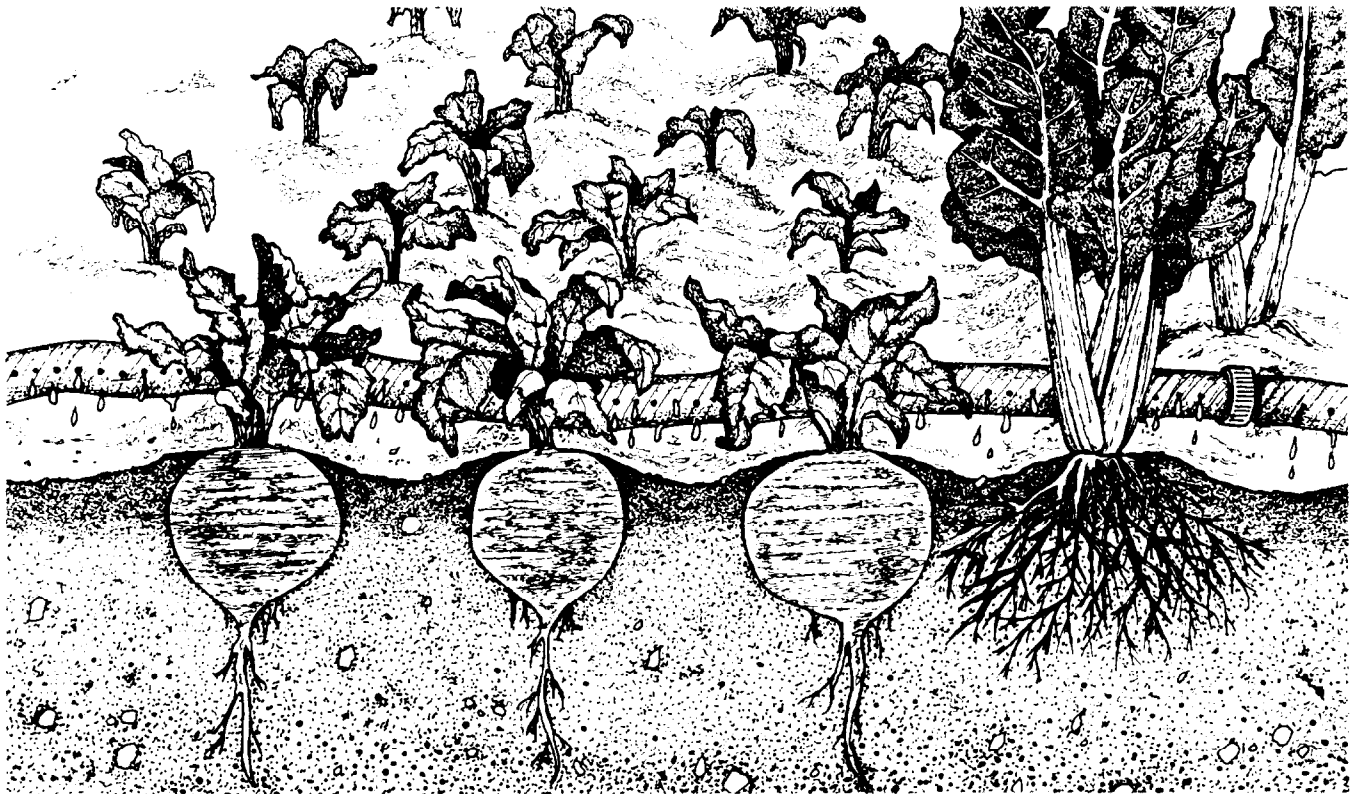


SOUND GARDENING

Gardening With an Eye on Water Quality

WATERING



Plants Need Water

Proper watering is essential to a healthy garden. A plant is 75–90% water. Water is necessary for all **internal plant** functions such as photosynthesis and the transportation of nutrients. If water is applied at the proper times in correct amounts, it is possible to conserve it, thereby protecting water quality in the Sound.

Overwatering can wash away soil, chemicals and plant nutrients. They can find their way into rivers, Long Island Sound, bays and the ocean – a loss to the garden and a hazard to marine life.

The *Sound Gardening* approach to watering is to plant drought-resistant species, landscape using xeriscape principles (planned, drought-resistant landscapes) and to water only when needed.

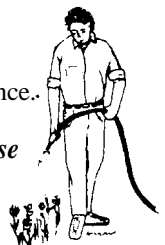
Ways to Water

The method you use can make a difference.



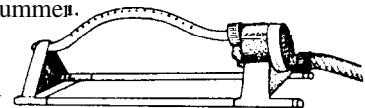
Hand Held Water Can or Garden Hose

This method is only appropriate for containers, small flower beds, newly planted trees, shrubs or recently sown flower or vegetable seeds. A small garden will require a great deal of time and patience to hand water properly. Sinking perforated plastic jugs into the ground next to plants will encourage infiltration. Using mulch will keep the soil moist and cool in the heat of summer.



Sprinklers

Keep the water pattern even by moving the sprinkler frequently and overlapping about one half of each pattern. Place oscillating sprinklers higher than the plants to prevent water from being diverted by leaves. Do not apply water faster than the soil can absorb it. Be sure the

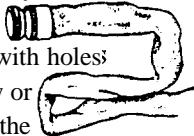


sprinkler is not watering the sidewalk, street or other paved surface.

Sonker Hoses

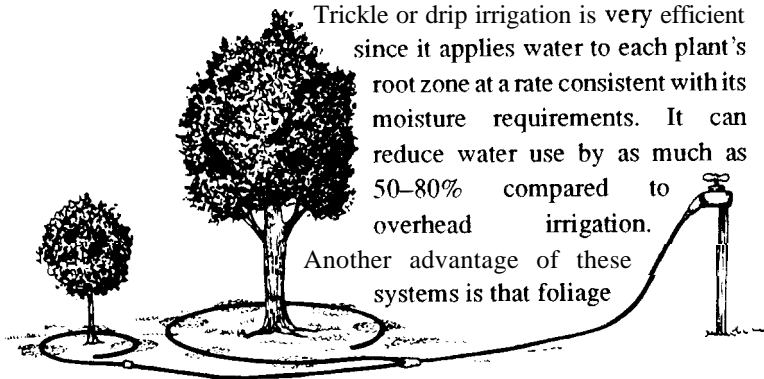


There are a variety of special soaker hoses. They can reduce runoff and evaporative losses and generally do not cost more than normal garden hoses. Perforated plastic hoses or soaker hoses should be placed with holes facing downward along one side of the crop row or underneath mulch. Water will slowly soak into the soil without wetting foliage, thus decreasing evaporation and the risk of foliage diseases.



Trickle and Drip Systems

Trickle or drip irrigation is very efficient since it applies water to each plant's root zone at a rate consistent with its moisture requirements. It can reduce water use by as much as 50-80% compared to overhead irrigation. Another advantage of these systems is that foliage



stays dry, reducing the potential for foliage disease problems.

When to Water

Water only when needed. A good rule of thumb in watering plants is to saturate the entire root zone and then allow the soil to dry out partially before the next irrigation. The speed of drying depends on plant size and species, the ability of the soil to hold water and the weather.

A small or newly-established plant will need watering before very much soil drying takes place – generally within a few days to one week. Seeds and seedlings need more frequent watering as they should never be allowed to dry out. A vegetable garden should be watered when the soil within 1" of the surface feels dry to the touch. When a lawn gets too dry it shows a loss of resilience: footprints will remain visible in the grass and its color will change to a grayish Hue.

For more information on *Sound Gardening and watering*, contact your local Cooperative Extension office.

In Connecticut:

Storrs: (203)486-3435 New Haven: (203)789-7865
Fairfield: (203)797-4176 Middlesex: (203)345-4511
Hartford: (203)241-4940 Lit & field: (203)567-9447
Tolland: (203)875-3331 New London: (203)887-1608
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In New York:

Nassau (516)454-0900
Suffolk (516)727-7850
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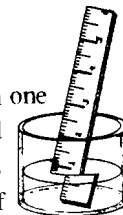
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Once plants are established, less frequent, deep watering with dry periods in between encourages deep roots. Gradually extend the length of time between waterings.

Do not rely on automatic timers. If you use an automatic system, install a moisture sensor to turn it on and off. Also, do not water on windy days or during the heat of the day, especially with sprinklers; considerable water may be lost to evaporation. Early morning watering is best for lawn.. and most other plants.

How Much Water

A running hose can deliver about 375 gallons in one hour. Too much water, especially in poorly drained soils, can be damaging. Apply water only as fast as the soil can absorb it. Turn off water at the first sign of puddling; turn it back on later if water did not penetrate the whole root zone. Do not apply water at rates greater than 1/4" to 1/2" per hour; faster watering can cause runoff and/or erosion. Use small containers to measure the amount of water being applied. A lawn can use 1" to 1 1/2" of water per week during hot, dry weather.



How to Reduce the Need for Water

- * Select low water use plants.
- * Add organic matter to the soil to increase the water holding capacity of sandy soils and allow for better air and water movement in compacted soils.
- * Design the landscape around sound xeriscape principles, consolidating plants requiring similar amounts of irrigation. Azaleas and rhododendrons could be grouped in one area, junipers and potentilla in another.
- * Select a turfgrass that excels in low water conditions.
- * Mulch the tilled areas to help reduce evaporation of water.

REMEMBER

- * Water deeply and slowly.
- * Water when needed, not according to a pre-determined schedule.
- * Water only as fast as it can be absorbed by the soil.
- * Follow watering restrictions when and where they exist.