

ECO-FRIENDLY LAWNS

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Each and every landscape makes a difference in the health of our planet. Increasingly, homeowners are becoming more aware of their effect on the environment. Traditional lawns often require high rates of fertilizers, pesticides, and water, as well as frequent mowing. Regular management to maintain lawns uses significant fossil fuel resources and may negatively impact the environment.

Our lawns can be part of our efforts to create a more sustainable landscape. When maintained in a more sustainable way, a dense lawn of a perennial turfgrass can be a net positive for the environment. Benefits of a healthy, sustainably managed turf area include:

- Absorbing and filtering rainwater, preventing contamination of groundwater;
- Cleaning the air by absorbing carbon dioxide and filtering pollutants;
- Reducing weed populations;
- Preventing soil erosion;
- Moderating temperatures, helping to cool the area around a home;
- Decreasing noise levels and light reflections/glare, particularly in urban areas;
- Supporting human recreation and connection with nature.

BEST MANAGEMENT PRACTICES FOR A SUSTAINABLE APPROACH TO LAWN CARE

BUILDING AND MAINTAINING HEALTHY SOIL:

- **Obtain a soil test** to determine the overall health of the soil, including the pH (acidity or alkalinity), nutrient composition, and organic matter content. Applications for soil tests and protocol for sampling can be obtained through the local Cooperative Extension office. **Apply fertilizer, lime or other amendments based on soil test recommendations, the turfgrass species, and how frequently the turf is used**, rather than as habitual seasonal tasks. Be aware of any nutrient state regulations or mandates that may impact lawn establishment and maintenance.

CHOOSING THE PROPER TURFGRASS:

- **Consider location, purpose, and specific climate when choosing turfgrass species.**
- Where possible, consider planting a less “input-demanding,” lower-maintenance lawn. Check the local Cooperative Extension office for the recommended low maintenance species.
- **The preferred time to plant grass seed is in the early fall** when there is less competition from weeds, more rainfall, and cooler weather. Spring seedings have limited success; it is a challenge for them to establish before the arrival of hot weather and competing grassy weeds. Use improved turfgrass varieties that have enhanced drought tolerance, pest tolerance, and turf quality when overseeding.

MOWING:

- **Mowing properly is an important cultural practice.** Mowing encourages turfgrasses to grow more densely. When done correctly, mowing can reduce weed growth and maximize the plant’s ability to make its food. Keep mower blades sharp all season long. Alternate the direction of mowing to avoid ruts, uneven wear, and compaction.
- **Maintain a high mowing height.** For most home lawns, a 3” height is preferred. Mowing too short (removing more than 1/3 of the grass’ leaf blade) can stress and weaken the turf. Improper mowing, or “scalping,” also exposes the soil to sunlight, which allows weed seeds to germinate. A higher mowing height encourages the development of a healthier root system, which makes the lawn able to tolerate stressful conditions such as heat, drought and disease.



A home lawn maintained with low maintenance turf grasses, mowed at a high height.

- **Mow regularly when turf is actively growing**, according to growth and weather conditions. Avoid mowing a wet lawn. Mowing is needed less in the heat/drought of summer, when turfgrass growth slows.
- **Leave clippings on the lawn** to decompose, which naturally supplies a source of nitrogen to the turf.
- **When possible, instead of using gas powered mowers, consider an electric or push mower.** Newer models of these machines make them easy to use, and without using fossil fuels, they are a plus for the environment.

FERTILIZING:

- Fertilizer promotes the shoot and root growth of turfgrasses. Slow release fertilizers are recommended because they extend the duration of feeding and provide an even and consistent feed, rather than a rapid release of soluble fertilizers.
- All turfgrasses should be fertilized when actively growing. Cool season turfgrasses should be fertilized in the spring or fall, not in summer. Warm season turfgrasses also should be fed while actively growing, and well before they enter dormancy. Over application and improper timing of fertilizer may cause excess nutrients to flow into groundwater. In the northern regions of the U.S., the last fertilizer application should be completed in mid-October to reduce the risk of unused nutrients from being leached into groundwater. Check with the local extension service as to the preferred time of year to fertilize in your area.

WATERING:

- **For mature, established lawns, watering should be done efficiently in order to be the most effective.** Overwatering produces a shallow, weak root system and also can encourage weed growth. Many weeds establish easily in moist or wet soils. Water deeply and infrequently, to encourage the turf roots to grow downward into the soil. Most established home lawns don't need to be watered frequently and can survive with limited irrigation. Tell-tale signs that turf is in need of water are the overall loss of color and "foot-printing" in which turf blades do not quickly "bounce back" when walked on. A lawn should experience a chance to dry out between watering events.
- **For new seedings, light, frequent irrigation** is needed until all turfgrass species germinate.
- **Water early in the morning.** Water will be absorbed by roots and used more efficiently by the plant, reducing the loss of moisture to evaporation. Avoid watering early in the evening and at night; grasses that are wet all night often are more prone to disease.
- **Allow the turf to naturally go dormant in summer by watering less frequently or not at all.** The growth of roots and shoots slows during hot weather. A healthy lawn will recover as growth resumes with cooler temperatures and late summer rains.
- **Water based on need, rather than timed, biweekly events.** Where possible, water sensors should be installed on all irrigation systems. Perform an audit on the irrigation system to ensure it is running properly, providing uniform coverage, and that sprinkler heads are directed to the turf, not driveways or roads.



Delicate fine fescues on a difficult to mow bank offer a low maintenance option.

AERATING/CULTIVATING:

- If soil is heavily compacted from wear or from roots of neighboring trees, mechanical cultivation allows air, water, and nutrients to enter the soil and helps grass roots to grow deeper and stronger. Spike or core aerators can be rented from lawn and garden stores.

WHERE POSSIBLE, REDUCE THE SIZE OF THE LAWN

- **Decreasing the overall size of your lawn can reduce mowing, irrigation and fertilizer inputs.** The flexibility of a home lawn provides the opportunity to be creative in its composition and care.
- **Identify the lawn area that is most important to maintain** for the purposes of walking, recreation, sports play, or visual appeal. The lawn directs the eye to other components of the property. Areas that are unused or difficult to mow (e.g., steep banks) can be left unmown. **Other areas may be repurposed as** alternative options, such as woodlots, meadows, landscaped beds, or expanses of other groundcovers. Low-growing, alternative ground cover options include clover, creeping thyme, sedge, sedum, and moss.