Protecting Your Home, Lawn and Water

The Georgia HOME*A*SYST Program

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Your Lawn and Garden

A lawn, along with flowers and trees, can beautify and increase the value of your home. But applying too much water, fertilizers or pesticides to your lawn can cost you more money and can create water pollution and health problems.

Poor use and disposal of fertilizers, pesticides, yard, car and pet wastes, household chemicals, and construction materials can result in runoff into storm drains, ditches, rivers, ponds, ocean water, etc, and affect our household water supplies and aquatic life.

Ask Yourself These Questions?

• Do you use or plan to use pesticides or fertilizers on your lawn?
• Do you store, mix, or apply pesticides or fertilizers within 100 feet of a well or other body of water?
• Is your home close to a body of water (pond, river, wetland, or ocean)?
• Do you know the recommended mowing heights for your lawn?
• Do you dump car fluids, cooking oil, grease or food scraps in your yard or in a stormdrain?
• Do you "water your driveway" when watering your lawn?
• Do you wash your car, motorcycle, boat or farm equipment on your driveway or street?
• Do you maintain your car and use parking lot trash cans as a water source?

FOR MORE INFORMATION:

Call your local Cooperative Extension Service office. Coastal counties offices Chatham (912)698-1900; Bryan (912)698-2344; Liberty (912)698-7931; McIntosh (912)237-6653; Glynn (912)267-5655; and Camden (912)576-3219.
Also, check our website www.caes.uga.edu/housing

This publication incorporates information from the National Home*A*Syst: An Environmental Risk-Assessment Guide for the Home, David J. Eagen, editor, publication number CNR-139, September 2000. Improving Household Wastewater Treatment, Anthony Tyson, author, bulletin number 1152-4; and EPA Office of Water, Improving Stormwater Management, bulletin number WH-547.

• Protect or reduce the use of pesticides by planting disease-resistant plants and grasses and remember to use plants native to your area when possible.
• If you live along a stream or river, leave a "buffer zone" of vegetation immediately adjacent to the water that you do not fertilize or apply pesticides to. This buffer zone will act as a filter for runoff leaving your yard, and will slow down, reducing erosion of your yard. It is best to have a mix of native grasses, shrubs, and trees in this buffer zone. Moving should be done infrequently. The width of this buffer zone recommended by the Georgia Environmental Protection Division is 25 feet on each side of the stream/canal.
• Conserve water: Convert your landscape plants and grass to ones adapted to your region in Georgia. Call your local extension service office for guidance on drought-resistant grass and plants and the mowing height recommended for your lawn.
• Typical lawns need about an inch of water a week. Measure how much water you need by placing a rain gauge on your lawn to determine how much is needed. Stop watering when the gauge is full or water is running off the lawn. A single deep watering is much better than several light waterings. Water in the early morning. Ask your local extension agent about how much water you need according to the type of grass in your lawn.
• Avoid applying over a single household waste or property, the rain will settle in land and water and could pose a health threat to you and others.
• Plant grass cover over the turf, which needs mowing. Ask your local extension agent for suggested grass varieties in your location.
• When building or remodeling your home, leave a "buffer zone" of undisturbed vegetation and dispose of construction waste to avoid runoff and sedimentation.
• Ask your local extension agent about Integrated Pest Management (IPM) and learn how to control pests outside and inside your home.
• Test your well water for nitrates and bacteria once every year. Consider xeriscaping your lawn. Xeriscaping is a method of landscaping using native plants or plants that thrive with little or no water.
• Group ornamentals and group drought-tolerant plants together and water those areas more frequently.
• Consider composting as an effective means to recycle yard debris.

What is Stormwater Runoff? Where Does Stormwater Go?

Stormwater runoff is rain and irrigation water that washes off the land surface, carrying with it chemicals, pesticides or substances it encounters on the ground into nearby stormdrains and waterways. Some stormwater seeps into the ground, ultimately reaching the groundwater, but the rest of it runs off of paved areas and laws.

The stormwater that runs off pavement and lawns flows into the stormdrains you see at street corners or at low points on the sides of your streets. Of course, the more areas are paved, the more stormwater will run off, instead of infiltrating into the ground.

Stormwater does not go to a treatment plant somewhere. The stormdrains carry this contaminated water directly into the nearest canal, stream or river, all of which ultimately lead to the coastal marsh.

Even if your house is not on a waterfront, stormwater runoff from your yard will likely end up in a waterway.

STORMWATER RUNOFF AROUND WATERFRONT YARDS (Example)

USE PANS TO CATCH CAR WASH WATER

WHERE DOES YOUR STORMWATER GO?
In developed coastal areas, the polluted runoff can reach such a degree that it results in fish kills, toxic algae blooms, and soil erosion. In the more populated coastal areas, it is not safe to eat the fish you catch, largely due to polluted runoff.

A 1997 study by the US Geological Survey reported that more pesticides were found in coastal Georgia streams draining urban and suburban areas than were found in streams draining agricultural areas. In addition, most people overfertilize their lawns. More is not better in this case; the excess simply washes off with the irrigation water or seeps into the ground and into our area, into the shallow groundwater. Nutrients break down into nitrates and phosphates, which can cause human health problems if ingested, and trigger excessive algae growth and fish kills.

The suggestions in the "Low-risk" column are practices recommended for your area. Additional recommendations include:

- Pull weeds by hand or learn to love weeds. Many weeds become wildflowers if allowed to grow!
- Protect your drinking water and also be the water supply for your neighbors and nearby communities.
- Controlling Runoff
- Assess and reduce your risks! By completing the assessment on your right, you will be able to:
  - Identify ways to increase the value of your home and your pocketbook.
  - Protect your drinking water, particularly, if you have a private well.
  - Protect the wildlife and economic resources of Georgia’s coastal ecosystem, such as the shellfish and fisheries industry.

For each statement on the left, read across to the right and check the box that best describes your risk. Although some choices may not correspond exactly to your situation, choose the action that you would take.

- Your Goal is to Reduce Your Risks!
- The suggestions in the "Low-risk" column are practices recommended for your area. Additional recommendations include:
  - Do not overfertilize your lawn. Contact your county extension agent to determine the amount of nutrients needed by your lawn and plants.
  - Protect your drinking water; particularly, if you have a private well.
  - Protect the wildlife and economic resources of Georgia’s coastal ecosystem, such as the shellfish and fisheries industry.
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<table>
<thead>
<tr>
<th>ISSUE</th>
<th>LOW RISK</th>
<th>MEDIUM RISK</th>
<th>HIGH RISK</th>
<th>YOUR RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive wastes</td>
<td>Oil drips and fluid spills are cleaned up using absorbent materials such as kitty litter.</td>
<td>Drips and spills are not cleaned up.</td>
<td>Used oil, antifreeze is dumped down the storm drain, in a ditch or on the ground.</td>
<td>Low</td>
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<tr>
<td>Car/boat washing</td>
<td>Vehicles are washed in a commercial car wash or spray booth that recycles its water.</td>
<td>Vehicles are washed on a lawn or gravel drive at a far spot.</td>
<td>Cars, trucks or other items are washed on a driveway, street or other paved area.</td>
<td>Low</td>
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<tr>
<td>Using pesticides</td>
<td>Pesticide spills are cleaned up immediately. Minimum amounts of chemicals are applied according to label instructions. Applications are postponed if rain is expected.</td>
<td>Spills are not cleaned immediately and label recommendations are not always followed. Applications are postponed when rain is expected.</td>
<td>Products are used in higher amounts than recommended on the label.</td>
<td>Low</td>
</tr>
<tr>
<td>Pet and animal wastes</td>
<td>A nimal and pet waste is flushed down the toilet. Or if allowed by local regulations, pet droppings are bagged away from swales and play areas or placed in the garbage.</td>
<td>A nimal waste is left to decompose on grass or soil. Wastes are scattered over adjacent areas.</td>
<td>Animal wastes are left on paved surfaces, concentrated in pen or yard areas, or dumped down a storm drain or in a ditch.</td>
<td>Low</td>
</tr>
<tr>
<td>Grass clippings, leaves and other yard waste</td>
<td>Grass clippings, leaves and other yard wastes are swept off paved surfaces and onto lawns away from water flow or gutters.</td>
<td>Grass clippings, leaves and other yard wastes are piled on the lawn next to the street for collection.</td>
<td>Grass clippings, leaves and other yard wastes are left on paved surfaces, concentrations in pen or yard areas, or dumped down a storm drain or in a ditch.</td>
<td>Low</td>
</tr>
<tr>
<td>Storage of chemical products</td>
<td>Chemicals are stored in waterproof containers but within reach of stormwater.</td>
<td>Chemicals are stored in waterproof containers but within reach of stormwater.</td>
<td>Chemicals are stored in non-waterproof containers but within reach of stormwater.</td>
<td>Low</td>
</tr>
<tr>
<td>Landscaping and vegetated stream banks</td>
<td>Yard is landscaped to slow the flow of stormwater and provide areas where water seeps into the ground. Buffers or unmowed strips of thick vegetation are left along stream borders and piers.</td>
<td>There is no landscaping to slow the flow of stormwater, especially on hilly and eroding properties. Stream banks or lawns are eroding.</td>
<td>Landscaping does not encourage water to soak in, but yard is relatively flat and little runoff occurs. Mowed grass or gravel vegetation exists adjacent to a stream or lake.</td>
<td>Low</td>
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<tr>
<td>Roof Drainage</td>
<td>Downspouts direct roof drainage onto a lawn or garden where water seeps into the ground but away from the house's foundation.</td>
<td>Some discharge water flows onto paved surfaces or grassy areas where water runs off.</td>
<td>Most or all downspouts discharge onto paved surfaces, or downspouts are connected directly to storm drain.</td>
<td>Low</td>
</tr>
</tbody>
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