

For many people, an expansive green lawn is the quintessential component of their yard and landscape. Unfortunately, lush, green lawns need a lot of maintenance-- fertilizing, mowing, aerating, dethatching, reseeding, and watering. One way we can reduce our environmental impact, including conserve large amounts water, is to change our philosophy around lawn and how we design and maintain our yards.

- **Reduce lawn area:** A smaller lawn area will use less water. Often, only a small portion of lawn area is used for practical purposes, the rest is just a way to fill space in our yards. Consider eliminating portions of lawn that are not frequently used. **Replace lawn area:** You can use space formerly reserved for lawn to create ecologically rich and visually appealing landscape features such as meadows, perennial gardens, and shrub thickets.
- **Mow less often:** Don't worry if the grass gets a little long or untidy. Longer grass helps to keep out weeds and keeps soil from drying out too fast. Longer grass also has a deeper, more robust root system, which is better at accessing water in the soil. Keeping the lawn short with frequent mowing means you will be watering more to keep it green.
- **"Brown is the new green":** Be ok with a brown lawn. By nature, the cool season grasses we use in the Northeast tend to turn brown and go dormant during the hot summer months. When there is more rainfall and temperatures cool down, the grass will green up again.



## **Grass selection**

Lawns are usually made up of several different species and like plants, there is a wide variety of species to choose from and each has their own requirements and preferred growing conditions. When seeding a new lawn or reseeding an existing lawn, choose a seed mix that consists of hearty, drought-tolerant grass species that are adapted to the conditions of your region. Grasses that are better adapted to our weather patterns and soil types will require less water to stay healthy.

## **Lawn care practices**

How we maintain our lawns can also have an impact on the health of the turf grass and how much water it will need.

- **Don't bag it:** Mulch your clippings back into the lawn while you mow rather than bagging them and taking them away. Mulching the clippings helps to build lawn soils and improve water retention. There are special mulching mower blades available that help to cut the clippings into smaller pieces for this purpose.
- **Don't scalp it:** Keep mower height at a minimum of 2.5 inches, but 3-4 inches is better if you can tolerate the longer appearance. Shorter grass dries out faster and has a tendency to "brown up." By mowing taller, grasses develop stronger root systems and the roots and soil are shaded, drying out less quickly. Longer lawns stay greener longer and require less water.
- **Keep it sharp:** Dull mower blades have a tendency to tear at grass rather than cutting cleanly. Damaged grasses are more susceptible to disease and they can appear ragged and brown. Healthier grass requires less water and stays greener. Sharpen your mower blades frequently and replace them when they are worn down beyond repair.

## Watering practices

Obviously, one of the biggest ways we can be “water smart” about our lawns is to be mindful of our watering practices and make adjustments in order to conserve.

- **Know when to water:** Look for signs that the lawn is dry and needs watering. Patchy sections, footprints remaining long after they were made, lightening or browning of color are all indicators that more water is needed. If you suspect soil dryness, dig down a few inches with a small trowel or your finger to confirm.
- **Keep track of time:** Time of day can play a major role in how much water is lost to evaporation. Watering during the middle of the day when temperatures are higher and the sun is strong will result in a high percent of evaporative loss. Wet grass can also be more easily burned by the hot sun and is more susceptible to disease. On the other hand, watering in the early morning, evening, or even at night means that more water will get to its intended destination—the soil and root zone of the lawn.
- **Water infrequently and deeply:** Frequent watering encourages shallow roots, which can weaken the lawn. Watering deeply, but less often, encourages deeper root development and healthier lawns. Water slowly so that water does not puddle or run off—the water should be absorbed by the soil. Do not water when it is very hot, windy, or raining as this is simply a waste of water.
- **Adjust irrigation properly:** Make sure your sprinklers or automatic irrigation systems are watering efficiently. Check the run times and make sure your controller is set to the optimal time of day and duration. Adjust spray nozzles so that they do not spray onto walkways, driveways, structures, etc. Install a rain sensor or a moisture sensor so that the system does not run if it is raining or if there is adequate soil moisture.

## Turf soil health

Healthy soils make for healthy lawns. By taking steps to care for it, your grass will stay greener with less water.

- **Keep it loose:** Avoid compacting turf soils with heavy foot traffic, equipment, or automobiles. Compacted soil has less water infiltration and reduced retention capacity. Aerate your lawn every couple years to help break up compaction and increase the amount of water that can be absorbed by the soil. Aeration also allows air and water to more easily reach the root zone of turf grasses.
- **Go organic:** Periodically add organic matter to your soil by topdressing with compost or other suitable material. Adding organic matter helps to beef up soils and improve water retention capacity, plus it provides nutrients to the grass and helps keep it strong and healthy.
- **If fertilizer is necessary:** Use only phosphorus-free natural fertilizers and apply only in the spring and fall. What we put on our lawns gets into our environment and lawn chemicals are a major source of pollution. Healthy, well-designed landscapes should require little to no fertilizers or pesticides.

*This project has been financed partially with State Capital Funds from the Massachusetts Department of Environmental Protection under a Sustainable Water Management Initiative Grant. The contents do not necessarily reflect the views and policies of the Department, nor does the mention of trade names or commercial products constitute endorsement or recommendation for use.*

