Lawn to Lake is a collaborative program to protect water resources in the Great Lakes region by promoting healthy lawn and landscape practices. With funding from the U.S. EPA Great Lakes Restoration Initiative, partners are coordinating a pollution prevention campaign addressing the needs of those responsible for lawn and landscape care in the Southern Lake Michigan basin. Collaborating partners include Illinois-Indiana Sea Grant, Lake Champlain Sea Grant, Safer Pest Control Project, and University of Illinois Extension.

**Health Risks**

Pesticide exposure can occur when chemicals are released into the air or tracked into your home from shoes. Exposure has been linked to a number of chronic health problems that include cancer, birth defects, endocrine disruption, asthma, neurological disorders, and immune system deficiencies. Remember—pesticides don’t just disappear once you have applied them, they can remain in the air, ground, or soil for weeks or months.

### The Illinois Lawn Care Products Application and Notice Act

As an Illinois citizen, you have the right to reduce your involuntary exposure to pesticides. According to the law, pesticide applicators must place a marker on the lawn when applying pesticides and provide the customer with information on the product used. In addition, any adjacent neighbor (backyard or next door) has a legal right to be notified in advance of neighbors’ pesticide applications.

<table>
<thead>
<tr>
<th>Common Weeds</th>
<th>Conditions for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crabgrass</td>
<td>Low mowing height, low fertility, drought or excessive watering</td>
</tr>
<tr>
<td>Dandelion</td>
<td>Soil compaction, low pH, low calcium, excessive potassium</td>
</tr>
<tr>
<td>Ivy (ground)</td>
<td>Poor drainage</td>
</tr>
<tr>
<td>Plantain</td>
<td>Soil compaction, low mowing height, low pH, low fertility, poor drainage</td>
</tr>
</tbody>
</table>

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Weed and feed products are a mixture of herbicides (weed killers) and fertilizers, and most of them contain pesticides (including 2,4-D, dicamba, and MCPP), which can be harmful to humans, especially children. They can also harm wildlife and cause ground and surface water contamination. Consider alternatives before applying weed and feed to your lawns.

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Adapted from Safer Pest Control Project’s factsheets
spcppweb.org/resources/index.php#factsheets
Eliminate the Conditions that Promote Weeds

Compaction
Compaction is an invitation for weeds. If your lawn is hard, compacted, and full of weeds, aerate to help air, water, and fertilizer to enter. If you can’t stick a screwdriver easily into your soil, it is too compacted. Once you have an established, healthy lawn, worms and birds pecking at your soil will aerate it for free!

Mowing Height
Mowing lower than 1 ½ to 1 ¾ inches can kill the root system by preventing photosynthesis. A low mowing height also invites sunlight in for weeds to sprout. Generally, you should keep a lawn at 3-3 ½ inches. Mowing high allows the grass to develop deeper, drought-resistant roots systems. Keep your mower blades sharp to prevent the development and spread of fungal disease, or ask your lawn care provider to sharpen their blades frequently.

Soil pH and Soil Testing
Low pH means acidic conditions and high pH indicates alkaline conditions. If the pH is too high, your grass cannot properly absorb nutrients. Ideal pH should be between 6.5-7.0, slightly acidic. Thriving dandelions indicate a pH of about 7.5. Generally, lime is added to raise the pH and sulfur is added to lower the pH. Adding compost can naturally correct your pH. A soil test is highly recommended to determine the soil pH and specific nutrient needs.

Fertility
Soil testing is the best way to determine your soil’s specific nutrient needs. Fertilizing in early fall ensures good growth and root development for your grass. Nitrogen, the most abundant nutrient in lawn fertilizers promotes color and growth. Adding too much nitrogen or quick-release synthetic fertilizers, can weaken the grass, alter the pH, promote diseases, insects, and thatch build-up. Grass clippings contain 58 percent of the nitrogen found in fertilizers. Clippings improve soil conditions, suppress disease, and reduce thatch and crabgrass. So, leave them on your lawn. You can use a mulching mower and leave the leaves too.

Watering and Poor Drainage
Drought conditions, excessive watering, or poor drainage due to soil type are all invitations for weeds. Watering needs are very site specific, but generally speaking, a deep watering of about one-inch once a week in the early morning is best.

Grass Seed and Seeding
Grass varieties differ enormously in their quality, resistance to certain pests, tolerance to climatic conditions, growth habit, and appearance. Some weeds are the result of using poor quality grass seed. To promote a dense turf that out competes weeds, over seed with the proper grass seed for your region.

Learn to Read your Weeds
Weeds can tell you a lot about the condition of your lawn. They can show you what you need to do to grow healthy grass that is naturally resistant to weeds and pest problems. Learn to read your “weeds” for what they indicate about your lawn care practices and soil conditions, and you’ll be on your way to creating a healthy lawn that will be less work in the long run.