

# Tree Troubles

Trees face many threats in today's world.

## DEVELOPMENT

As houses, shopping malls, and other buildings spread across the landscape, trees often take a hit. Some are cut to make room for development. Others are left in place, but are damaged by construction and eventually die.

## HARMFUL NON-NATIVE INSECTS AND DISEASES

Insects and diseases can weaken and kill trees. Some of those imported from other parts of the world are among the most devastating.

## DUTCH ELM DISEASE

Dutch elm disease, which is native to Europe, swept through Minnesota in the 1960s and '70s, killing millions of elm trees. Once-shaded city streets were left bare. Trees that added beauty, comfort, and value to homes were destroyed. As urban foresters replaced dead elms with species that are not affected by the disease, the problem got better. But in recent years Dutch elm disease has reared its ugly head again.



## GYPSY MOTH

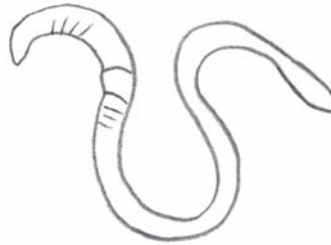
Gypsy moth is a non-native insect that eats leaves of deciduous trees, weakening them. It was imported to the United States in the late 1800s. Gypsy moths are spreading inland from the coasts.

## EMERALD ASH BORER

This Asian insect was found in Michigan in 2002. It can kill an ash tree within a year.

## EURASIAN EARTHWORMS

All earthworms, including angleworms and night crawlers, are non-native in Minnesota. Earthworms consume the leaf litter of the forest, causing tree seedlings, ferns, wildflowers, and potentially water quality to decline.



## COMMON AND GLOSSY BUCKTHORN

These European plants were introduced to Minnesota as landscaping shrubs. They spread rapidly, crowding out native plants and disturbing the woodland ecosystem. Many communities are working to eliminate buckthorn from public spaces and to encourage property owners to destroy it on their land so healthy native plants can thrive once again.

Keys to identification: Leaves are dark, egg-shaped, and pointed at the tip, with finely toothed edges. Green leaves remain on the tree until early winter.



## GLOSSY BUCKTHORN

