

WaterWatch



Greener Lawns, Cleaner Waters

Nearly everyone appreciates a well cared for lawn. To achieve the healthiest green lawn, many people turn to chemical fertilizers. Unfortunately, lawn fertilizers pose several risks to human health and water quality.



Hazardous chemicals in fertilizers include ammonium nitrate, ammonium phosphate, ammonium sulfate, pesticides and

potassium chloride. Fertilizers can be corrosive to skin, eyes and mucous membranes and can potentially affect water quality.

Fertilizer Use

When using fertilizers, read labels carefully to ensure that you are properly protected and that you use the right amount of fertilizer for your lawn. Don't fertilize before predicted heavy rain and be careful along lawn edges. Fertilizer left on sidewalks and driveways can easily be washed into storm water.

It is suggested that slow-release fertilizer is less-hazardous. Look for bags

that have the word "WIN" on them. This indicates that the fertilizer contains water insoluble nitrogen.

Leftover Fertilizer

If you have fertilizer left over, store it in a sealed and labeled plastic bag and keep it away from children, pets and water.

If you don't want to store it, it is best to find someone who can use it.

Disposal

Empty fertilizer bags that do not contain pesticides and weed killers can be

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Less Bugs and Weeds

Pesticides are chemicals used to kill or repel pests. Pesticides include herbicides (Which kill plants), insecticides (which kill insects) and fungicides (which kill fungi).

The pesticides used in a yard are poisons and may pose a health threat to the person applying them if not handled carefully. They also pose a threat to animals, plants, and insects beyond the intended pests. Honeybees are an example of non-target organisms. They are very susceptible to many household pesticides such as carbaryl

(sevin) and chlorpyrifos. Other non-targets include ladybird beetles, which are natural biological pest controls, and fish, which can suffer direct poisoning from the household insecticides, permethrin, resmethrin, pyrethrin, and rotenone washed into a stream or lake.



Until recently, groundwater was thought to be immune from the many chemicals used on lawns and gardens. However, contamination may occur when polluted surface water moves through the soil to the water table.

Integrated Pest Management

When we see weeds or insects invading our favorite plants, our first response is often to apply a pesticide. Some people even apply a pesticide to

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If you wouldn't drink it, don't dump it!

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Lawn Care

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disposed of in the garbage. If the fertilizer contains pesticide, please follow directions under "pesticides" on your product's label to dispose of properly.

If you can't find any way of using up the product, you may dispose of it by placing it in a heavy duty plastic bag. Please call the North Point Solid Waste District at 801-225-8170 and

let them know you are bringing in fertilizer. This makes sure the fertilizer is handled safely. Be aware that there are



minimal charges associated with disposal at the solid waste district.

Reducing The Need For Fertilizer

You can reduce the amount of fertilizer you need by frequently mowing your lawn with a mulching mower to a height of three inches or higher, and leaving the clippings on the lawn.

Using compost and soil amendments also reduces the need for fertilizer. A guide to composting is available in PDF format at the Utah State University extension website at <http://www.extension.usu.edu/publica/gardpubs/compos01.pdf>. Or you can call them at 370-8460 with questions about lawn and garden care.

Source

Eliminating Household Hazardous Waste.
Idaho Department of Environmental Quality.



Pesticides

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prevent invasions by pests. Both of these automatic responses lead to unnecessary pesticide use. A better approach is Integrated Pest Management (IPM).

Cultural Control

Cultural pest control methods attempt to create optimal growing conditions for plants and unfavorable conditions for pests. Methods include:

For Gardens

- Select disease-resistant varieties of plants.
- Plant varieties adapted to the geographic and soil conditions.
- Maintain a rich, fertile soil, with the proper pH for the plants being grown.
- Rotate plants to disrupt the life cycle of pests (this is called crop rotation).
- Plant and harvest early to promote healthier, stronger plants and avoid peak insect populations.
- Remove pest-infected plant residue in

the fall.

- Plant a wide variety of crops to reduce potential pest problems.
- Evaluate the availability of sunlight and water. Most garden plants need plenty of each to help control pest problems.

For Lawns

Proper mowing heights are important. Set the mower to cut at 3 inches or higher. Mow often, each time the grass reaches 4 inches. (It's important not to cut more than one-third of the height.) On troublesome spots, remember that improper light, moisture or soil conditions discourage good turf. Use of shade-tolerant grasses, bringing in topsoil, or switching to alternative ground covers may be the answer.

Biological Control

Numerous organisms feed upon or infect insect pests. These biological controls frequently prevent the insect pollution from reaching damaging levels. Three types of natural enemies are:

- Predators - Such as ladybird beetles, ground beetles and birds that consume many pests in their lifetime.
- Parasites - such as the trichogamma wasp, which will generally consume one individual insect pest during its own lifetime.
- Pathogens - such as fungi, bacteria, and viruses which infect many insect pests simultaneously.

Minimizing the use of pesticides on lawns and gardens allows these natural enemies to thrive, helping to keep pest populations in control.

To be continued in the next issue of Water Watch...

Source: *Yard Care And The Environment* by the West Valley City Storm Water Utility