

GREENWorks

Ideas for a Cleaner Environment

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Please Don't Fertilize Our Lakes!

The vestiges of winter have disappeared and mud season has dried up – now we see what's growing up all around us, and sometimes it's not pretty. This is the time of year when many homeowners are cleaning up their yards, fixing up their flower beds and pepping up their lawns. Some lawns need a little more TLC than others, and many people tend to turn to fertilizer to help them along.

If you plan to fertilize your lawn, keep in mind that the type of fertilizer you use and how and when you apply it can have a big impact on the environment around you. Fertilizer contains nutrients that plants need, such as nitrogen, phosphorus and potassium. If not applied properly, those nutrients can be carried away by stormwater runoff and washed into lakes and ponds. Those nutrients are causing too much plant growth in our surface water, which can cause real damage. Some areas of New Hampshire, such as the Great Bay, are grappling with issues of excess nitrogen and other popular lakes and ponds are seeing excess phosphorus.

Excess plant growth in lakes and ponds can:

- Stimulate algae blooms including cyanobacteria, which has been proven toxic for humans and animals.
- Reduce oxygen levels for fish.
- Fill in lakes or ponds over time.

It's important to note that there are alternatives to using fertilizer; for example, you can get a similar effect by leaving lawn clippings and leaf litter on your lawn. The nutrients grass use to grow are trapped in the blades. Leaving grass clippings to break down in your lawn returns those nutrients to the soil to be used again. (Good news! Leaving clippings does not contribute to thatch.) You are feeding your lawn and saving yourself the work of emptying a mower bag. If you do want to use fertilizer, though, you can help to protect our lakes and ponds, whether you live near them or not, by following some general application guidelines.

Picking the Right Fertilizer

No two fertilizers, or lawns, are necessarily equal. You will see that fertilizer packaging comes with a number code, such as "33-0-4" and "5-10-15," corresponding with an N-P-K. These numbers tell us how much of a nutrient is in the fertilizer: the first number is N (nitrogen), then P (phosphorus) and lastly K (potassium).

The amount of certain nutrients you will need in your fertilizer depends on what your soil is lacking. Most established lawns in New Hampshire do not need a lot of phosphorus. New Hampshire soils naturally contain the phosphorus most lawns need to grow. Leaving your lawn clippings can also provide phosphorus for your lawn.

You don't want to apply more nutrients than the plants can take up – that wastes your money and labor and causes pollution. Look for N-P-K that are 10 or lower – these are generally organic (natural) sources that are naturally slow release. Look for the [OMRI label](#). In addition to slow-release, look for water-insoluble nitrogen. A water insoluble choice will help decrease the number of applications needed.

Soil tests will always be the best way to see what nutrients your lawn needs. You can find soil testing facilities across the state, including the [UNH Cooperative Extension](#) and the [Natural Resources Conservation Service in New Hampshire](#).

Applying fertilizer

Maybe the biggest cause of excess nutrients finding their way into our surface waters is over-application of fertilizers. It is important to know your lawn's square footage to determine how much is needed. You can typically cut the recommended amount of fertilizer found on the packaging by about one-half to one-third.

You can also reduce the amount of fertilizer you need by choosing the right type of grass seed, leaving your lawn clippings, mowing at least three inches high and avoiding any over-watering.

Important: It is illegal to apply fertilizer within 25 feet of a lake or pond over 10 acres in size and many streams and rivers that are protected under the New Hampshire Shoreland Water Quality Protection Act. It is a great idea to treat all water bodies in the same way.

If you do end up with leftover fertilizer, you can save it and use it next year. When storing fertilizer, it's important to make sure to store it in a dry place and close the bag with a clip, so there isn't a danger of nutrients leaking from the bag.

When to fertilize

The best times to fertilize your lawn are in the spring – between April and mid-June – and fall – between Labor Day and Oct. 1.

Mid-May is a great time to apply fertilizer to your lawn as the grass is just starting to wake up and grow. Fall is an even better time because it allows the plants to store nutrients for the next year. It is also best to plant new lawns in early fall because there are less weeds at that time, and the grass will have a chance to grow before it gets too cold.

Never fertilize in July and August since grass grows less in the heat. Since the grass is growing less, it isn't able to take in as much of the fertilizer, which can then easily be picked up by rainwater and washed into lakes and ponds. Check the weather forecast before application too,

and be sure to apply it before a small to medium rain event, but not before a big storm that could cause it to all be washed away.

If you're going to apply fertilizer to your lawn, a little forethought and planning can help you grow a healthy lawn and protect the water quality of our ponds and lakes.

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