IMPROVING LAWN CARE AND GARDENING IN COASTAL NORTH CAROLINA

Lawns and gardens add beauty, provide habitat for many plants and animals, and can help protect the environment by filtering out pollutants and reducing soil runoff. Homeowners often care for these lawns and gardens by applying plant nutrients and sometimes pesticides to keep them healthy and pest free. Improper storage and application of these products may result in the products moving through the soil into the groundwater or leaching into surface waters. This can cause damage or kill aquatic plants and animals and pollute groundwater and drinking water.

It is important to know how to maintain these areas while still protecting your water supply and surrounding coastal waters. Children and pets are also vulnerable to pesticides improperly stored and applied. Proper storage and use of these products in addition to proper watering are all part of the overall protection plan to reduce harmful runoff.

Surface waters need to be protected from lawn and garden activities that cause soil erosion. Land-disturbing activities may cause soil to move into streams, rivers and estuaries. Excess sediment in surface waters can kill important food sources for fish and cause a decline of water quality. It is important to keep your soil on your property. You can do this by minimizing the amount of bare soil exposed to rain.

Leaving or establishing an undisturbed natural area of vegetation along lakes, creeks, marshes, canals and rivers, can provide numerous benefits for overall watershed and stream health. Landscaping down to the water with inappropriate plant species can increase erosion and the potential for flood damage.

It is nearly impossible to get pollutants out of the water once they get there. Expensive treatments or new wells could be required to get safe drinking water again and to clean up polluted waters. Clearly, it is much more effective to keep pollutants out of the water than to try to clean it up later.

Storage and use of fertilizers. Store fertilizers in a locked and dry cabinet away from your well. Keep fertilizers and pesticides separated. Load your fertilizer spreader on a hard surface so spills can be swept up. Liquid

fertilizer should be added to a sprayer over the lawn so it will not run into surface waters. Do not store fertilizers with combustibles, such as gasoline or kerosene, because of explosion hazards.

The chemical in fertilizer that can most easily pollute groundwater is a form of nitrogen called nitrate. Drinking water with 10 milligrams of nitrate per liter of water exceeds drinking water standards and should not be consumed. To prevent nitrate pollution, you must not apply more nitrogen to grass and plants that can be used during its growing period. Keep all fertilizer out of surface waters.

A good example is centipede grass, which needs very little nitrogen during its growing period in an established lawn. For the entire year centipede needs only one half pound of nitrogen per 1000 sq. ft. of lawn area. Never use a fertilizer containing phosphorus on an established centipede lawn. The recommended month to fertilize centipede is June.

For a garden you should need no more than 3 or 4 pounds of nitrogen per 1000 sq. ft. of garden area per year. If split into two or three applications, the fertilizer will steadily feed the plants without seeping into the ground water.

Storage and use of pesticides. The fewer pesticides you buy, the fewer you will have to store. Pesticides should be stored in a dry secure location away from a well or other water source. Keep dry products above liquid products to avoid wetting from spills. Damaged or unused pesticides should be disposed of at an approved household hazardous waste disposal site. Burning pesticides or containers can create extremely toxic fumes. Never pour unused pesticides down the drain.

Be sure to follow manufactures directions when applying and using pesticides. Use only the recommended amounts and keep it well away from any body of water or your wellhead. Do not apply on your sidewalk or driveway where storm water runoff could be a problem.

For more information on recycling lawn and garden pesticides, contact the Division of Solid Waste, North Carolina Dept. of Environment, Health and Natural Resources, Washington Regional Office (252-946-6481)

Proper watering for lawns and gardens. Over watering your lawn and

plants can cause excess water to move through the soil. This excess water can carry pesticides or nitrates that can pollute your ground water. The best way to avoid over watering is to measure how much you are adding. Apply enough water to moisten the soil 4 to 6 inches deep for healthy root growth or 1 to 2 inches below the root zone of the plants.

In coarse, sandy soil apply ½ inch and in heavier clay soil apply 1 inch of water. Place shallow containers like tuna cans to catch the water and time how long it takes to collect ½ or 1 inch. It is best to water in early morning so that the moisture does not evaporate as quickly as during the heat of the day. Also, by watering in the early morning, you can avoid mold and mildew problems that can occur when watering at night.

Using drought-tolerant native plants will reduce the amount of extra water needed above normal rainfall. Native plants also require less fertilizer and pesticides. Less water means less fertilizer and pesticides carried into the ground water. Water only when grass and plants really need it.

Any questions about any of these information articles should be directed to any member of the Waterways and Environmental Advisory Board. Board meetings are held the first Monday each month at River Bend Town Hall at 7:00 pm.