

TREES IN TROUBLE

VIEWER'S GUIDE

A film by Andrea Torrice

Saving
America's
Urban
Forests





Trees in Trouble — Questions for Viewers

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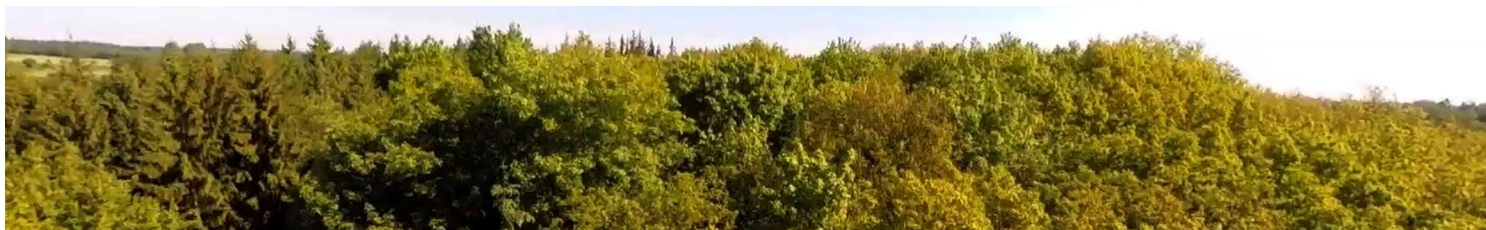
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Capsule Description

Trees enhance the quality of life in American cities. They purify the air, shade our homes and streets, beautify our parks, and provide food and habitat for wildlife. We take these ecological and aesthetic services for granted, and cities seldom factor them into their budgets. Yet our urban forests are now imperiled by invasive species. In Ohio alone, urban forests are threatened by emerald ash borer, viburnum leaf beetle, Asian long-horned beetle (attacks maples), and beech bark disease.

Trees in Trouble explores this ecological crisis as it unfolds in Cincinnati, Ohio, a typical large American city. We follow an urban forestry manager as he grapples with the emerald-ash-borer invasion and its consequences. Emerald ash borer is an Asian beetle whose larvae riddle the inner bark that carries nutrients between the roots and the leaves. An infected tree dies of hunger and thirst after only a season or two, and experts predict that all our native species of ash may soon be extinct.

Interviews with concerned scientists, homeowners, park managers, and city workers highlight the issues, the trade-offs, and the hard choices that communities and governments face. Yet we also learn how restoration programs, like those pioneered a century ago in Cincinnati, offer hope to mitigate human and ecological costs. Replanting with diverse native species can provide immediate, long-lasting benefits. The film ends with school children planting trees, an act that experts agree is one of the most effective things that each one of us could do for the environment.



Discussion Questions

1. Do you have ash trees on your street or in your community? Has the emerald ash borer been spotted? What species, if any, besides ash are at risk in your community? Do you see tree die-offs as a looming threat that needs to be addressed?
2. When invasive insects or disease kill a large numbers of trees in a community, what are the different kinds of losses that the community suffers?
3. The film shows how the spread of invasive insect species is increased by global commerce. Do we have to accept that tree losses are inevitable given that global trade is part of modern life? What are the alternatives? Do you feel that corporations that benefit from global trade should pay for remediation and quarantines? If so, would you recommend something like the carbon tax, which is being proposed to limit greenhouse-gas emissions?
4. In the film, Geoffrey Donovan, PhD, of the USDA Forest Service explains that public health research shows that the presence of trees can literally be the difference between life and death. In a seven-year study across 18 states, in relation to the loss of trees due to the emerald-ash-borer infestation, there were an additional 15,000 deaths from cardiovascular disease and 6,000 deaths from lower respiratory disease. He asserts that trees are an important part of public-health infrastructure as they improve air quality and, as part of the natural environment, reduce stress. Why do you think today's governmental bodies have been so slow to factor these benefits into their budget planning when a hundred years ago many of their counterparts were building parks with an eye to the future? Do we have a tendency

nowadays to take nature for granted? If so, how can we change that behavior?

5. Scientists in the film say that the emerald ash borer has put native ash trees in the U.S. at risk of extinction. If extinction is generally a natural process, why are ash trees so at risk and why should it concern us? What are some remedies for saving individual ash trees and for maintaining healthy forests? How important is biodiversity?

6. The film shows government officials weighing the costs and benefits of dealing with the emerald-ash-borer infestation. They grapple with competing budget priorities, different kinds of public health dangers (e.g. falling trees v. crime), less than fully effective treatments (insecticides), as well as public ignorance and apathy. Experts in the film explain that trees do so much for us, including cleaning our water and air, providing habitat, and reducing energy use. Dr. Dan Herms from The Ohio State University says that each tree provides the equivalent of several hundred dollars per year in environmental services, including sequestering carbon dioxide and reducing the urban heat island effect. The loss of trees can reduce property values, increase cooling costs, increase storm-water runoff, and damage community health. Trees clearly enhance public health and provide a host of environmental services. If you were a city council member, how would you take account of all of these services? Should governmental officials be required to give full consideration to the environmental, economic and social impact of each decision?

7. In the film, Cincinnati Councilmember Wendell Young explains how he took trees for granted in his youth, enjoying their beauty and benefits while not really understanding how they grew or how they could be threatened. What steps are being taken in your community to educate people about the threat posed by invasive species and the steps they might take to address it? Given that agencies tasked with preventing the spread of invasive species are only able to inspect a fraction of goods coming into the U.S. (and have suffered major budget cuts), how important is it for communities to be educated?

8. Does your community have a Street Tree Ordinance? What policies and practices have been established in your community to deal with invasive species like the emerald ash borer? What other invasive species have emerged in your area?

9. By the mid-1800s, trees, used to build and power our cities, were declining dramatically in number. Led by physician and horticulturalist John Aston Warder, the American Forestry Association was established, and in 1882, the first American Forest Congress was held in Cincinnati to combat the tree crisis. Two days later, the superintendent of Cincinnati schools let children out of class to plant trees in an abandoned vineyard, which is now the beautiful Eden Park. Dr. David Stradling, University of Cincinnati, says that the lesson of urban parks around the country is that investments in the 19th century paid incredible dividends; it is difficult to find anything that costs so little that has so much value today. What is the importance of reforestation of urban parks and forests? Do we have a responsibility to grow and maintain such places for future generations?

10. It has been estimated that the invasive insect species have cost local communities almost \$2 billion in tree management. What would you be willing to do or contribute in order to safeguard the trees in your community? Can you think of places where planting trees would be a public service?

11. Councilmember Wendell Young points out that humans and trees have a symbiotic relationship. How is this manifested? Do you have any ideas for how to increase public support for urban forestry and protecting and increasing the number of trees in your community? How can you get local businesses, non-profits, civic organizations, and citizens involved?



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