



# SUSTAINABLE GARDENING

THE OREGON-WASHINGTON MASTER GARDENER HANDBOOK

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## About this handbook

The Oregon-Washington Master Gardener Handbook is a basic gardening text, used as one component in master gardener training programs for Extension volunteers in Oregon and Washington. It also is a useful resource book for any gardener in the Northwest, covering topics in gardening, landscaping, and pest management.

The title “Master Gardener—Washington State University” or “Master Gardener—Oregon State University” is to be used only and exclusively in the WSU Extension or OSU Extension Service Master Gardener program, through which trained and certified master gardeners provide gardening information.

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# Introduction: Sustainable Gardening

## A thoughtful balance between resources used and results gained

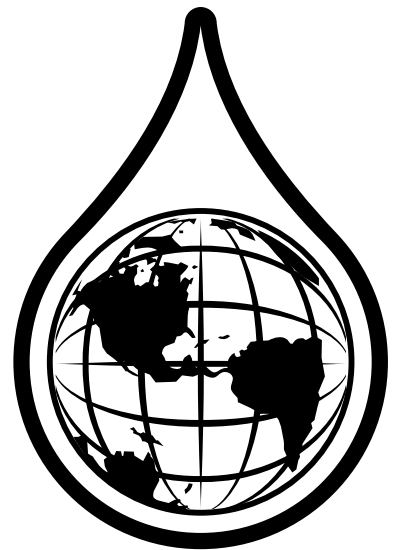
Enjoyed by millions, gardening is among the most popular leisure activities in America and throughout the world. Gardening can contribute to your enjoyment and appreciation of nature, and how you garden can have a significant impact—both positive and negative—on your local and regional environment. As a result, gardeners are becoming more aware of environmental protection and improvement practices.

*Sustainable gardening* is a straightforward concept that requires only slightly more planning than conventional gardening. A sustainable garden is one that thrives with minimal inputs of labor, water, fertilizer, and pesticides. Sustainable gardening also may mean altering your perception of the “perfect garden.” Lawns that are lush, green, and weed-free; plants with no insect damage; and unblemished fruit may be desirable, but they carry a price. Sustainable gardens achieve a balance between inputs and outcome.

You can do a number of things to reduce the inputs necessary to make your garden thrive. The first and most important concerns the soil. Starting with soil that has the correct pH, good drainage, adequate fertility, and few weeds is a critical first step in sustainable gardening. Research has shown that nearly 80 percent of plant problems are related to poor soil. Completing an initial soil test can give you guidance on how to improve your soil.

Selecting plant material adapted to your area is the next step. Choosing plants that are well suited to your yard’s climate, light exposure, annual precipitation, and other environmental conditions helps ensure that your plants will grow well. Additionally, selecting species that are disease- and insect-resistant can drastically reduce your need for insecticides and fungicides.

You also can incorporate resource conservation practices into your gardening repertoire. Composting



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By Ann Marie VanDerZanden, former  
Extension master gardener state coordinator,  
Oregon State University.

pruned limbs, leaves, and other garden by-products is a good way to create a constant supply of nutrient-rich organic material. Incorporating this composted material into the soil not only improves soil fertility and drainage, but also reduces the burden that garden waste adds to landfills. Likewise, a mulching lawn mower keeps finely chopped clippings on the lawn, where they can decompose and return nutrients to the soil, at the same time eliminating the need to bag clippings and send them to a landfill.

Covering bare soil with mulch leads to many garden benefits. The mulch layer reduces soil water evaporation and runoff, thus allowing water to be used more efficiently. Reduced weed growth is another benefit. Suppressing weeds eliminates the need to apply herbicides

and reduces the competition for water between weeds and desired plants. A mulch layer also can minimize fluctuations in soil temperature and reduce root damage from temperature extremes. Additionally, as organic mulches (such as bark chips and leaves) decompose, they add organic matter to the soil and improve soil fertility.

As the world population grows, the planet's natural resources face increasing stress. Contrary to popular perception, gardening methods do have implications beyond the backyard. If all gardeners, new and experienced, continue to adopt and refine the principles of sustainable gardening, they will further enhance the environment for people, plants, and wildlife. This book is designed to help you do just that.

