

Mowing Practices

Proper mowing practices will result in a lawn that is visually appealing, healthy and resilient while decreasing the need to apply herbicides and providing an inviting location for recreational activities.

Best Practices and Benefits by Category¹

Height

Proper lawn length has many benefits including increasing the lawn's resilience to stressors, lessening time spent maintaining the lawn and reducing herbicide application.

- 1. As a best practice, lawns should generally be kept at 2.5 to 3 inches in height though optimal length varies by grass type.³** To measure lawn height, slide a ruler through the grass until it touches the underlying soil surface and check the grass blade height on the front of the ruler.
Benefits: Maintaining a lawn of proper height can limit the need to apply herbicides by controlling the weeds through natural means. Lawns with greater height lessen the light that reaches the soil surface, which can limit weed growth since many weed seeds require direct sunlight to germinate.
- 2. As a best practice, consider increasing lawn height in summer months especially during prolonged dry periods.** Increased lawn heights will increase the lawn's ability to tolerate stress caused by heat and dry winds.
Benefits: Lawns with higher heights generally also have greater root depth, which increases their ability to infiltrate water more quickly, and increases their access to nutrients and water found within the soil. Increased access to nutrients and water helps to keep the plant healthy and resilient to pests, dry weather, and other stressors.

Frequency

The frequency at which you mow a lawn depends entirely on how fast the grass is growing. In Pennsylvania, lawns tend to grow more quickly in the spring when temperatures are moderate and precipitation levels are higher. Lawn growth rate tends to decrease in hotter summer months; however, this varies year-to-year depending on actual temperature and precipitation levels. Typically mowing frequency should slow in mid-to-late fall as cooler temperatures slow plant growth. Generally, mowing should stop in Pennsylvania around late October when growth stops; however, the timing will vary year-to-year based on weather conditions. Ideally, grass should be mowed at the end of the season to prevent having long grass (which is susceptible to snow mold and meadow voles) during winter months.

¹ <http://www.extension.umn.edu/garden/landscaping/maint/maint.htm>

1. **As a best practice, mowing frequency should be based on the length of the lawn rather than the number of days that have passed since the lawn was last mowed.**

Benefits: Lawns that are mowed at proper intervals will be healthier and more visually appealing due to decreased scalping, which is excess removal of green plant tissue while mowing. Lawns that are mowed too frequently may not have sufficient time to grow green plant tissue while lawns that are allowed to grow too long may have too much green leaf tissue removed during the cut. Cutting too low will expose leaf tissue that appears yellow because it lacks chlorophyll. Grass that has been cut too low will need to use food reserves to grow plant tissue that contains chlorophyll before it is able to grow normally. This lessens the plant's resilience to pests and other stressors and can promote weed growth.

2. **As a best practice, no more than 1/3 of the grass blade should be removed during a cut.** As an example, you should not cut more than 1 inch off a lawn that is 3.5 inches in length.

The picture to the right demonstrates a lawn that has been "scalped" (i.e. too much of the leaf tissue has been removed).



Bladerunner Farms Inc., Texas

Direction

If possible, mowing direction should vary from cut to cut.

1. **As a best practice, if possible, mow at a right angle to the previous cut.** *This may not be possible depending on topography. Push mowers should be used side-to-side on a hill and riding mowers should be used up and down a hill.*

Benefits: Alternating mowing direction promotes upright shoot growth, prevents scalping, and reduces soil compaction.

Education and Outreach²

Locations that implement mowing best practices may face scrutiny from individuals who have different lawn care expectations—this is particularly true for lawn height. Therefore, some locations may benefit from providing the public with information on lawn care practices. The following bullets may be beneficial for education and outreach purposes:

² <http://www.lawn-care-academy.com/grass-cutting-height.html>

³ <http://tinicumconservancy.org/pdfs/Environmentally%20Friendly%20Lawn.pdf>

- **Not all grass is the same.** Most grass types used in lawns should be kept at 2.5 to 3 inches in height. This height promotes deep roots which provide access to nutrients and water and help the grass resist pests and tolerate dry weather.
- **Leave the buzzcut at the links.** Golf courses use specific types of grasses, such as Tifdwarf Bermudagrass and Creeping Bentgrass that tolerate very low heights. While aesthetically beautiful, these grasses require considerable maintenance. Similar heights are not appropriate for most lawns that use different grass types.
- **Shade out the weeds.** Longer grass can help to prevent weed growth by preventing sunlight from reaching the ground where weed seeds are waiting to grow. This natural approach to preventing weeds reduces the need to apply herbicides, which can make their way into streams and other waterways.