



Proper Lawn Care for Lake Health

Dr. Jennifer L. Jermalowicz-Jones, Restorative Lake Sciences

Everyone likes a lush green lawn, especially on a waterfront property! However, did you know that this practice can be harmful to the lake water quality and overall health? Did you also know that most lawns can get more than enough nutrients just by using lake water? This lake water is often high in both phosphorus and nitrogen and can support a lush, green lawn. Each time the water is filtered through the soil, phosphorus adsorbs onto the soil and less of the nutrient returns to the lake. It is phosphorus that causes most nuisance aquatic plants to flourish and both nitrogen and phosphorus that can accelerate algal blooms. The majority of our lakes have more than enough nutrient to allow for abundant aquatic plant and algae growth and most do not need additional nutrients. Michigan State University Extension can conduct testing to see if your soil is nutrient-deficient. Contact your local MSU Extension office for assistance or visit www.msusoiltest.com. **If the soil is found to be deficient, then the following tips are recommended for safe use of fertilizers with less impact to the lake:**

1. Do not use a fertilizer with phosphorus (P). Look for only organic nitrogen primarily in a slow-release form.
2. Make sure there is an adequate buffer (distance) between where the fertilizer is applied and the water's edge (at least 10 feet). Ideally, a soft shoreline of vegetation would also be present.
3. Be sure to avoid impervious (hard) surfaces during fertilization as this would allow for transfer of nutrients into the lake during runoff from hard surfaces.
4. Similarly, never apply fertilizer to frozen soil or saturated soils which have the same runoff effect.
5. Ask lawn fertilization professionals if they are familiar with following safe application for lake best management practices.
6. Only apply fertilizer after spring greening has begun and once again in mid-summer and early fall.
7. A general rule of thumb is to apply no more than 1 pound of nitrogen per 1,000 square feet of lawn.
8. During the lawn mowing season, if you bag your clippings, dispose of them in local yard waste disposal site, or other approved location.
9. Make sure when you remove leaves during fall leaf season, to dispose of in your local yard waste site or other approved location.
10. Never dispose of yard waste by dumping in the Lake.