

American backyards are where toddlers learn to kick a ball, where teenagers play flashlight tag under the glow of the moon, where pets roam and where busy adults sink into hammocks and patio chairs to unwind. The lawns and landscapes that provide a backdrop for these memory-making moments are indeed the root of happiness. They are good for our health, good for our communities and good for the environment.

### **HEALTHY LAWNS KEEP OUR FAMILIES SAFE**

Healthy lawns can help protect our families and pets from the diseases carried by ticks, mosquitoes, fleas and fire ants.

- Ticks carry viruses that transmit Lyme disease, Rocky Mountain spotted fever, ehrlichiosis, babesiosis
  and other diseases. Once transmitted, many of these illness can be debilitating, especially Lyme disease,
  estimated by the Centers for Disease Control to affect 300,000 people each year. The disease can linger
  with infected individuals for years, causing extreme pain, memory loss and speech impairment.
- Mosquitoes, long associated with West Nile virus and encephalitis, have made themselves even more threatening recently with new links to chikungunya and the Zika virus.
- Fleas are particularly troubling for household pets as they can transfer anemia-causing tapeworms. Humans are at risk from fleas as they can transmit murine typhus and, while rare, the bubonic plague.
- Fire ants, which now infest more than 260 million acres in the United States, make their presence known
  with stings that are itchy annoyances to some or painful blisters for others, and some even face lifethreatening allergic reactions.

While these insects are small, they can create big problems. Proper application of pest preventatives and well-maintained lawns will help protect your family and your pets from the threats they pose.

# HEALTHY LAWNS AND LANDSCAPES ENRICH THE QUALITY OF LIFE IN OUR NEIGHBORHOODS

There's no disputing the facts, communities are strengthened when lawns and landscapes are healthy. They are more peaceful, more enjoyable and better protected from environmental threats against them.

- Without proper attention, unwanted plants can wreak havoc in neighborhoods by causing debilitating allergies that often force people to enjoy the outdoors only through windowed views.
- Healthy landscapes don't just play a protective role they are also great providers, offering incredible health benefits to communities:

- » Neighborhoods that incorporate community green spaces have lower incidences of stress, have lower health care costs and have an improved quality of life.<sup>1</sup>
- » Research shows that just looking at plants and trees, even through a window, can reduce stress and lower blood pressure.<sup>1</sup>
- » Walking in a natural environment with plants and trees has been shown to improve attention and memory.<sup>2</sup>
- » Neighborhoods with tree-lined streets and larger yard trees have reduced crime rates.3
- When landscapes are not protected, invasive species threaten them. Invasive plants and pests can take
  up residence, killing the grass, trees and plants that belong. Emerald Ash Borer, for instance, have killed
  hundreds of millions of ash trees in North America and woody adelgids have been the demise of hemlocks
  in neighborhoods across the country.

#### HEALTHY LANDSCAPES ARE GOOD FOR THE ENVIRONMENT

Landscapes are often taken for granted. They are appreciated for their beauty, but many people don't understand the essential value they provide the environment. Here are some facts that may surprise you.

#### **HEALTHY LANDSCAPES...**

- Clean the air. Grass and plants play a vital role in capturing dust, smoke particles and other pollutants to make our air cleaner. In fact, lawns alone capture more than 12 million tons of dust;<sup>4</sup> add to that the additional absorption provided by trees and plants, and it's easy to see the role these plants provide in creating a healthy environment.
- Protect bodies of water. When lawns are well cared for, they absorb unhealthy water runoff that might
  otherwise filter into bodies of water. It may be surprising to learn that an average, healthy lawn can
  absorb more than 6,000 gallons of water from a single rainfall event.<sup>5</sup>
- **Provide oxygen.** Grasses absorb carbon dioxide and break it down into oxygen and carbon. In fact, a 50'x50' lawn produces enough oxygen for a family of four.
- Act as natural coolants. Lawns can be 31 degrees cooler than asphalt and 20 degrees cooler than bare soil. Trees shading homes can reduce attic temperatures by as much as 40 degrees. These natural coolants reduce the need for electric cooling units, saving energy and reducing electric bills.
- **Minimize noise.** Lawns and plants dramatically reduce noise pollution; they can reduce noise levels by 20 to 30 percent over hard surfaces like concrete and pavement.

## WHAT MAKES A HEALTHY LANDSCAPE?

Like all living things, grass, plants and trees need care and attention to ensure their good health. A healthy lawn does not mean one that's simply been mowed and given water. A healthy shrub isn't one that's merely been pruned. Healthy landscapes need to be managed with a high degree of know-how, the support of science, and often, a dose of protection — so that families, communities and our environment can derive the full benefits they provide.

<sup>1</sup>Housley and Wolf, <sup>2</sup>Marc Berman, University of Michigan, <sup>3</sup>U.S. Forest Service, <sup>4</sup>Georgia Turgrass Foundation, <sup>5</sup>Journal of Environmental Quality