Conservation Matters

A monthly column focused on conservation education, as the result of collaboration among several area conservation commissions and organizations. If your town's commission or conservation organization would like to contribute articles, please contact Jessica Tabolt Halm jesshalm78@gmail.com

Title: Fertilize with Care

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Summer is the time when thunderstorms frequently pop up and can deposit large amounts of rain in a very short time causing minor flooding and uncontrolled run-off. Summer is also the time when we all periodically fertilize our lawns and gardens. A mistake often made is to apply excessive amounts of fertilize. Over fertilization not only can harm plants, but excess fertilizer can find its way into local water resources before it all dissipates into the soil. Most fertilizer contains nitrogen and/or phosphorus, which may be good for your lawn and garden, but in excess are not good for streams and lakes. Storm water run-off can carry fertilizer not yet absorbed into the ground into storm drains and culverts, which eventually carry the water to a stream or lake. Excess nitrogen in lakes and streams causes an increase in the growth of algae and other aquatic plants, which cannot be contained by the natural ecosystems. Significant increases in algae harm water quality, food resources and habitats, and decrease the oxygen that fish and other aquatic life need to survive. Large growths of algae are called algal blooms and they can severely reduce or eliminate oxygen in the water, leading ultimately to the death of large numbers of fish. Humans unknowingly consuming contaminated fish can become seriously ill. Please use fertilizers responsibility; use recommended amounts and gently water the fertilizer into the ground to prevent run-off. Also, please note: the Shoreland Water Quality Protection Act dictates that **no** fertilizer may be applied within 25 feet of the reference line designating protected waters. Between 25 and 250 feet from the reference line, only slow or controlled release fertilizer may be used. No other chemicals, including pesticides or herbicides of any kind, can be applied within 50 feet of the reference line, except by a licensed, permitted professional.

Late fall is an ideal time to fertilize your lawn and garden areas. It helps strengthen your soil to help plants winter over, and there is less chance of 'down-pours' where the ground is unable to absorb all the water. Normally, gentler fall rains are more easily absorbed into the ground dissipating the fertilizer into the soil so it's ready in the spring. Before you fertilize, summer or fall, it's wise to have your soil tested, either by a professional lab or using a home test kit [available at farming cooperatives, university labs, private labs, and some hardware and gardening stores]. It is best to test your soil every few years, and it is particularly important in new garden bed installations or in areas where established plantings are not performing as well as expected. Soil testing is an inexpensive yet valuable tool for assessing the fertility of lawn and garden areas. A soil sample can be collected any time the ground is not frozen, but fall is considered optimal. Generally, results from a professional lab will provide more accurate and more detailed information; and will also contain specific recommendations as to the type(s) and amount of fertilizer to use. The advantage of using a local lab is that they are familiar with the chemistry of

the soil in the area where the sample was taken, which enables technicians to recommend the tests that are most likely to reveal useful information. Knowing how much and what type(s) of fertilizer to apply saves time and money, as well as helping to protect the environment. A soil fertility test does not detect the presence of contaminants such as pesticides or petroleum products; a state approved environmental laboratory can perform these analyses if desired.

Our preference from a conservation standpoint, would be that you use 100% organic materials for fertilization, but if chemical fertilizers are used, applying the proper amounts of limestone and fertilizer promotes healthy, productive plants, and reduces the potential for water pollution from overapplication of nutrients, especially nitrogen and phosphorus. For more information about soil testing and detailed instructions on collecting soil samples, contact the University of New Hampshire Coop-Extension info line at (877) 398-4769 Monday through Friday 9:00am – 2:00pm, visit their website at extension.UNH.edu, or you may email your question(s) to: answers@UNH.edu .