Lake Terramuggus Weed Guide

&

Lawn Care Tips

Presented by the Marlborough Lake Advisory Commission

Weed Knowledge and Tips:

To assist in preserving one of Marlborough's most valuable natural resources, the Marlborough Lake Advisory Commission holds regular meetings to discuss issues impacting the lake and assists in coordinating various activities at the lake (water testing, weed monitoring, fish stocking, etc). Over the last several years, resident accounts and a weed survey have identified several varieties of grasses/weeds that are beginning to pose challenges to the health of lake and/or its recreational use. The following information is being provided as a quick reference guide to enhance the knowledge of residents within the watershed. The overall objective is to help residents:

- Understand what approvals are required before taking any actions within the lake area;
- Identify what plants may be growing on their property;
- Remind them that most weeds are beneficial to the lake – providing cover for fish and improving oxygen levels;
- Indicate which plants should not be removed by homeowners;
- Indicate which plants may be removed by homeowners and how;
- Provide some ideas on safe and effective yard maintenance practices;
- Where to obtain additional guidance and information.

Required Approvals:

The Marlborough Conservation Commission must review and approve all vegetation removal occurring within 200 feet of Lake Terramuggus. Therefore, residents should contact the Marlborough Town Planner's office for guidance prior to beginning a weed removal project. The Marlborough Conservation Commission meets monthly, and their meetings are posted on Marlborough's town website.

Phragmites*:*

Also known as the common reed, plants grow up to 20 feet high in dense stands. Stalks are very durable and sharp to the touch. While it primarily spreads quickly via root runners, it is also capable of spreading by seed. Dark purple cones of flower develop by mid-Summer then transition to grey tufts of silky hair-like strands. Seed transfer occurs mostly in fall and winter, and can occur by wind or by physical transportation. Decomposing Phragmites plant material causes marsh conditions more quickly than other vegetation.

Most successful management involves an aquatic herbicide and full removal of the plant at the correct time of year. Removal by homeowners is not advised, and in most cases can serve to accelerate the spread of the plant. Homeowners should alert the Marlborough Town Planners office or Lake Commission if Phragmites are identified on a property so that a strategy can be determined.

Cattail:

Plants grow up to 10 feet tall and are topped by a cigar-shaped seed pod called a catkin. The seed pod is green during early summer and turns fuzzy brown in the fall and following spring. While it primarily spreads quickly via root runners, it is also capable of spreading by seed. Seeds and existing stalks that are underwater cannot grow well.

Cattails can be eliminated/managed by cutting the stalks. Cutting stalks in spring or early summer actually stimulates growth, while cutting stalks below the waterline several times beginning in late summer will discourage growth the next season. Removal of the entire plant from the area is preferable. Most successful management typically involves the application of an aquatic herbicide and full removal of the plant.

Small Pondweed (potamogeton pusillus):

Small pondweed grows in standing or slow-flowing bodies of water. It almost always remains submerged. It thrives in circumstances of high nutrients. Under best conditions, it can establish extensive beds. Buds are produced during summer in large quantities. In fall, the entire plant disintegrates causing the buds to be deposited into the water bed and assisting with overwintering/propagation. It can also spread via runners.

Pondweed can be removed by cutting/raking and removing from the water. Removal should be done before buds form in late summer. Remaining runners and seeds will repopulate the area, but sequential years of removal can significantly reduce plant density. Bottom-shading mats can be used to deprive the runners of light. Aquatic herbicides can also be used to control the plant.

Disposal of Removed Plant Material:

Plant matter removed from properties can be disposed of at the transfer station. Transfer station staff members have been notified to place material in a segregated area to prevent inadvertent transplanting.

Additional Information:

Significant information on all of the above plants is available on the internet. Other sources would include the CT DEEP, the Town of Marlborough Conservation Commission, and the Marlborough Lake Advisory Commission.

Lawn Care Tips:

To many people a yard without a lawn is not a yard. Lawns provide play areas for children and sports. A lawn's open space is ideal for enjoying the sun and outdoor dining or entertaining.

But aren't there water quality problems with having a lawn in a shoreline area? Yes, in fact, there are. The same nutrients that promote a lush green lawn can promote lush green growth of aquatic plants and algae in a lake. Studies on some lakes have indicated that lawn fertilization is one of the largest sources of human-induced pollution. Although nutrient pollution can be minimized by carefully managing fertilizer application or not fertilizing at all, the very existence of a lawn which extends to the water's edge causes other types of problems, such as near shore habitat destruction, increased overland runoff to the water, and weakened shoreline soils increasing the likelihood of erosion.

Lawns are not a natural landscape feature and generally require high maintenance. You can still have a lawn on a shoreline property and protect water quality, especially if the area adjacent to the shoreline has natural vegetation. This brochure provides some tips on how you can manage your lawn without impacting the lake's water quality.

Guidelines for Shoreline Lawn Care:

If you do choose a lawn as your preferred landscape option for your yard, follow these guidelines to minimize your impact on surface waters:

Natural Vegetation:

Maintain natural vegetation along the shoreline. Maintaining natural vegetation with trees, shrubs, and ground cover can preserve water quality, enhance aesthetics, and protect your property from shoreline erosion.

Fertilizing Tips:

Before applying fertilizer, test your soil to determine which nutrients, if any, are needed. Soil testing is available through our local garden centers.

If fertilizer is necessary, be sure you're fertilizing only the lawn and not the lake! Use the smallest amount of fertilizer possible to maintain good grass cover. In the spring, use small amounts of a slow release form of nitrogen. This method allows the grass to use the nitrogen and remain vigorous while minimizing the amount of nutrients entering the water. If the lawn is not growing well, apply a very small amount of nitrogen early in the summer. Try not to apply fertilizer before a rain.

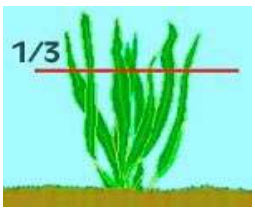
Do NOT use a fertilizer containing phosphorus. Phosphorus is the most critical nutrient in lakes. Even a small amount of phosphorus added to a lake can stimulate excessive growth of aquatic plants and algae.

Lawn Cover:

If you are establishing a lawn, plant a fescue mixture rather than bluegrass. Fescue requires much less nitrogen per square foot than bluegrass. Tall fescue and creeping red fescue grass are drought and shade tolerant and does very well here in Connecticut.

Grass Length:

Do not cut the lawn too short. Recommended cutting height is two to two and a half inches. Along shorelines you may even want to grow it longer. This allows healthier, greener growth with less fertilizer. Leave grass cuttings on the lawn to help retain moisture and add nutrients to the soil. Never cut more than 1/3 of the grass length at a time.



Watering:

Water the lawn with lake water to keep it green and thriving without the use of fertilizer. Nutrients in the water can be utilized by the grass, reducing concentrations in the lake or stream. A thorough weekly watering during dry spells promotes deeper root growth and healthier grass than light watering. Avoid excessive watering, especially on sandy soils, as it can cause nutrients to leach from the soil and move into surface water.

Pesticides and Herbicides:

Avoid pesticide/herbicide and fertilizer mixtures. Since many commercial lawn herbicides can harm aquatic plants and animals if they get into the water, it is better to dig up or live with the weeds.

There are many tools available to manually pull out weeds such as Friskar's Deluxe Stand-up Weeder. Devices like this will also immediately eliminate your weeds.

If you decide that weeds must be treated, spot treat herbicide in the fall. This will minimize runoff and reduce harm to trees, shrubs, and aquatic life. Pesticides not only can contaminate water and wildlife, but can cause harm to humans too. Many alternatives to pesticides are available and can be equally if not more effective than pesticides.

Professional Care:

If your lawn is maintained by a lawn care professional, discuss your priorities for water quality protection with them. Be an informed consumer. Don’t let them put anything on your land that will harm our beautiful lake.

Consider Alternatives:

There are many alternatives to a highly manicured lawn. Preserving or restoring natural vegetation may be more attractive and beneficial. Some other options to consider include a pruned lake viewing corridor, a deck, or a small patch of lawn near your house with a diverse, low-maintenance mixture of trees, shrubs, and ground cover planted in other areas.

Dangers of Leaves and Lawn Clippings to our Lake:

Leaves and grass are organic. They just break down and disappear, right?

Wrong. Leaf litter and lawn clippings are one of the biggest contaminants when it comes to lake pollution.

When leaves and lawn clippings in addition to animal wastes, fertilizers, and soil are picked up by storm water runoff or are raked and/or blown directly into our lake, it provides the lake with excess phosphorus. This excess phosphorus causes increased algae growth. Increased algae growth is observed as green algae blooms or scums on the lake. Too much algae is harmful to a lake system. It blocks sunlight and prevents other plants from growing. When it dies and decays, it also takes much needed oxygen away from fish. Limiting phosphorus reduces algae blooms. Algae blooms can make for unsafe swimming conditions and cause for a potential shut down of all swimming. This also adds to the yucky layer of muck on the bottom of the lake.

What to do with leaves?

Never blow or rake or blow leaves into the lake or onto the street so that they end up in the stormwater drains around our lake. They decompose and produce harmful levels of polluting nutrients.

Instead, rake up the leaves and grass on your property. You can have leaves transported off of your property to a place that can safely allow them to decompose back into the ground away from any waterway or consider these following options.

Mulching leaves on your lawn:

Most of us mulch our grass clippings right back into our lawns. This provides valuable nutrients for our lawns and saves us trips to the yard waste drop off sites. It turns out that mulching leaves back into your lawn is also good for our lawns and reduces the time we spend raking in the fall.

Benefits of Mulching Leaves on Your Lawn:

There have been several long term studies of the effects of leaving leaves on the turf. These studies all conclude that your lawn will benefit from mulching leaves right into the grass. Lawns where leaves were mulched directly into the turf where healthier than the lawns with no leaves added and had fewer weeds. Leaf mulching also provides a softer surface in the following summer providing a cushion that would be more forgiving for persons engaging in physical activity in the area.

How to Mulch Leaves on Your Lawn:

It is important that you use your mower to mulch leaves into your lawn. Mowers cut leaves into small pieces, allowing them to fall into and beneath the grass canopy instead of resting upon it. This process results in increased surface area, which in turn makes it easier for insects and microbes to consume the leaves and get the nutrients back into the soil.

Making leaf mulch to use beyond your lawn:

Leaves make great mulch and winter ground cover for gardens and around shrubs and trees. And, they are free. Shred your leaves and pile them on top of your annual garden or around perennial plants and shrubs. This will help insulate plants and protect them from winter freeze damage. In the spring, you can till the leaves into your garden. Since large leaves get wet and mat down they provide poor insulation it is important that you shred your leaves first. The best way to do that is to run over them with your lawn mower.

Compost:

A compost pile located away from the lake is a good way to dispose of leaves and grass clippings. If you don't compost your yard waste, dump leaves, grass clippings, or brush back from the lakeshore. Burning leaves is not recommended, as it causes air and water pollution. If you have a fire ring near the shore, periodically remove the ashes for disposal away from the water's edge.

Leaf Mold:

Another great at home use for leaves is to make leaf mold. Leaf mold differs from compost in that when you compost leaves you mix them with other organic matter. When you make leaf mold, all you use are leaves.

Benefits of Leaf Mold:

Leaf mold greatly improves the structure and water-holding capacity of soil. It also creates the perfect conditions for the beneficial organisms that live in your soil. Best of all, it's easy to do. Leaf mold is perfect mulch because it can hold up to 500 times its own weight in water. Place it around (but not touching) the crowns of annuals, perennials, and vegetables to help them maintain moisture during summer. It's easier for roots to penetrate soil and take up nutrients when the soil is not as dense and leaf mold makes it easier for roots to penetrate. A University of Connecticut study found that soils amended with leaf mold increased their water-holding capacity by almost 50 percent. The amended soil could hold nearly a two-week supply of water for vegetables.

How to Make Leaf Mold:

You can chop up your leaves with a mower or use whole leaves for this process. Next by making sure the leaves are thoroughly moistened. Dry leaves begin to lose nitrogen, and this hinders the decomposition process. Next, you can take the slow route and pile leaves in a sheltered, inconspicuous area of your yard and leave them for two years. Or, you can make a 3-by-3-foot leaf mold bin from drive stakes and chicken wire or rabbit fence and place the leaves in the enclosure. You can speed up either process by turning your pile or cage every 8 to 10 weeks. There are several ways to use leaf mulch. Leaf mold is a good substitute for peat moss. It has similar qualities and it's a renewable resource from your own lawn.