

Being A Good Garden Neighbor To A Stream IPM and Water Quality

Know your watershed address –

Every drop of water that runs off from your property goes somewhere, probably into a local stream that feeds a small river that then feeds the Connecticut River or the Housatonic. Look at a topographic map to see where your water goes. Follow the storm drains in your street to their outfalls, or ask your Department of Public Works where the water goes.

My watershed address is: Meadow brook/South Branch of the Mill River/Mill River/Connecticut River

Get to know your local stream –

Once you know your watershed address, take a walk and visit your nearest stream. What is it's quality? Is the water clean and clear or is it murky and smelly? That water is coming from your lot, your neighbors' lots, and your streets. Think about what this stream provides – habitat and drinking water for wildlife, irrigation for the plants along the edge, habitat for fish, water storage to prevent flooding downstream, and much more. Now give some thought to what the pesticides, herbicides, fertilizers, and other products used in gardens will do the quality of that stream, and you will be inspired to reduce your use of these products to the minimum that your garden needs.

But how do I reduce my impact on water quality?

- **Minimize runoff.** Design your gardens to infiltrate water into the ground rather than have it run off the lot. Roof drains that go to infiltrators help keep your soil moist and increase the benefits of even brief rainstorms. Surround hardscaping with lawn or flowerbeds and slope the pavement to drain to them rather than to the driveway. Use rain barrels. Use permeable paving or gravel for paths rather than impervious. If repaving your driveway, consider using permeable asphalt. Don't water lawns unless they need it.

- **Use only the amount of fertilizer that your plants can absorb.** Excess fertilizer use is a major contributor to stream eutrophication. Use of too much fertilizer or the wrong kind of fertilizer can actually reduce flowering and fruit or vegetable production. Excess lawn fertilizer means more mowing.

- **Use buffer strips.** If your property borders a stream or a drainage ditch or swale, plant a six foot or wider strip along the edge of it with low-maintenance native shrubs, grasses, and ferns. These will help filter any runoff from your lot and will reduce the amount of lawn care products that reach the stream.

- **Use Integrated Pest Management (IPM).** IPM is a technique for minimizing the use of herbicides and pesticides. IPM combines observation of pests and weeds with natural controls and occasional use of stronger products, but only if needed to control unacceptable damage.

The Steps of IPM:

- 1. Observe** – Look carefully at your lawns and gardens. Do they look healthy?
- 2. Diagnose** - Are there insects on the plants or in the soil? What kind of insects are they? Are they harmful or beneficial? Are there signs of fungus or disease? What plant is it on? What fungus or disease is it?
- 3. Assess** – How bad is the damage? Is it cosmetic or is it endangering the plant? How many insects are there? Can you live with it or do you need to take action?
- 4. Fix the problem** – Many garden problems are caused by poor cultural practices. Fungal diseases are often the result of poor air circulation or drainage. Insect infestations are often a sign of a plant under stress, perhaps from drought or other causes. Good cultural practices will reduce garden problems.
- 5. Use the lowest impact control strategy first** – Pick off insects by hand. Use horticultural oil or insecticidal soap. Prune infected leaves, branches and shoots. Remove dead or dying plants. Dig weeds by hand.
- 6. Only if the potential damage is unacceptable** – Use the right pesticide or herbicide, according to the package label, only on the damaged or threatened plants. Dispose of any excess product according to the label. Do not dump old or excess product into storm drains or streams. Do not bury old or excess product on your property.

Good Plants for Stream Buffer Gardens

- *Cornus sericea* – Redosier Dogwood
- *Hamamelis virginiana* – Witch hazel
- *Viburnum dentatum* – Arrowwood
- *Viburnum trilobum* – Cranberry Viburnum
- *Ilex verticillata* – Winterberry Holly
- PJM Rhododendron

- *Caltha pulustris* – Marsh Marigold
- Ostrich fern

Groundcovers

- *Ajuga reptans*
- *Asarum canadense* – Wild Ginger
- *Convallaris majalis* – Lily of the Valley
- *Hosta*
- *Lycopodium clavatum* – Running pine