RESEARCH LABORATORY TECHNICAL REPORT



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Ivy on Trees

Though it has long been planted as a groundcover or climbing ornamental, and the name is synonymous with venerable old institutions; simply put, ivy is bad for trees. No ivy species is native to the United States and many species become aggressive, invasive components of landscapes. In North America, the most common culprits are English ivy (*Hedera helix*) and Irish or Atlantic ivy (*Hedera hibernica*). These species of ivy are considered noxious weeds in California, Oregon and Washington.

The Problem

There are a number of reasons why ivy is such a problem. In the forest, ivy aggressively displaces native species, provides very little food for wildlife compared to natives, reduces biodiversity, and alters the normal nutrient cycle. Ivy also provides habitat for rats, but very few other species. In landscape settings, ivy competes with desirable plant species for water and nutrients, but most importantly, ivy leads to a number of concerns for tree structure and failure potential.

For arborists, the major concerns regarding ivy are related to tree stability. While ivy is unlikely to have a huge impact on overall plant health, it can reduce tree stability and lead to failure for a number of reasons. Structural, or buttress, roots are one of the most critical areas of a tree when inspecting for risk assessment. They are one of the most common sites for decay and eventual tree failure. If this area is obscured by ivy, an arborist cannot conduct a proper risk assessment of the tree and critical information about tree stability cannot be determined (Figure 1).

In addition, ivy adds considerable weight and wind resistance in a tree canopy. Ivy is also evergreen, so added weight of rain, snow, or ice will accumulate on ivy-covered trees in winter. Ivy may also obscure defects or evidence of decay in branches and trunks,

Figure 1: Ivy covered structural roots cannot be assessed for decay and hazard potential



limiting an arborist's ability to perform an accurate assessment. A thick layer of ivy will trap moisture, organic matter, and reduce air and light penetration inside a canopy. These conditions will favor decay and development of foliar disease in addition to reducing overall tree vigor.

Mitigation

The best scenario for trees and the native environment is to eradicate ivy from the landscape. This can be achieved through hand removal, judicious use of herbicides, or ideally, a combination of the two. Ivy climbing on trees can be removed by hand which is fairly labor intensive, or cut at the base and allowed to senesce and fall off naturally, which may take several years.

If complete removal is not desired from an aesthetic or budget perspective, there are a few practices that can limit the negative impact of ivy on trees and the environment. First, remove ivy from tree trunks, and pull ivy back at least 3 feet from the base of any tree (Figure 2). This will mitigate the weight, moisture, and wind resistance issues associated with ivy. This will also leave the structural roots visible for inspection. In addition to tree trunks, ivy should be prevented from climbing on any vertical surfaces such as walls or fences. Ivy only produces seed when it is growing vertically. A well maintained groundcover of ivy is far less likely to provide seed for invasion of natural areas in comparison to ivy that is climbing up walls or trees.

Properly managed ivy may add aesthetic value to a landscape, however all too often, this invasive weed is left to run amok, damaging ecosystems and leading to structural instability and unknown risk in large trees. Figure 2: Ivy has been removed to expose lower trunk and structural roots, while maintaining the desired ground-cover aesthetic



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