

Massachusetts Master Gardener Association

FACT SHEET

Have gardening questions? Contact the **Master Gardener Help Line.**

Two locations / two ways to contact us:

At *Mass Hort, Wellesley*: mg helpline@masshort.org, 617-933-4929

At *Tower Hill Botanic Garden, Boylston*: hortline@towerhillbg.org, 608-869-6111 x104

Please visit our web site for Help Line open hours <http://massmastergardeners.org/what-i-do/>



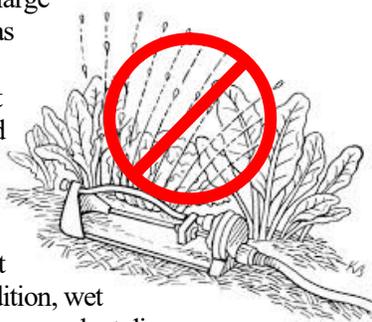
Watering Wisely

Mother Nature can't always be counted upon to keep our gardens watered. Whether your water comes from a municipal source, a private well or a rain barrel, it is a valuable limited resource. So how can you use it wisely?

Different plants have different water needs that may also vary during their life cycle. Seeds or seedlings will usually need frequent watering at their shallow root zones; whereas a well-established spruce tree may not need watering at all. Annuals may need more water than perennials; and vegetable gardens may need supplemental watering all season long to produce crops successfully.

Wise watering starts with good garden design. There are many plants that tolerate drought, but design goes beyond plant selection: placement in the garden also matters. Grouping plants with similar water requirements allows you to target water to only those areas of your garden that need it.

Unless you are watering a large area very shallowly (such as a newly-seeded lawn), sprinklers generally are not the best choice. Plants need water at their roots, but sprinklers put water in the air; and much of it can be lost to evaporation before it gets to ground level. In addition, wet foliage can actually spread some plant diseases.



When watering established plants, deep infrequent watering is usually preferable to shallow frequent watering. Deep watering encourages plants to grow strong, deep root systems.

WATERING ALTERNATIVES

If you are watering only a few plants, you can do it with a hand-held hose or even a watering can. For a larger area, you may want to simplify your work by installing a soaker hose or drip irrigation.

Soaker hoses attach directly to any standard hose bibb, including those on most rain barrels. Soakers are made of a semi-porous material that “weeps” water slowly along the hose’s entire length. They work well with both tap water and rain barrels and are relatively inexpensive and easy to install.

Soaker hoses are ideally suited for short-term use such as watering freshly transplanted perennials until they can establish their root systems. There are, however, some soaker hose downsides: you cannot vary the amount of water they emit; and unless you bring them in for storage during the off-season, they only last a few years.

Drip irrigation also attaches to standard hose bibbs. Many different components are available. To get started you will need a minimum of (1) a hose connector with a simple filter, (2) a “supply” line that moves water from one place to another, and (3) drip hose or tubing that has “emitters” that allow a specific amount of water to pass through per hour. A popular manufactured drip hose has emitters every 12” that emit one gallon per hour (GPH); this is a good starting flow rate for many New England soils. Extra emitters or even small sprinklers can be added to a drip irrigation system.

Drip irrigation is best suited to a garden with ongoing watering needs, such as a vegetable garden. As with soaker hoses, drip irrigation has some downsides: installation is more complicated than soaker hoses, and drip irrigation cannot run off of a rain barrel unless the barrel is elevated enough to increase the water pressure. Many brands market home starter kits that include everything needed for a basic drip irrigation installation, including instructional materials.

Regularly check the moisture level below the soil’s surface and adjust the running time of your irrigation as needed: shallow-rooted plants in clay soil may require a shorter amount of time to water as compared with plants in loam soil.

Whatever method you choose, monitor your water usage and tailor it to the changing needs of your garden.

The Massachusetts Master Gardener Association is a non-profit organization whose mission is to share knowledge and experience with the public through outreach programs in education, horticulture and gardening; to provide the Master Gardener Training Program to interested members of the public; and to provide graduates of the Master Gardener Training Program with educational and practical opportunities to extend their knowledge and interests in gardening and related topics.

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