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Water in Idaho: Fertilizer & Pesticide Use at Home

How to have a beautiful lawn *and* protect the environment

A Healthy Lawn

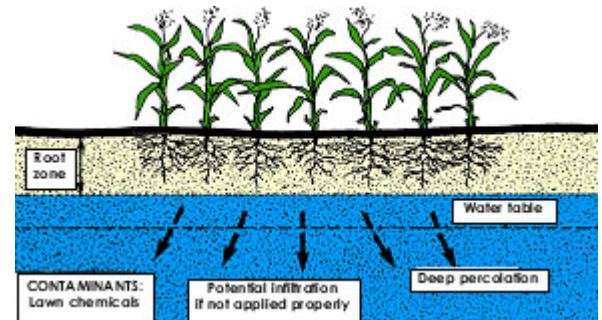
Maintaining a healthy carpet of grass may involve use of fertilizers and pesticides. With proper care, you can maximize the benefits of these products while minimizing their adverse effects on the environment.

Why does it matter how much fertilizer and pesticide I add to my lawn? How much effect can one home have on the environment?

Your lawn probably covers a small piece of land. Combined with other homeowners, however, the environmental contamination can present a major problem.

Because the majority of Idaho's drinking water supply comes from groundwater, over-application of fertilizers and pesticides can move hazardous chemicals through the soil and into drinking water, adversely affecting human health. Over-application also can damage your lawn.

Knowledge of best management practices (BMPs) for home lawn chemical use can make a difference and set an example for homeowners around you. This list of tips and facts will help you attain a beautiful *and* environmentally friendly lawn.



Fertilizer Use

Fertilizer provides nutrients—commonly nitrogen, phosphorus and potassium—to lawns. In the proper quantity and proportion, these nutrients can help produce a healthy lawn. If fertilizer is over-applied or the wrong combination of nutrients is added, however, plants may not fully absorb all of the nutrients, resulting in excess chemicals. These chemicals can build up in the soils or filter into ground and surface waters, adversely impacting water quality.



Here's how you can help

- **Test your lawn's soil.** By determining the characteristics of the soil, you can tell which nutrients are lacking and apply fertilizer more efficiently.
- **Pick a product with appropriate proportions of the nutrients** your lawn needs. Fertilizers are labeled according to the percentage of each nutrient.
- **Minimize nitrogen use.** Excess nitrogen can contaminate groundwater and harm animal and human health, particularly in small children.
- **Choose slow-release fertilizers** to minimize chemical loss through the soil and promote uptake by the plant. ➔

- **Look on the back of the bag** for terms such as controlled-release, slow-release, slowly available, or water-insoluble nitrogen.
- **Ask about proper fertilizer application methods.** Make sure your investment is utilized efficiently and over-application does not harm your lawn.
- **Plant native grasses and plants** that tend to be adapted to the local environment and may not need supplemental nutrients.

Remember, proper fertilization not only protects Idaho's drinking water, but can reduce money spent on lawn care products and time devoted to lawn care.

Pesticide Use

A pesticide is any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any pest. Pests can be insects, mice and other animals, unwanted plants (weeds), fungi, or microorganisms like bacteria and viruses.

Here's how to use pesticides wisely

- **Identify the problem.** Different pests require different controls. Using the wrong pesticide could damage the plant or surrounding garden without solving the problem.
- **Try non-toxic controls first.** Many common pests can be cured with non-toxic alternatives. Beer can be used to capture slugs, for example, and soapy water can eliminate many garden pests. Some

pests can simply be removed by hand. Refer to an organic gardening book for suggestions.

- If pesticides must be used, **limit application** to the rates specified on the label to prevent over-application.
- Apply **only to the affected part** of the plant.
- **Apply when pests are most vulnerable.** Depending on the pest, applications at night, early morning or after watering may be most effective.
- **Make a habit of inspecting your lawn for pests.** Catching a problem early reduces the amount of pesticide needed and prevents storage and disposal problems.
- If using a pest-control service, ensure it follows **best management practices.**

Disposal

Proper waste disposal is a critical final measure toward protecting ground water from lawn care products. To minimize impact from extra product and waste containers:

- ✓ Buy **the least amount** of product needed.
- ✓ **Rinse containers** and use the rinsate as you would the product.
- ✓ **Properly dispose of the container**—do not use it to store another liquid. Contact your local landfill, waste hauler or public works department for disposal and recycling options in your area.

On-line Assistance

U.S. Environmental Protection Agency

Links to residential lawn and garden fact sheets.
www.epa.gov

University of Idaho Extension Service

Master gardening classes and gardening advice.
http://extension.ag.uidaho.edu/ada/id_master_gardeners.htm

Gardening Best Management Practices

Tips on how to cultivate a healthy garden ecosystem.
<http://www.uidaho.edu/wq/wqbr/wqbr29.html>

Idaho Association of Soil Conservation Districts

Home*A*Syst Program

Information on protecting Idaho's soils and waters.
<http://www.iascd.state.id.us/default.htm>

Idaho Department of Environmental Quality

DEQ is the state agency responsible for enforcing environmental protection laws and programs for the state of Idaho. Visit DEQ's assistance and outreach page for more information on how you can help protect Idaho's environment.
www.deq.state.id.us/assistance1.htm