

FACT: The poisons you put on your lawn can get into the water we drink. Pesticides and herbicides travel from your lawns and gardens and contaminate our water with chemicals that are toxic to both humans and animals. These chemicals can travel into water sources as surface runoff or by leaching into the groundwater.



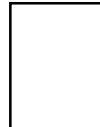
FACT: You can minimize the damage from fertilizers, pesticides and herbicides. How we care for our lawns will affect the quality of water for many people. We need to act in a way that will preserve water quality for those around us now and in future generations.

**Look inside for
15 easy ways that
you can help
protect our water.**

Communities united to protect and preserve Buzzards Bay

**Inside:
15 easy ways
to keep our
water healthy...**

Buzzards Bay Action Committee
P.O. Box 9399
Dartmouth, MA 02747



STOP!

Before you apply those lawn products, know these important facts

.... what you do to your lawn affects our bays, rivers, streams and drinking water

FACT: Lawn fertilizers do not stay on your lawn. The nitrogen and phosphorus in fertilizers travel great distances and end up in the groundwater we drink and in water bodies like Buzzards Bay. Nitrogen and phosphorus are very harmful to our water.



FACT: Fertilizers that reach the water can kill fish, shellfish and aquatic vegetation. Once the nutrients from fertilizer enter a water body, they dramatically increase the growth of algae. Algae blocks sunlight from entering the water and leads to the death of other important aquatic vegetation. Decaying algae decreases the oxygen available to fish. Eventually the fish die. Decaying algae also kills shellfish and other bottom dwelling species because it settles on the bottom and suffocates whatever lives there.

1. Test your soil

- A soil test identifies the nutrients already present in your soil, so you only apply the right amounts of what your soil needs. This will prevent excess nutrients from entering the environment and save you time, energy and money.
- For details contact the UMASS Soil Testing Lab at (413) 545-2311 or visit their website at www.umass.edu/plsoils/soiltest

2. Follow directions

- Fertilizers are sold using a formula of three numbers (for example: 10-20-10 or 5-10-5). The first number is nitrogen, the second number is phosphorus and the third is potassium.
- The results of your soil test, as well as what type of plants you are fertilizing, should determine what fertilizer you choose.
- Always use the lowest possible amounts of fertilizer, pesticides and herbicides. Over application impairs plant growth, weakens a plants ability to resist pests and disease, and damages the environment.

3. Time applications carefully

- Never apply fertilizers before heavy rain or when cold weather is expected. Heavy rain increases runoff and leaching into groundwater.
- In cold weather, plants can't absorb nutrients. That means the fertilizer stays on the ground where it is more susceptible to runoff.



4. Maintain a strip of natural vegetation between lawns and wetlands

- This vegetated buffer zone will help filter and trap nutrients before they are able to reach the water and help prevent erosion.

5. Handle lawn chemicals carefully

- Never spill fertilizers, pesticides or herbicides on concrete surfaces where they can easily runoff into water.
- Do not mix, apply or dispose of pesticides or herbicides with 100 ft. of your well, storm drains or any surface water. Always dispose of containers properly.

6. Water your lawn after fertilizing

- Proper irrigation will help the fertilizer be absorbed, making it less likely to runoff.
- Water lawns in the morning.
- Use only enough water to saturate the root zone.
- Do not water again until you see signs of wilt or footprinting.
- Do not overwater lawns and never water before heavy traffic is expected. Both of these practices increase nutrient runoff and weaken the turf.



7. Use organic materials

- Recycle grass clippings by leaving them on the lawn. As they decompose, clippings will provide the soil with nutrients, reducing chemical fertilizer needs by up to 25%.
- You can also create a compost pile and use the compost as a slow-release fertilizer.

8. Plant native grasses

- Native grasses require less water, fertilizers and pesticides than non-native species.
- In sandy soil areas around Buzzards Bay, plant a mix of fine leafed fescues and perennial rye grasses.
- White clover added to your lawn mix provides a natural nitrogen source.

9. Mow your lawn correctly

- Mow your lawn to 2" during the first cut of the season and 3" during each subsequent mowing.
- You should never cut off more than 1/3 of the grass blade at a time.
- This will give you healthier, well-rooted grass that is better able to resist pests and needs less fertilizer.
- Use compost blades on your mower and always make sure your blades are sharp. Mulching mowers do not contribute to thatching problems.

10. Add organic material, or loam, to sandy soil

- If you have sandy soil, add a layer of at least 6" of loam.
- This will increase the water holding capacity of your soil.

11. Aerate compacted soil

- This reduces runoff by helping fertilizer get into the soil.

12. Use natural enhancers on your lawn

- To balance acidic soil, use lime. For greener grass, use an iron supplement. This will help decrease the amount of harmful nutrients entering our aquatic environment.

13. Focus on specific problem areas

- Spot apply fertilizers and pesticides whenever possible instead of treating your whole lawn. This decreases the amount of chemicals entering the environment.

14. Use slow-release fertilizers

- Fertilizers are usually divided into two groups, water soluble nitrogen (fast-release fertilizers) and water insoluble nitrogen (slow-release fertilizers).
- Slow-release fertilizers provide a more controlled release of nitrogen than other products. Instead of containing nitrogen that dissolves in just water, slow-release fertilizers rely on chemical or microbial activity in order to release their nutrients, making it less likely that they will reach the water.



15. Increase natural landscaping

- Minimize your lawn size.
- Healthy grasses can tolerate some competition from weeds and other pests without requiring the use of herbicides.
- Ground cover plants can be mixed with grass, lowering your fertilizer needs. A healthy, well-maintained lawn requires little or no fertilizer.
- Remember, a perfect lawn is not necessary, especially when it carries such high environmental costs.

For more information:

The University of Massachusetts Cooperative Extension Office website
<http://www.umassturf.org>

The University of Rhode Island Cooperative Extension Gardening and Food Safety Hotline
(401) 874-2900