never removing more than 1/3 the total length of the blade of grass. Generally, the 'kindest cut' is a mowing height of 3" or more.

Lawn clippings are free fertilizer, adding valuable organic matter to the soil and increasing its ability to hold water. Clippings that are removed from the lawn should be disposed of properly by composting or recycling.

Sweeping litter (including grass clippings) into the street, gutter, or sanitary sewer is prohibited in Spring-field Township. Grass clippings are high in phosphorus and can pollute our waterways.

#### Thatch

Lawn thatch is made up primarily of dead and decomposing stems and roots that build up between grass and soil. A thin layer of thatch can be beneficial, providing some protection to turf and limiting weed growth. When thatch develops beyond half an inch, however, it may harbor disease-spreading organisms and prevent water from reaching plant roots. Thatch can be relieved in late summer with aeration. Frequent mowing, and avoiding soil compaction and overfertilization discourage the development of thatch.

#### Restoration

A routine part of your lawn care regimen is restoration. Touch up bare spots by overseeding in early spring or late fall. Add topdressing in fall to enrich the soil, increase drainage or moisture retention, and promote thick vigorous turf that discourages weed germination. Topdressing is a fine layer of additives mixed to improve the particular quality of your soil. Typically it includes loam, sand, and peat. Increasing the percentage of sand promotes soil drainage; the percentage of sand should be low in soils that drain excessively. Compost topdressing adds organic matter to soils, and promotes soil flora, the life of the soil.

#### Pets

Dogs can be hard on your lawn. Big dogs in small spaces can compact the soil. The salts contained in dog urine can kill turf, though



damage can be reduced by immediately flushing the affected areas with water. Dog feces should be removed to prevent smothering turf.

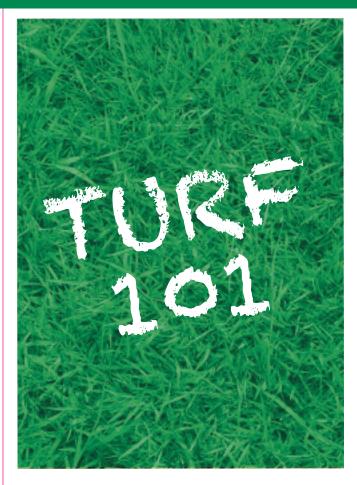
#### Weeds

A picture perfect lawn cannot be sustained without labor, cost, and potential damage to the environment from use of chemicals. Some level of weed growth should be considered acceptable. The best way to eliminate weeds is to prevent their growth by promoting the



health of your soil and turf. Incidental weeds that do intrude are most easily removed when they are young and can be pulled out readily. An application of boiling water or household vinegar will kill many young weeds. More information about chemical free lawn care is readily available online at sites such as www.healthylawns.org, and at the Cornell University Cooperative Extension.

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# Best Management Practices for Greener Lawn Care

## **Springfield** Township



Healthy lawns provide many benefits. They can protect or improve water quality and control erosion. In contrast to paved surfaces, they reduce runoff and lower ambient air temperatures. From a social perspective, we have long been in love with lawns, both for their appearance and for the recreational area they provide for our families and pets. It is generally true, however, that maintaining a stand of healthy turf demands a greater investment of time, effort, and money than does a well selected planting of trees, shrubs and perennials. Once established, a mixed planting requires relatively little care, and offers extensive benefits including ornamental display throughout the year, and habitat for birds and wildlife. Trees provide shade and cooling, and along with deeper rooted shrubs, stabilize the soil. Before you plant or improve your lawn, consider how much lawn you need.

From The Ground Up

As is true for any plant, requirements for healthy turf include conditions below the ground as well as above. Plants growing in healthy soil develop stronger roots and can more successfully withstand drought, outcompete weeds, and resist pests and disease.

#### **Test the Soil**

The condition of your soil directly affects its ability to sustain healthy turf. Penn State College of Agricultural Sciences offers a variety of turfgrass related services including soil and water testing, and disease identification (http://cropsoil.psu.edu/turf/extension/services). Results of lab testing will help you determine what amendments such as organic matter or nutrients could improve your growing conditions.

## **Build the Soil**

Topsoil for growing turf should be a minimum depth of 4". Soil should drain freely. Adding organic matter, tilled or dug in to a depth of 18", can reduce soil density, improve drainage, and build soil flora – vital



organisms that live in the soil and promote its fertility.

Soil which has become compacted will not drain freely, or allow adequate water and air to reach plant roots. Soil compaction results from such things as driving and parking on turf areas, especially when the soil is wet. Even repeated foot traffic from family members and pets can cause soil compaction. Soil compaction can be relieved, preferably in the fall, by aeration which removes small plugs of soil throughout the lawn.

#### **Choose the Right Seed**

Many varieties of turf seed are available for a wide variety of growing conditions, including sun, shade, and high pedestrian (and pet) traffic. Consider turf seed with lower demands for water.



From The Top Down

#### Water

More is not always better, especially when it comes to turf. Overwatering can kill turf when soil does not drain properly. Overwatering can also foster weak root development, since roots are not encouraged to seek out water deep in the soil. Watering is best done early, before the heat of the



day. Water deeply to moisten the entire root zone, and let the soil dry out before watering again.

Water left on plants late in the day can encourage the development of disease.

## Drought

It is normal for cool season grasses to experience summer dormancy in response to lack of moisture. Many varieties of turf will enter a dormant state, fading to brown under drought conditions. Typically, a healthy lawn will regreen when water conditions improve.

## Mowing

Thick, tall turf creates shade at the soil line, lowering plant stress by retaining soil moisture and reducing soil temperatures. Similarly, thick, tall turf discourages the germination of weed seeds. Mow high,

