

NEW INVASIVE SPECIES AND THE NR 40 RULE

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Invasive species are those plants, animals and disease organisms that are not native to a region, yet when introduced, can cause significant harm. The term is generally used for those species that cause ecological harm to our native fish, wildlife, plants, lakes, forests and other natural areas. Many species are weedy or pests in agricultural areas, but not in wild lands. Conversely, many of the invasive plants and animals affect only wild areas species, and do not harm crops or livestock. However, there are a number of species such as Canada thistle that do double duty. It is important for persons involved with agriculture to know about invasive species, as they can be both the victims of this harm, and may unwittingly introduce or spread invasive species.

There are a number of factors that are causing a rapid increase in the number of species invading Wisconsin. These include rapidly growing global trade, the public's insatiable desire for new landscaping plants and global climate change. In addition, those invaders already in the area are accidentally moved around by roadside mowing, logging and farm equipment, tourists and outdoor recreationalists. The majority of people introducing or spreading these harmful species around are unaware of the harm they are causing. Many efforts have been underway for a number of years to raise the public's awareness of the species of concern and what they can do to minimize their spread. Outreach efforts alone have not been sufficient to stem the tide of these invaders. Over the last few years groups of foresters, right-of-way managers, recreation enthusiasts and landscape industry members have been working together to create a series of voluntary Best Management Practices to help people in their fields to minimize the accidental spread of invasives. Agriculture is another large area of the economy that may benefit from developing similar voluntary practices.

Until recently, the laws in the state relating to various types of invasive species were piecemeal, and inconsistent from one group of organisms to another. In 2002, the state legislature authorized the Department of Natural Resources to write rules to classify, identify and control invasive species. After extensive input from stakeholders and the public, a comprehensive set of rules went into effect September 1, 2009 to minimize the intentional introduction and accidental spread of certain species listed in the rule.

NR 40 lists 73 plants as 'Restricted' or 'Prohibited'. Most of the 'restricted' species are too widespread to expect anyone to completely control them, so the goal is to minimize the spread. Therefore landowners are not required to control restricted species, but must take reasonable precautions to avoid transporting them from an infested area. Keeping these weeds contained will protect our pastures, farmland and natural areas from further infestations. Several of the restricted species are commonly found in perennial grass fields or on roadsides or the borders of ag fields. These widespread invasive weeds include: Canada, musk and plumeless thistle, leafy and cypress spurge, spotted knapweed, teasel, Japanese knotweed and purple loosestrife.

The prohibited species are those not yet in the state, or only in limited populations, but known to be troublesome in nearby states. These species have been listed as 'prohibited' in an effort to try to stop them before they become established, regardless of where they may appear in the state. The prohibited plants are species that most people in Wisconsin, even farmers, are not familiar with.

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However, one of the reasons for the rule is to ask people who are on the land frequently to learn to recognize these species before they become widespread. When these plants are sighted, we are asking that they be reported so they can be controlled quickly before they produce seed and get established. A few of the species listed as prohibited are especially important for farmers, crop consultants and others in agriculture to become aware of now, as they have the potential to cause significant damage on farms. Some of those species are described here.

Poison hemlock (*Conium maculatum*) is a biennial weed that closely resembles the common Queen Anne's lace, or wild carrot. This plant is common in Illinois and is being rapidly spread along a few Wisconsin roadsides by mowing. From these roadsides it moves into pastures, hay fields and CRP fields. This plant is highly toxic to cattle and could cause illness and death in livestock if allowed to spread freely.

Hill mustard (*Bunias orientalis*) looks like the common yellow rocket from a distant, but has larger basal leaves and bumps on the stem. This mustard was discovered in a few townships in Green County just a few years ago and has already expanded into many pastures in the area, eliminating forage crops.

Giant hogweed (*Heracleum mantegazzianum*) looks like a Queen Anne's lace on steroids. It can reach fifteen feet in height with leaves that can be three feet across. The sap of this plant can cause serious burns on the skin.

Yellow star thistle (*Centaurea solstitialis*) has made millions of acres of grazing lands in the western states unusable for forage. This perennial knapweed has flower and seed heads with long stiff spikes that get caught in the fur and mouths of livestock causing skin and facial irritations.

Kudzu (*Pueria Montana*) is commonly known as the "vine that ate the South." It is less well known that this southern weed has been found within a few miles of Wisconsin, north of Chicago. This vine was originally introduced as a forage crop and very rapidly spread, climbing and toppling trees, covering buildings and making forests impassable.

Photographs and detailed control information for these and other invasives can be found at the DNR website at www.dnr.state.wi.us/invasives. In order to help people learn about these and other invasive plants in Wisconsin, the WI DNR has created a pocket size field guide with photos, identification and control information for over sixty invasive plants. This guide can also be accessed on the WI DNR website.

For more details on NR 40 go to <http://dnr.wi.gov/invasives/classification/>. For questions, contact Kelly.Kearns@wisconsin.gov or 608-267-5066.