating, and which will have to be eliminated. Worth saving may be an Ailanthus or Popular on the northwest side to act as a screen; whereas a similar tree on the southeast side will steal the morning sun from future crops. Before cutting down a tree one should of course consider whether it could shade a picnic or children's play area in the heat of summer, or perhaps screen out the sun from a garden of such shade-loving plants as Violets, Primulas and Hostas. The wishes of neighborhood residents who may have become very attached to the tree should also be considered. Unless a linear screen is wanted, suckers (shoots) growing up around trees should be constantly removed or transplanted to suitable places, because they will compete for light and soil with the parent tree and nearby vegetation. Ancient overgrown Lilacs, Viburnums or Forsythias are sometimes worth renewing: the old plants can be cut back to enable the growth of vigorous young suckers.

As with trees, the conservation minded gardener uses discretion in removing plants generally regarded as weeds. Lambsquarters may be grown and harvested as a vegetable, and Wild Purslane or Dandelions provide tasty greens too.

Natural stands (areas) of Hollyhock, Wild Sunflowers, Chicory, Bouncing Bet, Yarrow, Loosestrife, Field Daisies, Mullein, Black-eyed Susans, Cinquefoil, Milkweed, Pokeweed, Joe-pye-weed and diverse Violets, Clovers, Asters and Goldenrods are interesting and attractive in city lots fortunate enough to accommodate some of them. Lilac bushes and Wild Asparagus may have persisted from a time when the city vacant lot was a farm or country house garden.

What are some methods for the gardener who considers chemical weedkillers unacceptable?

1. Cultivation (essentially plowing) has been practiced since the invention of agriculture about 10,000 years ago. This is done by chopping down the weeds and digging them under, best done in early fall which leaves time for them to disintegrate during the winter and enrich the soil. Use a digging spade, hoe or trowel, depending on the size of the area to be worked. This method destroys annual as well as many perennial weeds but does not destroy those weeds that sprout from deep taproots of spreading rhizomes (weeds with long lateral roots), such as Binweed, Pokeweed, Mugwort, Quackgrass. By breaking the roots into many pieces, cultivating spreads rather than eliminates weeds.

2. Weeding most weeds can be pulled up by hand if enough hands and time are available, however weeds from taproots and rhizomes will grow from pieces of root inevitably left in soil.

3. Mulching (smothering the weed by depriving it of light and air). Numerous substances and waste products such as tree bark, sawdust, compost, leaves, grass clippings, hay, seaweed, newspaper, gravel, corncobs, aluminum foil, black polyethylene film can be used. Some ingredients may protect, even improve the soil. It is always necessary to consider the effect of the material on the soil, as well as possible side effects such as flammability in dry weather, or possible increase of acidity which may have to be neutralized with lime. Theoretically, mulching should eventually destroy all weeds. In practice, tough rhizomes such as those of Quackgrass or Mugwort and rootstocks of anything as persistent as Bindweed would have to be covered by an opaque material like aluminum foil or black

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polyethylene for one or several seasons before they lose their sprouting capacity. One has to be careful not to introduce new unwanted weeds from seed in mulching materials such as hay. Mulching has the added advantage of helping to conserve soil moisture and constant temperature range, and also that it does not subject the soil to injury by compaction of methods 1 and 2.

4. Weeding by displacement (growing the desirable plants so close together that there is no room for the weeds). A mixed flowerbed or herb garden can be maintained in this fashion once the really aggressive weeds have been removed. Under this heading can be classed the upgrading of weeds by ones that are less undesirable and may even have some desirable qualities. Bugleweed, Periwinkle, Ivy and Pachysandra when used as ground cover in fertile city street treepits, grow sufficiently dense to crowd out most annual weeds.

5. Weeding by attrition. (For the observant but indolent gardener who delays chopping down weeds till their flowering time before they manage to spread their seeds). All weeds can be weeded in this fashion but mainly those depending on sexual reproduction. The gardener must get rid of the weeds before they have a chance to generate a new crop. This method provides an abundance of seed-free compost or green manure material and works well with annuals such as Ragweed which can be pulled and composted at the beginning of August, before its pollen causes hay fever. Each successive summer there will be less Ragweed seed to germinate in the soil, though some will be blown in from less diligent neighbors.

Bibliography

Martin, Alexander C., Weeds, Western Publishing Company, Inc. Racine, Wisconsin, 1972.

Page, Nancy M., and Weaver, Richard E. Jr., Wild Plants in the City, Quadrangle, The New York Times Book Co., New York, N.Y. 1975.