



FIGURE 23: The Dangers of Fertilizers and pesticides

The illustration shows fertilizers and pesticides being applied to a large lawn by lawn care professionals. Much of these chemicals are washed into the lake during rainstorms. One pound of fertilizer can create 500 pounds of algae in the lake. Pesticides are harmful to aquatic organisms and can cripple the delicate ecosystems.

Stop Using Fertilizers and Pesticides

Fertilizers contribute to algal blooms and pesticides poison indiscriminately. There are many ways to accomplish beautiful property landscaping without using these chemicals.

Many landowners throughout the Lake George watershed routinely apply fertilizers and pesticides as part of regular yard maintenance. But the use of these products is altering Lake George and degrading its water quality.

The natural forested landscape around Lake George is rich in hundreds of diverse flowers, shrubs and tree species. These plants are adapted to the local environment and do not require watering or maintenance. Landscaping that focuses on the use of these native plants eliminates the need for fertilizers and pesticides. It also helps maintain the beauty of the natural forest areas that surround Lake George. See page 47 for the benefits of landscaping with native species.

The Problem with Fertilizers

Use of fertilizer is a major source of nutrient pollution, which is another important factor in Lake George water quality degradation. Although nutrients in fertilizer, such as nitrogen and phosphorus, occur naturally throughout the environment, high levels are detrimental to the lake. Most fertilizers are chiefly combinations of phosphorus and nitrogen.

Each year, large volumes of fertilizers are washed into Lake George, where the excess nutrients stimulate greater plant growth and algal blooms (as illustrated in Figure 23), which lower the clarity of Lake George water. The lake now receives triple its natural level of phosphorus. This constant loading of high levels of nutrients from fertilizers is changing Lake George.

KEY MESSAGES:

1. The use of fertilizers and pesticides is altering Lake George and degrading its water quality.
2. Landscaping that focuses on using native plants, while minimizing grass lawn areas, eliminates the need for fertilizers and pesticides.
3. Herbicides, insecticides and other pesticides poison indiscriminately. They are lethal to many aquatic organisms and fish that the lake supports.
4. A pesticide label only identifies the hazards of the "Active" ingredients and does not list all the potentially hazardous "Inactive" ingredients in a product.

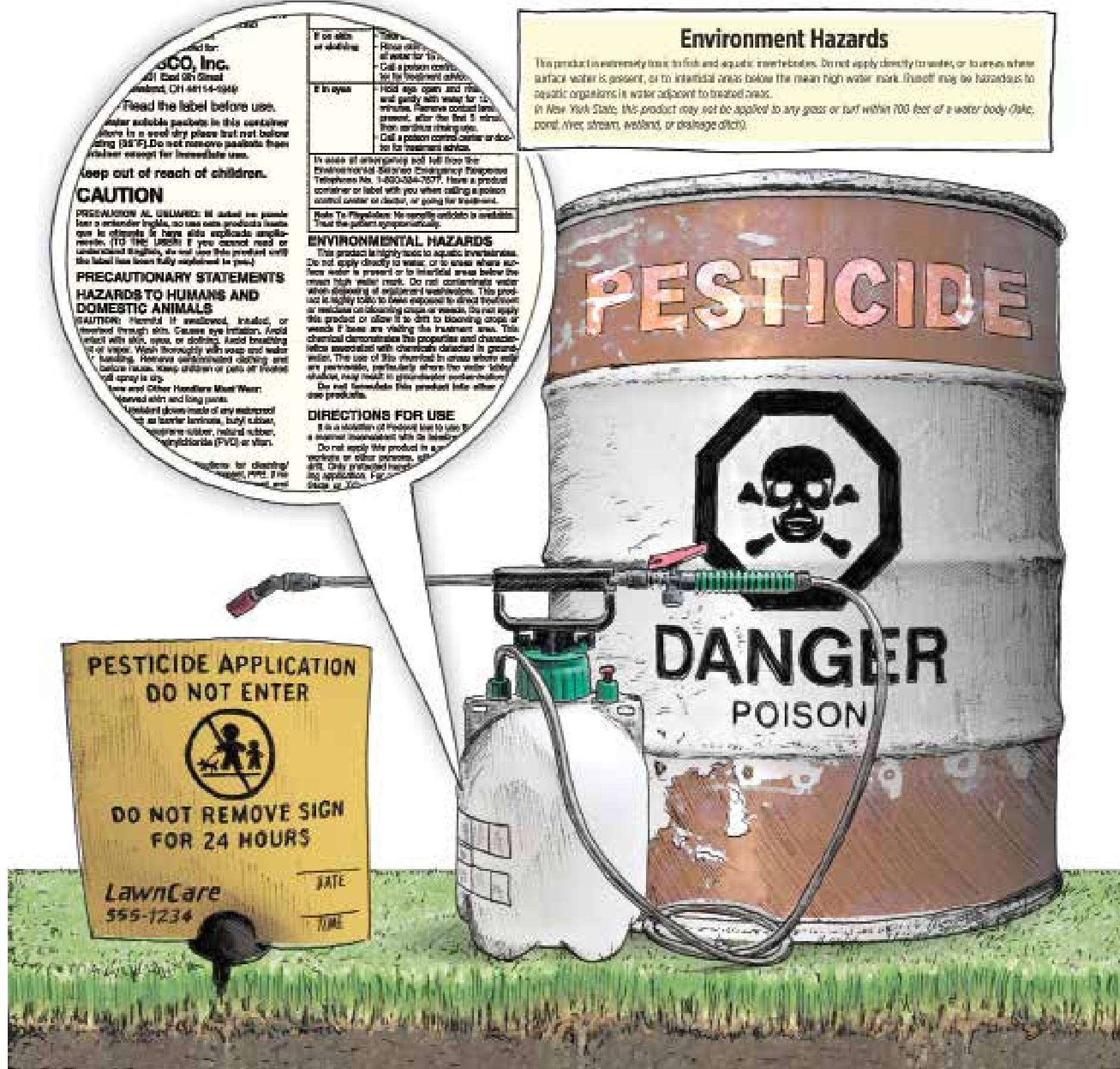


FIGURE 24: Toxic Chemicals

Herbicides and insecticides are designed to kill insects or vegetation. Large portions of these chemicals are applied to lawns and gardens around Lake George and washed into the lake during rainstorms.

A pesticide label does not list all the potentially hazardous ingredients in a product. These "Inactive" ingredients are often as toxic as the "Active" ingredients listed on a product label.

Pesticides are Poison

Pesticides, which include herbicides, insecticides, termiticides and fungicides, were created to eliminate unwanted insects and help manage pests and weeds. Unfortunately, as indicated by the typical long list of precautionary statements on the back of a pesticide container, most of these products poison indiscriminately. See Figure 24.

From 2003 to 2005 (the most recent data available), licensed pesticide applicators, who are required to report their registered pesticide usage, applied 91,501 lbs. and 3,965 gal. of pesticides from Assembly Point to the Town of Bolton. Source: New York State Pesticide Registry.

In other words, whatever is lethal to a particular insect, pest or weed will also harm or kill other plants and beneficial insects, such as honeybees and lady beetles. Pesticides can be fatal and cause illness in people, particularly children and pets. These chemicals, picked up by stormwater runoff during rainstorms and carried to the lake, are lethal to many aquatic organisms and fish.

To compound the problem, most pesticide users don't know what other kinds of potentially toxic compounds are included in these products. The U.S. Environmental Protection Agency requires that pesticide labels identify both the content and percentage of "Active Ingredients." However, companies are not required to identify "Inactive Ingredients," which often make up the majority of most herbicides and insecticides. Often, these unlisted chemicals can be as harmful as the Active Ingredients.

The Bottom Line

The bottom line is that pesticides and fertilizers used on properties contribute heavily to Lake George's overall declining health. Unless they are strictly limited or eliminated altogether, these pollutants will continue to change the natural balance of the lake and have an adverse impact on human health.

In the end, by making the choice not to use these products you help to protect the lake and human health. 💧

