

HARDIN COUNTY NOXIOUS WEED POLICY

INTEGRATED ROADSIDE VEGETATION MANAGEMENT

March 15th, 2018

This policy addresses the control of invasive and noxious weeds within the Hardin County Secondary Road System public right of way. The County is required to control Primary and Secondary noxious weeds as listed in the Code of Iowa, Chapter 317(see appendix A).

Hardin County Board of Supervisors approved an Integrated Roadside Vegetation Management Program (IRVM) to better serve the public by using an integrated approach to roadside vegetation maintenance.

The IRVM Department is also responsible for upholding the Iowa Weed Law (Chapter 317, code of Iowa) within Hardin County. The County Weed Commissioner (IRVM director) oversees the control of noxious weeds on all public and private property. Controlling noxious weeds is an important aspect of responsible land management. If noxious weeds are left uncontrolled they can cause severe economic and environmental loss.

The ultimate purpose of any Roadside Vegetation Management program is to provide a safe, healthy, and environmentally sustainable roadway, to preserve and improve both aesthetics and native biodiversity along the county's secondary road system. IRVM is a program for accomplishing these objectives in the most economically and environmentally responsible manner possible. The IRVM program is based on the belief that Hardin County's approximately 6,000 acres of rights of way represent a significant resource worth managing by the most sustainable methods possible to the greatest benefit to the county.

Noxious weeds are often exotic, introduced plant species which have no natural controls, spread rapidly, produce abundant seed, and can displace native plant communities. Noxious weeds quietly suffocate and lower diversity and quality of native plant communities. Once well established, most species of noxious weeds are very difficult, if not impossible to control or eradicate, as well as being expensive and time-consuming to do so. A primary weed management goal is to keep plants from producing seeds and becoming well established. Without proper control, most of these exotic species can quickly expand their populations and encroach into farm lands, lawns, pastures, roadsides, etc. Because most roadsides are highly disturbed, have unadaptable plant communities, and contain variable soil conditions, weeds quickly establish in roadside ditches. Roadsides can serve as an entry point for exotic species to rapidly travel into new and unwanted areas via vehicles, cargo, livestock, road maintenance equipment, etc.

WEED CONTROL

Hardin County will provide regular, ongoing training on various noxious weed control methods to employees. Training will be on topics such as: traffic and equipment safety, weed and plant identification, safe and correct herbicide application, IRVM fundamentals (i.e. prescribed burning, prairie planting, etc.), seeding and mowing techniques, etc. The County is committed to providing education to employees about right of way vegetation management and ways to improve roadsides. Training will be conducted by the Roadside Vegetation Manager or by using other training professionals.

Native Prairie Seeding-

Planting of native prairie vegetation will help control encroaching/establishment of brush and weeds.

Prescribed Fire-

Requires proper weather conditions, equipment, and management skills are required for prescribed burning. Rotational burning at the right time can boost native vegetation historically linked with fire to promote growth. Expanded use of spring and fall burning can help to eliminate seeds and stress weeds as they are not fire adapted. Burning can also be a valuable management tool to improve restored or remnant prairie areas, in place of, or in conjunction with, other weed management methods.

Mowing-

Mowing will be used to reduce speed proliferation, improve site distance at intersections and signs, and to reduce snow drifting. Limited mowing also decreases equipment maintenance, fuel requirements, and labor costs.

Chemical-

Spot spraying techniques are used to spot kill weeds. It targets specific weed problems like Canada and Musk thistle. Select herbicides used are effective, yet environmentally sensitive. In the past, blanket spraying killed or stressed many plants in the roadside resulting in weedy vegetation and water quality issues. It was also very expensive and has led to the chemical resistance of many weed species.

A critical tool employed by IRVM programs is a spot herbicide application program designed to control and reduce noxious weed populations. A spot application program:

- 1). Targets and treats specific noxious weeds,
- 2). Identifies growth characteristics and cycles,
- 3). Uses herbicides labeled specifically for that weed species and location,
- 4). Uses appropriate equipment to minimize drift and off-site movement,
- 5). Attempts to minimize disturbance to beneficial plant communities

NO SPRAY APPLICATION

No Spray Applications (see attached), are available from the Roadside Vegetation Management Biologist and online, allows property owners to manage vegetation within the right of way adjacent to their property without the use of spot herbicide applications. A Work in the Right-of-Way Permit must be filed in conjunction with the No Spray Application. Vegetation must be maintained in accordance with Hardin County Brush Control & Noxious Weed Policies and Iowa State Noxious Weed laws. The property owner shall request this annual application which explains the property owner's responsibilities in order to avoid herbicide application. Organic producers, beekeepers, etc. are encouraged to fill out the No Spray Permit and post no spray signs at property borders. All land owners with sensitive crops are encouraged to register such sites with the State of Iowa at <http://www.fieldwatch.com/fieldwatch-state-registries/>.

CONCLUSION

Hardin County needs to take a strong stand to control weed invasion from the right of way onto private land, and weeds from private lands encroaching into the right of way. This policy is proposed because of the need to proactively control noxious weeds in accordance with Iowa's Noxious Weed Law and Board of Supervisors' Resolutions. Weed control in the past has been a subject for many debates. Using all of the weed management techniques outlined in this policy, Hardin County's Integrated Roadside Vegetation Management Program can provide a more economically maintained, environmentally friendly roadside for residents to enjoy.

APPENDIX A

NOXIOUS & INVASIVE WEED SPECIES TO BE CONTROLLED

The Iowa Department of Agriculture and Land Stewardship and the Code of Iowa have declared 27 species of plants as noxious weeds which need to be controlled. The following weeds have been acknowledged as noxious by the State of Iowa:

Iowa Code Section 317.1A Noxious weeds.

1. The following weeds are hereby declared to be noxious and shall be divided into two classes, as follows:

a. Primary noxious weeds, which shall include:

- (1) Quack grass (*Elymus repens*).
- (2) Perennial sow thistle (*Sonchus arvensis*).
- (3) Canada thistle (*Cirsium arvense*).
- (4) Bull thistle (*Cirsium vulgare*).
- (5) European morning glory or field bindweed (*Convolvulus arvensis*).
- (6) Horse nettle (*Solanum carolinense*).
- (7) Leafy spurge (*Euphorbia esula*).
- (8) Perennial pepper-grass (*Cardaria draba*).
- (9) Russian knapweed (*Acroptilon repens*).
- (10) Buckthorn (*Rhamnus* spp., not to include *Frangula alnus*, syn. *Rhamnus frangula*).
- (11) All other species of thistles belonging in the genera of *Cirsium* and *Carduus*.

b. Secondary noxious weeds, which shall include:

- (1) Butterprint (*Abutilon theophrasti*) annual.
- (2) Cocklebur (*Xanthium strumarium*) annual.
- (3) Wild mustard (*Sinapis arvensis*) annual.
- (4) Wild carrot (*Daucus carota*) biennial.
- (5) Buckhorn (*Plantago lanceolata*) perennial.
- (6) Sheep sorrel (*Rumex acetosella*) perennial.
- (7) Sour dock (*Rumex crispus*) perennial.
- (8) Smooth dock (*Rumex altissimus*) perennial.
- (9) Poison hemlock (*Conium maculatum*).
- (10) Multiflora rose (*Rosa multiflora*).
- (11) Wild sunflower (wild strain of *Helianthus annuus* L.) annual.
- (12) Puncture vine (*Tribulus terrestris*) annual.
- (13) Teasel (*Dipsacus* spp.) biennial.
- (14) Shattercane (*Sorghum bicolor*) annual.

2. a. The multiflora rose (*Rosa multiflora*) shall not be considered a secondary noxious weed when cultivated for or used as understock for cultivated roses or as ornamental shrubs in gardens, or in any county whose board of supervisors has by resolution declared it not to be a noxious weed.

b. Shattercane (*Sorghum bicolor*) shall not be considered a secondary noxious weed when cultivated or in any county whose board of supervisors has by resolution declared it not to be a noxious weed.

INVASIVE WEED SPECIES WHICH MERIT MANAGEMENT CONSIDERATION

New exotic weed pests are continually being discovered encroaching into the State of Iowa. Many of these weed species can be controlled early in the discovery phase, and before infestation. The IRVM Program and the County Weed Commissioner, while focusing on noxious weeds, also will evaluate the spread and the environmental impacts of new weeds on Hardin County. If a weed species is considered to have a significant detrimental impact on the resources of Hardin County, the Weed Commissioner can seek to have that species declared noxious by the Board of Supervisors. That weed species can then be included as part of the overall weed management plan.

This is a list of plant species which are considered invasive or aggressive by the Hardin County IRVM Program and County Weed Commissioner. These species are unsuitable for use or growth in roadside plant communities. Because of concern for their spread into public right of ways, planting these species in adjacent private lands is discouraged. This plant species list is not all-inclusive, and may be edited to include or remove certain species as conditions or situations dictate.

Pampas Grass (*Miscanthus* species)

Garlic Mustard (*Alliaria petiolate*)

Crown Vetch (*Coronilla varia*)