



HARDIN COUNTY
Board of Supervisors

1. Monday, January 22, 2018
2. 10:30 A.M. Canvass Drainage Trustee Election
3. 11:00 A.M. Meet With IRVM Director
Re: Review Policies
Large Conference Room

Documents:

[HARDIN COUNTY BRUSH CONTROL POLICY.PDF](#)
[HARDIN COUNTY NOXIOUS WEED POLICY.PDF](#)

4. 1:00 P.M. Working On 2018/2019 Budgets
Large Conference Room

Hardin County Brush Control Policy

Integrated Roadside Vegetation Management (IRVM)

November 30th, 2017

It is the policy of Hardin County that the vegetation of its roadsides be preserved, planted, and maintained to be safe, visually attractive, ecologically integrated, and useful for many purposes. (See Iowa Code section 314.22 for full statement of the purpose of this policy.)

This policy addresses the procedures and methods for the proactive management of woody vegetation adjacent to roads under the jurisdiction of the Hardin County Board of Supervisors. It is the duty of the Board of Supervisors, Hardin County Secondary Roads Department and the Hardin County IRVM Department to maintain a county road system that is safe and convenient for public travel and to manage roadside resources with an eye toward preservation of beneficial plant communities.

This policy represents the County's authority, in its discretion, to:

- ❖ Cut and/or spray any woody vegetation in the right-of-way which creates a situation that threatens the safety of the traveling public. Such safety threats may include:
 - Snow traps and/or shading of the road.
 - Site distance problems in relation to road signs or intersections.
 - Conditions that impede maintenance of or improvements to the right-of-way.
 - Width or height restrictions imposed on vehicles or equipment using the roadway.

Small/medium woody materials cut or sprayed will be left to decompose in the right-of-way.

- ❖ Burn roadside vegetation to destroy small brush and stimulate desirable vegetation.

Hardin County's Integrated Roadside Vegetation Management Program, with assistance from Secondary Roads Department, will use several management techniques to provide a safe and environmentally sound roadway.

RIGHT-OF-WAY AREAS TO BE TREATED

Tree and brush management priority shall be by road system, with the primary roads having the highest priority. Management priority shall be asphalt or concrete mats (paved), granular surface roads (gravel), and lastly, level B maintenance roads, in that order.

Along all county roads, paved, gravel, and dirt, the County's normal procedure will be to clear the entire right-of-way, utilizing level cuts as low as possible, including immediate stump treatment, with a few general exceptions provided for trees and shrubs positioned near dwellings. (For exceptions, refer to the Tree and Shrub Plantings section of this policy.)

There are certain conditions within the right-of-way in which brush or trees present clear hazards. In these situations, the brush and trees which are in close proximity to the road surface must be removed. Trees within the right-of-way but greater than 30 feet from the road surface present reduced hazard and may be considered individually.

Areas in which brush and trees must be managed to promote safety:

- 1). All brush and trees on the foreslope and ditch bottom must be removed.
- 2). Brush at intersections must be removed to a minimum distance of 350 feet to provide visibility of hazards or oncoming vehicles.
- 3). Brush must be removed around traffic warning signs to a minimum distance of 350 feet, allowing viewing at typical road speeds.
- 4). Brush on inside horizontal curves at points obscuring driver vision.
- 5). Brush on outside horizontal curves and trees in a target position for errant vehicles.
- 6). Trees and limbs overhanging road surfaces, creating icing or snow drifting hazards, providing too little vertical or horizontal clearance, or which cause a vehicle to move out of the proper lane must be either pruned or removed.

Trees/brush will also be considered for removal in these instances:

- 1). Accident frequency (evidence of vehicle/tree accident), either from actual reports or scarring.
- 2). Trees/brush deemed problem species which encourage the spread of disease or which have been designated by USDA/IDALS or Hardin County as invasive, noxious, or undesirable.
- 3) Violating Iowa Code Chapter 318 (obstructions in the ROW) by planting trees in the right-of-way.

If the following conditions exist within the right-of-way, it may be possible to retain trees that would otherwise be considered for removal:

- 1). There are trees of endangered/threatened species, as defined by state or federal listings,
- 2). Trees behind guardrails, providing a minimum of 4 feet of clearance from guardrail to tree,
- 3). Trees within the right-of-way which are greater than 30 feet from the traveled portion of the road, or
- 4). Where removal would adversely affect wetlands or water quality.
- 5). Approved tree or shrub species, which, when located on the backslope, and are not causing drifting, icing, visibility problems, or other road hazards, should be left for wildlife habitat.

Situations will be inspected individually by Hardin County's Roadside Vegetation Manager.

HARDIN COUNTY BRUSH CONTROL POLICY SUMMARY

Locations where brush and trees are managed in the county right-of-way

1. ALL brush and trees will be removed from the shoulder and ditch bottom.
2. ALL brush and trees will be removed at least 350 feet from all intersections and in front of traffic warning signs.
3. ALL brush and trees on inside or outside corners.
4. ALL brush and trees in locations:
 - ❖ Obstructing driver vision.
 - ❖ Causing drifting or icing hazards.
 - ❖ Which made a vehicle move out of its appropriate travel lane.
 - ❖ Which are in a target position for errant vehicles will be removed or pruned.
5. Brush and trees overhanging the traveled portion of the road (25 feet minimum height required).
6. Brush located on the backslope of the road which will exceed 4 inches in diameter at maturity will be removed (i.e. Elm, Mulberry, Oak, Boxelder, etc.).

Possible Suitable Locations for Brush and Trees in County Right-of-way

1. Brush and tree species with less than 4-inch stem diameter at maturity, which when located on the backslope, and are not causing a visibility, drifting, icing or other problem, may be left. Requirements of #2 and #4 above must still be met for signs and intersections.
2. Brush and tree species with greater than 4-inch stem diameter at maturity, which when located greater than 30 feet from the traveled portion of the road and do not present a hazard for errant vehicles, will be considered individually for management.
3. Brush and trees behind guardrails with at least 4 feet of clearance between guardrail and tree.



Typical Road Cross Section and Locations

TREATMENT METHODS

Hardin County will provide regular, ongoing training on various brush and tree control methods to employees. Training will be on topics such as: traffic and equipment safety; tree and plant identification; safe and correct use of herbicide application, equipment and products; proper pruning techniques; and IRVM fundamentals including prescribed burning, prairie planting, seeding and mowing techniques. 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 appropriate training professionals.

Mechanical-

Naturally occurring remnant prairies will have brush removed by hand. Reconstructed prairies will be subject to listed management methods, with the goal of avoiding disturbance to beneficial plant communities.

Physical removal of trees and brush with large equipment (excavators, bulldozers, etc.), or hand cut with chainsaws, etc. Brush control may be either by mechanical means or hand-cutting consistent with the physical and cost restraints of limited equipment, time, personnel, and funds for this purpose.

Mechanical brush cutters will be used in rural non-residential areas with small scattered brush and trees where debris will be allowed to lie on slopes. Trees larger than 8 inches in diameter will be cut with chain saws, or excavator, and will be cut flush to the ground whenever possible. Large side branches will be trimmed to the main trunk of the first lateral branch.

Mowing-

Removal of small trees or brush and chemically treating stumps (when practical) to prevent resprouting. This may entail mowing of foreslope, ditch bottom, or backslope which are infested with brush and small trees.

Prescribed Burning-

Using controlled fire to stunt or kill small brush species and to prevent woody encroachment into remnant or established prairie locations. This is not effective on larger trees (i.e., > 2-3 inches diameter).

Chemical-

No foliar application for woody species control will be done in naturally occurring remnant prairies.

Using a spot herbicide application program with IRVM goals to control small brush within the right-of-way. The spot application is designed to target specific problem species to avoid disturbance to more beneficial plant communities. The herbicides used will be only those approved by appropriate state and federal agencies for this purpose and in this location. All applicators shall receive annual training on herbicide use and safety, and plant identification. Herbicides shall be applied only by state licensed and properly trained or supervised personnel, using appropriate equipment, and shall be applied in a timely fashion, with the intent of killing, or significantly retarding, woody plant growth. This includes cut stump, frill, basal bark, and limited foliar applications. Foliar applications shall be limited to spot spraying of small individual brush in problem locations. No blanket foliar spraying will be done. Foliar applications will only be used in areas where other treatment methods are ineffective.

Hardin County is committed to the wise use of herbicides on its roadsides and being consistent with employee and environmental safety and with regulations controlling the use of roadside application of pesticides in the state.

Competitive Seeding-

Planting of native prairie vegetation or other hardy perennial plants, where feasible, to help control encroaching brush and weeds and to reduce long-term area maintenance costs. This method shall be used in large brush removal areas as time and funds permit.

Property Owners-

A Roadside Maintenance Agreement, available from the Roadside Vegetation Manager, allows the property owner to manage vegetation within the right-of-way adjacent to their property without the use of spot herbicide applications. Vegetation must be maintained in accordance with Hardin County Brush Control and Noxious Weed Policies. The property owner may request this Agreement which explains the property owner's responsibility in order to avoid the spot herbicide application. Organic producers, beekeepers, etc. are encouraged to obtain a Roadside Maintenance Agreement and post official County signs at property borders.

TREE AND SHRUB PLANTINGS

No tree or shrub species will be planted in naturally occurring remnant or reconstructed prairies.

Trees or shrubs shall not be planted or allowed to grow in the right-of-way within 30 feet of the traveled portion of a public road (Iowa Code 318).

Existing trees or shrub plantings adjacent to a home or dwelling which have been planted in close proximity to the roadway, or are causing a vision problem, i.e. inside curves, intersections, or are causing a snow drifting or icing problem, will be removed. Landowners shall have the option to transplant these trees or shrubs, at their expense, out of the public right-of-way adjacent to their property. Landowners shall be notified to remove these trees or undesirable vegetation, with 30 days to complete the work (unless otherwise specified). This gives the landowner ample time to move the trees or vegetation to a more desirable location. If, after 30 days, the work has not been satisfactorily completed, a follow up letter will be sent specifying the removal will be done by Hardin County when conditions permit.

1. Trees and shrubs that extend into residential yards or acreages whose bases are inside the right-of-way line by no more than 5 feet may remain, if so desired by the landowner, but limbs must be pruned back to the nearest lateral branch, so that limbs extend no further than 8 feet into the right-of-way. A written notice of the County's intended work will be sent or delivered to these property owners a minimum of seven (7) days prior to the commencement of work. This notice will provide the landowner an opportunity to arrange for his/her own trimming and/or to request any larger material for firewood. (Landowner will be responsible for cutting wood into lengths and removing from ditch.)
2. Side trimming of limbs of trees will be done by pruning them back to no more than eight (8) feet from the right-of-way line when the tree base is actually outside the right-of-way.

OTHER CONSIDERATIONS

An ongoing inventory of roadside vegetation resources and problems will be developed in order to facilitate better management. The inventory will contain information on prairie locations, areas of tree and brush infestations, noxious weed infestations, etc. This inventory process can help to identify areas which need special consideration and treatment, as well as problem areas which need attention. This inventorying process will also help to identify and protect naturally occurring remnant plant communities.

Trees/limbs within the right-of-way which are diseased/dead and could fall onto the roadway shall be removed. Trees which fall off private property onto the roadway will be removed/trimmed within the borders of the public right-of-way. Trees which fall off the public right-of-way onto private land will be removed by the County. The County assumes no liability for damages caused by, or removal of, said trees.

Brush and trees removed within the right-of-way will be handled differently depending on situation and location. Brush will be either: chipped into roadside, chipped and hauled away, left in roadside, buried, hauled away, or burned. Low impact control methods shall be used, if possible, in areas of naturally occurring native plant communities including prairies, savanna, and wetlands.

This policy is proposed because of the need to address woody plant species within the County Right of Way. There is a clear need to have a set policy in regards to tree and brush removal, which is based on public safety, and sound environmental management practices. Using Integrated Roadside Vegetation Management to provide a proactive approach to brush and tree management is both publicly and environmentally friendly. Additionally, using several management tools for woody plant species control gives the IRVM program the flexibility needed to provide Hardin County with a safe and attractive roadside, along with improved wildlife habitat and erosion control.

Hardin County Board of Supervisors

_____ Date: _____
Lance Granzow, Chair

IRVM Department

_____ Date: _____
Megan Dohrman, Roadside Vegetation Manager

Hardin County Secondary Roads Department

_____ Date: _____
Taylor Roll, County Engineer

HARDIN COUNTY NOXIOUS WEED POLICY

INTEGRATED ROADSIDE VEGETATION MANAGEMENT

December 8th 2017

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. Historically invasive species have always been a problem in the roadside, but, 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, preserve and improve 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 of the amount of disturbances in roadsides, coupled with plant communities which are not highly competitive, and generally poor soil conditions, weeds can move quickly into ditches. Roadsides can serve as an entry point for exotic species to rapidly travel into uninfested 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 use of herbicide application equipment and products, 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 brush and weeds.

Prescribed Fire-

Requires proper weather conditions, equipment, and management skills. 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-

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.

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

ROADSIDE MAINTENANCE AGREEMENT

A Roadside Maintenance Agreement (see attached), available from the Roadside Vegetation Manager, allows property owners to manage vegetation within the right of way adjacent to their property without the use of spot herbicide applications. Vegetation must be maintained in accordance with Hardin County Brush Control & Noxious Weed Policies. The property owner may request this annual Agreement which explains the property owner's responsibilities in order to avoid the spot herbicide application. Organic producers, beekeepers, etc. are encouraged to obtain Roadside Maintenance Agreements, and post no spray signs at property borders.

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 evaluates 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*)

ROADSIDE MAINTENANCE AGREEMENT REQUEST

Name: _____ Phone _____

Address: _____

City/State/Zip: _____ Email: _____

I request Hardin County IRVM Department not to apply herbicides within the right of way adjacent to the land designated below located in Section ____, of Township _____

Areas That Are Not To Be Treated

(Please be as specific as possible- feel free to include an illustration of the area on back)

County Road _____ Side of Road N S E W

From _____

To _____

County Road _____ Side of Road N S E W

From _____

To _____

In return, I ask permission to work within the public right of way to remove noxious weeds and to remove brush by cutting and treating the stumps. Dept. No spray signs must be posted in visible locations at each end of the Maintenance Agreement area to define boundaries. Signs must have an unobstructed view from the road and must be a minimum of 5 feet above the ground. This agreement does not prohibit herbicide applications by utility companies or other entities.

I fully understand that I am to destroy State & County listed noxious weeds by June 1st of every year, and remove all brush and trees in accordance with Hardin County Noxious Weed and Brush Control Policies, or the same may be removed by Hardin County and this or future permits may be revoked. This is a long-term agreement, and is effective until five (5) years from date below.

DATE: _____

DATE: _____

Applicant Name & Phone Number

Hardin County Vegetation Manager

Property Owner (if other than applicant)

Hardin County Engineer

Hardin County Board of Supervisors

_____ Date: _____
Lance Granzow, Chair

IRVM Department

_____ Date: _____
Megan Dohrman, Roadside Vegetation Manager

Hardin County Secondary Roads Department

_____ Date: _____
Taylor Roll, County Engineer