



## 1.0 Background

With rapidly increasing globalization of world trade, invasive species, both terrestrial and aquatic plants and animals, are becoming an increasingly significant problem. Historically, the Midwest was somewhat insulated from the problem because trade goods arrived in this country at east- or west-coast ports and then were moved overland to the country's interior. In the early days, this cross-country migration occurred rather slowly. However, modern shipping and transportation methods enable goods to travel directly to the Midwest from their country of origin.

Plant species now considered invasive were imported either intentionally as ornamental or agricultural plants or accidentally as undetected hitchhikers on other commodities. Invasive plants have a survival advantage over other plants because of their ability to out-compete more desirable plants and the absence of the natural predators that keep them in check in their native environment. They typically are early colonizers on disturbed sites. Soil disturbance has also increased during recent years as human population increases and construction of the accompanying infrastructure expands.

The State of Wisconsin recognizes the potential of these species to create negative impacts to tourism, agriculture, recreation, hunting, fishing and habitats. The result is a significant impact on the state's economy. In recognition of these impacts, the department included special provisions in highway construction contracts and is implementing vegetation management guidelines to aid in controlling the spread of invasive plants resulting from construction and maintenance activities on state and federal highways.

The following discussion focuses on invasive terrestrial plants but the principles presented are equally valid for animal species and aquatic plants.

## 2.0 Early Detection

Early detection of new invasive plants involves being aware of what species are invasive in other states or in other areas of Wisconsin and learning to recognize them so that observations can be reported as they occur. Until maintenance personnel can be trained in plant identification, the Bureau of Highway Maintenance (BHM) landscape architects and outside experts such as Department of Natural Resources and Natural Resources Conservation Service field staff and UW County Extension agents can be helpful in identifying new occurrences.

## 3.0 Rapid Response

Some invasive plant species are so ubiquitous (e.g. Canada thistle, leafy spurge, spotted knapweed) it is not reasonable to expect they can be eliminated from state highway rights of way. However, when small, first-time populations of invasive plants are observed or reported, the environmentally responsible thing to do is to eradicate the population as soon as possible before the plants have a chance to spread. See HMM 07-05-05, Control of Noxious, Invasive and Hazardous Plants. This should be done by hand pulling if the population consists of only a few plants. When hand pulling is not practical, consult the BHM landscape architects for recommended treatment options.