FOREST MANAGEMENT

Protecting Ohio's Forests

NATIVE INSECTS, PLANTS AND DISEASE

Insects

Ohio's forests are home to thousands of native insect species. Insects are a critical component of forested ecosystems. Below are just some of the benefits these insects may provide:

- Food source for many species of wildlife, including birds, mammals and fish;
- Pollinators of flowering plants;
- Contribute to nutrient cycling as they break down dead organic matter;
- Predators of harmful forest pests, helping to keep their populations in check.

Plants

Ohio's native forest plants have coevolved with our native insects over thousands of years, and they have developed mechanisms to coexist with one another. While native insect populations periodically build to outbreak levels, they typically do not cause significant damage to native ecosystems. Most native forest insects attack trees that are weakened or stressed by drought or other damage.

Diseases

Ohio's forest trees can be hosts for many types of diseases. Most well-known tree diseases are caused by fungi, but they can also be caused by bacteria or viruses. As with forest insects, most native tree diseases impact trees that are weakened by drought or other damage, while healthy trees are generally disease-free. Both native insects and native tree diseases are important components of a natural forest ecosystem. They typically kill off weakened or genetically inferior trees, allowing more space and resources for healthy, vigorous trees to grow.

NON-NATIVE INVASIVE SPECIES

While our native insects, diseases and plants do not usually pose a major threat to the health of our forests, organisms introduced from other parts of the world can have devastating effects to our native species and ecosystems. Below are some characteristics of non-native invasive species, which allow them to be successful:

- Adaptable to a wide range of environmental conditions;
- Fast growth rate;
- Prolific reproduction and ability to reproduce at a young age;
- Lack of predators to keep their population in check;
- Non-native plants often produce leaves earlier in the spring and drop their leaves later in the fall than native plants, giving them a competitive advantage.

Non-Native Invasive Forest Pests in Ohio

INSECTS	*PLANTS*	*DISEASES*
• emerald ash borer	• tree-of-heaven	• Dutch elm disease
• Asian longhorned beetle	• bush honeysuckle	• chestnut blight
• hemlock woolly adelgid	• Japanese stiltgrass	• butternut canker
• gypsy moth	• kudzu	• thousand cankers disease

Non-native invasive pests in Ohio include bush honeysuckle (Amur honeysuckle shown upper right), the Asian longhorned beetle (lower left), Japanese stiltgrass (1), hemlock woolly adelgid (2), emerald ash borer (3) and tree-of-heaven (4).

Wildfire

WILDFIRE PREVENTION AND SUPPRESSION

The ODNR Division of Forestry has a long history of wildfire prevention and suppression in Ohio. From the early 1920s through 1945, forest rangers operated out of their homes and had no paid staff. To fight the wildfires, the forest rangers called local fire wardens who enlisted volunteers to help, and the fire wardens were paid for the time they worked. During the Civilian Conservation Corps (CCC) days of the 1930s, trained wildfire fighters were readily available. Concern for wildfire control was heightened by WWII as wildfire could hinder the war effort by destroying critical resources. The Division of Forestry appealed to the Civil Air Patrol for fire detection in 1942. There were few trained wildfire fighters available because they were fighting in WWII. As the state forest system grew, fire suppression equipment was acquired, and the Division of Forestry began working with local volunteer fire departments to minimize losses from wildfire. Today, the division cooperates with more than 350 rural volunteer fire departments, fighting an average of about 1,000 wildfires annually that burn approximately 4,000 to 6,000 acres.

Periodically, the ODNR Division of Forestry conducts prescribed fires to reduce forest fuels that contribute to occurrence and severity of wildfire and to manage species composition in the forest.

Historic methods of fire detection and suppression.

Ohio Department of Natural Resources

ZALESKI STATE FOREST