The Alliance for Healthy Forests

The Problem

Sustainability of forests in the U.S. and the environmental and economic benefits they provide are threatened by insects and diseases that injure and kill trees.

According to the U.S.D.A. Forest Service, trees were dying from insects and diseases on more than 8.6 million acres across the U.S. in 2017.

- Mountain Pine Beetle in the West killed almost one quarter of these trees;
- Gypsy Moth continues to spread, impacting 1.5 million acres in the East each year;
- Emerald Ash Borer is now killing trees in 965 counties in the U.S. from Maine to South Carolina to South Dakota and threatens the survival of all ash trees;
- Laurel wilt, an introduced disease, threatens to eradicate redbay, swamp bay, and sassafras trees in the South in the same way that Chestnut Blight and Dutch Elm Disease has essentially eliminated American Chestnut and American Elm from the landscape.
- Southern Pine Beetle has reached outbreak levels and threatens the forest product industry in the South that is worth more than $200 billion;
- Swiss Needle Cast disease annually impacts more than 300,000 acres of Douglas-fir in Washington and Oregon causing growth losses of 20 – 50%. The value of the lost growth exceeds $200 million annually.
- Needle Cast diseases were recently detected in Mississippi and Alabama and are already damaging southern pines on more than 350,000 acres in those two states.

The Solution

Build an alliance within the forestry community to institute a sustained program of research, technology transfer, and community outreach that produces the knowledge and practical tools needed to improve forest management and reduce the risks posed by insects and diseases to forests in the U.S.

Background and Justification

Forestry is the ultimate green industry. Trees are a renewable resource and forests can be sustainably managed in perpetuity. Forests produce clean water and air, beautiful landscapes, recreation opportunities, fish and wildlife habitat, and sequester carbon that helps mitigate climate change. The U.S. is enriched by its abundant forests that in addition to their environmental benefits produce products ranging from lumber and paper to toothpaste and plastics that are an integral part of the daily lives of all Americans. The forest products industry is a major economic engine in the U.S., producing over $300 billion in timber and forest products annually. The forest products industry accounts for about 4% of the manufacturing GDP in the U.S. and employs over 950,000 workers. Forest products companies are among the top 10 manufacturing sector employers in 45 states. Damage caused by insect and disease threaten the sustainability of Americas' forests which impacts the entire forest products supply chain from private and public forest landowners to manufacturers who use wood as a raw material to consumers who use forest products every day.

Forest certification demonstrates a commitment by landowners to sustainable forest management, providing supply chain assurances, conservation leadership and a commitment to education and community engagement. For example, over 300 million acres of forests in North America are certified to the forest management standards of the Sustainable Forestry Initiative. Many other acres are certified by the Forest Stewardship Council and the American Tree Farm System. Healthy forests are the cornerstone of sustainable forestry and we are dedicated to maintaining healthy, productive forests that provide the environmental benefits and forest products needed in the U.S. These healthy forests benefit everyone, from those living in rural areas that depend on the forest for their livelihood to those in large cities and small towns where the health of street trees and urban forests influences the quality of life in those communities.

We are concerned that the overall capacity of the forestry community in the U.S. to address forest health issues has declined over the last several decades. Funding has decreased in all sectors to the point where investment in forestry research is less today than it was in 1962. However threats from insects and diseases continue to increase. Global trade will continue to bring new invasive pests to the U.S. Climate change is likely to increase the risks posed by both native and invasive insects and diseases. We need to rebuild our capacity to effectively deal with the risks from both native and introduced insects and diseases. This should be a comprehensive program that includes research, technology transfer, and community outreach efforts that increase our knowledge of insects and diseases, improves our understanding of pest-host dynamics in forests, and creates practical tools needed to improve forest management. It must address several key areas:

1) Improved monitoring efforts to quickly detect and identify both native and exotic insects and diseases and evaluate their risk. This should include improved biosecurity efforts at ports of entry to prevent the introduction of invasive species that threaten Americas' forests.
2) Develop the practical tools needed to improve forest management practices so that landowners and managers can respond swiftly to threats from insects and diseases as they occur.
3) Tree improvement efforts that use both traditional tree breeding and modern biotechnology to identify mechanisms of susceptibility/resistance and develop trees that are better adapted to resist insects and diseases.
4) Education and community outreach efforts to inform land managers and the general public about the risks to forests from insect and diseases and provide them the knowledge and tools needed to create more resilient, healthier forests that better mitigate the risks faced and the threats encountered.

Without healthy, sustainable forests we all face a bleak future of wood shortages, impaired water and air quality, diminished recreational opportunities, degraded fish and wildlife habitat, decreased biodiversity, and increased carbon emissions. We propose to form a coalition that brings together the forestry community to advocate for the resources needed to address forest health issues in the U.S. so that we can continue to provide society with the products and environmental benefits from forests that are needed now and in the future.

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