



NEWS RELEASE

City Selects Neonics to Help Save Trees from Devastating Invasive Pest

City of Naperville's decision to use neonicotinoid insecticides on 15,000 ash trees protects them against an invasive pest, avoids costly tree removal and preserves community value

MADISON, Wis. (Dec. 3, 2014) – The Emerald Ash Borer (EAB) is a devastating invasive pest that was first detected in the United States in 2002. One study has estimated a total \$10.7 billion cost to U.S. communities through 2019 for treating, removing and replacing ash trees due to EAB infestation. One city decided to fight back.

Faced with the threat of losing thousands of valuable ash trees to EAB the city of Naperville undertook an aggressive treatment program using neonicotinoid insecticides to keep its trees healthy and preserve the quality of its community. Two years into the program, more than 90 percent of the treated trees were thriving, while untreated trees in nearby neighborhoods had to be replaced, resulting in significant removal costs and a decline in property value.

In the wake of the devastation caused by Dutch elm disease decades ago, many eastern and Midwestern communities turned to ash trees to replace their dead or dying elms. Ash trees were the popular choice because of their aesthetic appeal, low maintenance needs, wide canopy and longevity. Urban trees also increase property value and decrease home cooling costs, while providing numerous environmental benefits, including storm-water retention, carbon sequestration and air filtration.

First detected in the United States and Canada in 2002, EAB has now spread to more than 20 states and two provinces. Although both adult and immature stages feed exclusively on ash trees, the main damage is caused by the larvae, which tunnel into the tree's vascular system and disrupt the flow of nutrients and water. Without treatment, trees infested with EAB will die within a few years. Ash trees in North America have no native immunity to this invasive pest and there are no natural enemies to keep populations in check.

Because most of the damage is caused by larvae inside the tree, the most effective treatments are systemic insecticides, which can move through the tree's vascular system to reach the feeding insect. Neonicotinoids have been very effective at protecting trees from EAB and restoring trees with less than 50 percent canopy damage. Applied to the soil, professional applicators can treat a large tree in only 1-2 minutes. Non-neonicotinoid systemic products also can be used, but are typically applied as a trunk injection by a licensed applicator, a process that is more costly and can take up to 30-45 minutes for larger trees.

Infested trees carry potential public safety and financial risks to municipalities and homeowners. Dying trees will shed branches and can topple, creating serious personal or property liability. The cost of removing trees is expensive, often exceeding \$1,500 per tree. Additionally, property values are likely to decline in neighborhoods where trees are removed due to EAB infestation.

In 2012, the city of Naperville, Illinois, was facing serious damage to its public and private landscapes as a result of this invasive pest. Within a few years since its discovery, the number of EAB infestations had increased and the city was removing more trees and issuing notices to homeowners to remove infested trees on their property. Based on positive results from a pilot EAB treatment program ("The Legacy Tree Project") initiated in 2010 and faced with a rapidly increasing level of tree loss, city and community leaders decided to pursue an aggressive chemical treatment program to protect 15,000 ash trees along the city's public parkway.

Two years following implementation of the program, more than 90 percent of the parkway ash trees have shown little to no EAB damage. By contrast, neighboring communities that did not treat have lost substantial canopy coverage that will take many years to replace. "It was a night and day difference between untreated, dead trees on one side of a street and treated, lush, living ash trees on the other side" said Dr. Robert Buckman, past president of the Naperville Area Homeowners Confederation.

The economics associated with treating and saving trees from EAB cannot be properly evaluated without also considering the long-term emotional and financial impact of unmanaged tree loss on the affected communities. "What became clear to me is that the cost associated with losing so many ash trees was far greater than the hard cost of removal and replacement," said Steve Chirico, Naperville city councilman. "The property value of these homes will undoubtedly sink, the cost for air conditioning will rise, but most importantly, the feeling of the neighborhood has changed."

Fortunately, the city correctly assessed the danger and moved quickly to preserve the value of community. "Since learning of the threat, Naperville residents have been very concerned about the potential for EAB to wipe out ash trees throughout the city and dramatically change the feeling and quality of our neighborhoods and community" noted Doug Krieger, Naperville city manager. "Neonics, with their quick and lower cost-treatment method, have allowed us to do the right thing for our residents and protect parkway ash trees across the entire city."

Report Reference

The Value of Neonicotinoid Insecticides in Turf and Ornamentals: A Case Study of Neonicotinoid Use for Controlling Emerald Ash Borer—the Naperville, Illinois Experience

This report is one in a series that will be released over the next few months as part of a comprehensive evaluation of the economic and societal benefits of neonicotinoid insecticides in North America. The research was conducted by AgInfomatics, a consulting firm of independent agricultural economists and scientists, and jointly commissioned and sponsored by Bayer CropScience, Mitsui Chemicals Agro, Inc., Syngenta and Valent U.S.A. Corporation.

All reports will be published online at: www.GrowingMatters.org.

About Growing Matters

Growing Matters is a coalition of organizations and individuals committed to scientific discourse on the stewardship, benefits and alternatives of neonicotinoid insecticides in North America. [Bayer CropScience](http://www.BayerCropScience.com), [Syngenta](http://www.Syngenta.com) and [Valent U.S.A. Corporation](http://www.ValentU.S.A.com) are leading this coalition with support from Mitsui Chemicals Agro, Inc.

Agriculture and horticulture are key to nourishing families and communities. Feeding a growing population, enhancing the beauty of our surroundings, and sustaining a commitment to environmental protection are fundamental needs that matter. Crop protection products, both natural and synthetic, are important tools that protect plants from tough and invasive pests that can devastate crops and urban landscapes.

Go to www.GrowingMatters.org for the latest information, reports, videos and infographics on the benefits of neonicotinoid insecticides or to show your support.