

## Spring Ahead and Cultivate an Organic Lawn

North Edison gardening enthusiast Nisha Khanna highlights the importance of a pesticide-free lawn.

by Nisha Khanna Community contributor

pring is around the corner, and everywhere outside, there are signs of the waking earth. Buds are swelling on the trees, and the breeze has a hint of warmth. It may still be frustratingly cold, but we know that soon, we'll be able to shed those jackets and sit on the deck in short sleeves. Of course, this brings up the question of "yard work;" the maintenance of the landscape around our houses.

For most of us busy suburban homeowners, the whole process consists of signing – usually with the same lawn care company as last year – a "maintenance contract" that promises to keep the lawn neat by mowing and blowing every week, and keep it perfect by spreading something four times in the season.

What many of us don't realize is that some of the things that are being spread on our lawns are toxic pesticides. There is increasing concern over the harmful effects of commonly used chemicals, and a growing body of research is linking home and garden pesticides to many health and environmental problems.

I have been gardening for more than 20 years, most of it

without using any chemicals. My North Edison garden has been completely organic for many years, and our lawn is as nice as any of the more conventionally managed ones on our street. And I don't worry when my kids roll in the grass.

#### What are pesticides?

Pesticides are anything that prevent or destroy pests; and pests are any organism that bothers you. In that sense, a Citronella candle is a pesticide. Of course, when I talk about reducing or avoiding pesticides, I'm talking about toxic chemical pesticides. The following familiar products are all pesticides: weed and feed, grub control, weed killer, fungus treatment, moss killer, insect spray, crab grass prevention, etc.

There are pesticides that are of such low concern that they are allowed in organic agriculture, or are exempt from Federal pesticide registration requirements. These products are considered fairly safe to use, and are always preferred to their more toxic alternatives.

#### Why avoid pesticides?

Pesticides are toxic to human health. Lawn pesticides are increasingly linked to many diseases, such as cancer, asthma, Parkinson's, birth defects, learning disabilities and behavioral problems. Children are particularly vulnerable due to their size, rapid development, and long-term cumulative exposure. According to an article published in November 2012 by the Council on Environmental Health of the American Academy of Pediatrics, "Children encounter pesticides daily and have unique susceptibilities to their potential toxicity. Acute poisoning risks are clear. Epidemiologic evidence demonstrates associations between early life exposure to pesticides and pediatric cancers, decreased cognitive function, and behavioral problems." Lawn

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A happy pollinator sits on a Blue Vervain, another native plant found in Nisha Khanna's garden.

Photo courtesy of Nisha Khanna



The young catbird in Khanna's garden helps keep garden pests in check in a natural way.

Photo courtesy of Nisha Khanna



Pesticide-free lawns are the safest option for children and pets. Photo couriesy of Nisha Khanna



Pictured is the front flower bed at Nisha Khanna's North Edison home.
Photo courtesy of Nisha Khanna

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pesticides get tracked indoors on your skin, clothes and shoes, and contaminate homes. Pesticide runoff threatens the safety of our drinking water, and also harms marine organisms. Excess and improperly applied pesticides end up in our drinking water and in streams via storm drains. Lawn pesticides can poison pets and increase their risk of illnesses. Government regulations do little to protect the consumer. Pesticide labels only disclose acute toxicity, not chronic or long-term effects. Even after a pesticide is proven to be highly toxic, it takes many

Making your lawn a safer place.

Safe

Pesticides present significant dangers, especially for children and pets. A pesticide-free lawn can protect all. years to phase it out. Pesticides create problems in your garden ecosystem. Pesticides kill beneficial insects like predators and pollinators. Pesticides also kill microorganisms in the soil, which weakens plants and creates a vicious cycle of chemical dependency.

#### An organic garden

Plants generally thrive without being watered and fed and sprayed. While we may not want our gardens to be completely wild, we can have gardens that need much less coddling. Healthy soil is essential to a healthy garden. We tend to have rather hard clay soil in Edison. And most of the top soil is removed during construction anyway. We really need to build soil fertility and improve drainage by adding organic matter like compost.

The plants in our gardens should be well-adapted to their local conditions, both our regional climate, as well as the specific site conditions like sun and shade. This is a good reason for choosing native plants, because they evolved in the local climate. Also, a healthy ecosystem consists of a wide variety of plant and animal life that keep each other in check. For example, I had an infestation of Japanese beetles on my Oak Leaf Hydrangea. Shortly after, a cowbird became a frequent visitor, and ate the beetles. Remember that most insects in our yards are beneficial. They provide pollinating services, food for other animals, and keep other insects in check. For example, the larvae of the familiar ladybugs eat aphids. If you spray your plants with insecticides, you're going to kill the beneficial bugs



A native coneflower found that is able to flourish naturally in Khanna's North Edison garden because it naturally adapts to this environment. Photo courtesy of Nisha Khanna

as well. Instead, if you plant a wide variety of plants, you will attract a variety of insects and have a better chance of establishing a balanced ecosystem.

#### An organic lawn

Lawn is perfect for play spaces, and for opening up a view. But most lawns are high-maintenance. One of my first projects was creating wide beds all around our back yard under the trees. It is almost impossible to grow grass under trees, and rather than fight a continual battle against nature, I just mulched those areas. You can also create wonderful woodland gardens of shade loving plants and ground covers.

Similarly, if you have steep slopes on your property, or narrow edges that are hard to mow, consider replacing the lawn
with flower beds, ground covers, or hedges. I added a couple
of island beds to my front lawn, and expanded the skinny little
beds at the corners. The garden looks better, has space for lots
of colorful plants, and there is less lawn to care for. A perfect
lawn has become a status symbol – a lush expanse of pure
green. But nature hates a monoculture, and this type of lawn
requires a lot of intervention. So figure out what your tolerance
limits are. Maybe you can accept a few weeds if that means
fewer pesticides. My children know to avoid walking on grass
that is too "perfect" because it is likely to be toxic.

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# **Caring for Your Lawn**

Khanna offers these tips for maintaining a healthy, organic lawn year-round.

A healthy lawn needs nutrients and microbe-rich soil to develop deep rooted, dense turf that competes successfully with weeds and naturally resists drought, insects and diseases. Get your soil tested every two to three years. You can get a soil test kit and instructions at the Rutgers Cooperative Extension of Middlesex County, .co.middlesex.nj.us/extensionservices/

Apply soil amendments, such as lime and fertilizer, based on the test. Feed the soil. Spread ¼ inch of compost each spring and fall. Feed the grass. Leave grass clippings on lawn as fertilizer. This supplies 30 percent or more of the Nitrogen requirements.

Water less often but longer. Once a week, when soil is dry six inches down, add one of water early in the morning. Prevent weed germination. Apply Corn Gluten in the spring.

Mow high, around three inches. This shades roots, conserves moisture and keeps out weeds. Many weeds thrive in conditions that are not optimal for grass - such as compacted soils or low pH. You may need to remove perennial weeds like dandelions by hand.

Control pests only when they have crossed an acceptable threshold level. Use recommended organic methods.



Choose native plants for your garden, such as the toadflax pictured above. This photo was taken in Nisha Khanna's North Edison garden. Have a household tip? Email northedison@hibu.com.

Photo courtesy of Nisha Khanna