FERTILIZER APPLICATION TIPS FOR HOMEOWNERS ON NANTUCKET

Background

A comprehensive plan to reduce nutrient contamination of our waters from excess use of fertilizers, thus meeting mandated Total Maximum Daily Loads, TMDL, of nutrients in our waters, has been released by the Town of Nantucket.

- The Board of Health will be responsible for the plan and the Department of Health will enforce it.
- It applies to professional fertilizer applicators and interested homeowners on Nantucket, excepting commercial agriculture. Landscapers will take a test to be licensed and will reapply every three years. Is your landscaper certified? Homeowners may apply for a license as well. License holders may follow the detailed but flexible guidance of the BMP.
- The comprehensive plan is based on a scientifically rigorous Best Management Practices Plan, BMP, available in the DOH office or on line as a reference.
- The BMP has been written specifically for Nantucket: Soil, topography, climate, and plants. Our soil is porous and does not hold fertilizer, which, if over applied, washes into our water sources.

Points for Homeowner fertilizer use- We are different.

- Fertilizer should be applied for plants to use as quickly and effectively as possible. Excess will harm ACK waters:
- Apply only between April 15 and Oct 15 so that plants are active, not dormant;
- Do not apply before strong rain that will wash it into water sources;
- Avoid excess irrigation;
- Avoid wetlands and other areas defined by the Conservation Commission as no-fertilize areas;
- Test the soil before applying fertilizer.

Compost –Learn More.

- Special case on Nantucket: soils are different here from the mainland and need to be treated differently.
- Many of our amended lawn and garden soils have enough phosphate for plant growth, adding more might harm waters.
- Animal manures and animal-manure-based composts are rich in nitrogen and phosphate; leaf litter composts are less so and are preferred.
- Native levels of organic matter, OM, are lower here than elsewhere.
    - Compost is important to develop organic matter in soil:
        - a source of carbon and other nutrients,
        - retains moisture,
        - hosts beneficial bacteria and insects,
        - leaf litter compost is preferred,
        - while compost is important for raising OM levels, it should be applied slowly.
    - Raising soil organic matter much above native levels can result in nitrogen and phosphorus leaching.

How to test soils, why?

- Always use the same testing laboratory for consistency in results;
- Follow sampling directions on sample container;
- What is learned?
    - Texture: percentages of clay, silt, and sand,
    - Essential elements: P, K, Ca, Mg, Fe, and trace elements,

    - Organic matter,
    - Nitrogen is not exact.

READ the LABELS when buying fertilizer and applying.

- Labels list the ingredients as follows: Nitrogen, N, as elemental nitrogen, Phosphorus, P, as P_2O_5, and Potassium, K, as potash, K_2O.
- The label tells us in percentages how much of each is contained in a bag of fertilizer: N percent, P percent, and K percent.

Guide to Fertilizer Application

- Nitrogen application limits:
    - excess nitrogen affects marine life,
    - 3.0 lbs per 1000 sq ft per season,
    - At least 2 weeks apart,
    - 0.5 lbs per application,
    - No more than 0.25 lbs per 1000 sq ft of quick-release nitrogen per application,
    - Variations allowed for license holders who follow the BMP.
- Phosphate application limits:
    - Excess phosphates affect fresh water life,
    - None unless need specified by soil test,
    - If soil tests show need, new plantings and moved plantings may receive phosphate.

Effective lawn care can reduce the need for fertilizer

- Let your grass grow longer, 2 ½ to 3 inches long. The plant is healthier and can take up fertilizer more effectively. Long grass weathers the hot summer better.
- A 3-inch high lawn can take up and use nutrients up to ten times as effectively as a 2-inch lawn.
- Leave the clippings on the lawn. They equal a pound of fertilizer per 1,000 sq. ft. per year that you do not have to apply.
- Cut the grass more often. Never remove more than the top 1/3 of the length. Your lawn will be healthier.

Using native plants is a simple way to reduce nutrient inputs to our soils.

- Site planning and landscape designs incorporating or preserving native plants, which do not require fertilizer, are encouraged.
- Some native plants that work well on Nantucket:
    - Meadow grasses, including little bluestem and Pennsylvania sedge;
    - Shrubs, including bayberry, inkberry, winterberry, and blueberry;
    - Trees including red maple, tupelo, American holly, and oaks.

More information can be found in the Best Management Practices manual.