

Hardin County



IRVM
Integrated Roadside Vegetation Management
Iowa's Roadside Resource

Management Plan for Integrated Roadside Vegetation Management

Version 2

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Contributors to the Plan

Cory Engle

Hardin County Roadside Vegetation Manager

Wes Wiese

Hardin County Director

Blake Harris

Hardin County Natural Resource Manager

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Program History

The Hardin County Integrated Roadside Vegetation Management (IRVM) program began in 1989 when the Hardin County Board of Supervisors approved the hiring of a roadside biologist. The plan for the program emphasizes cooperative efforts and mutual support among the Board of Supervisors, IRVM Department, Secondary Roads Department and the Conservation Department. To more efficiently manage the IRVM program it was merged with Hardin County Conservation Department in 2013.

Goals

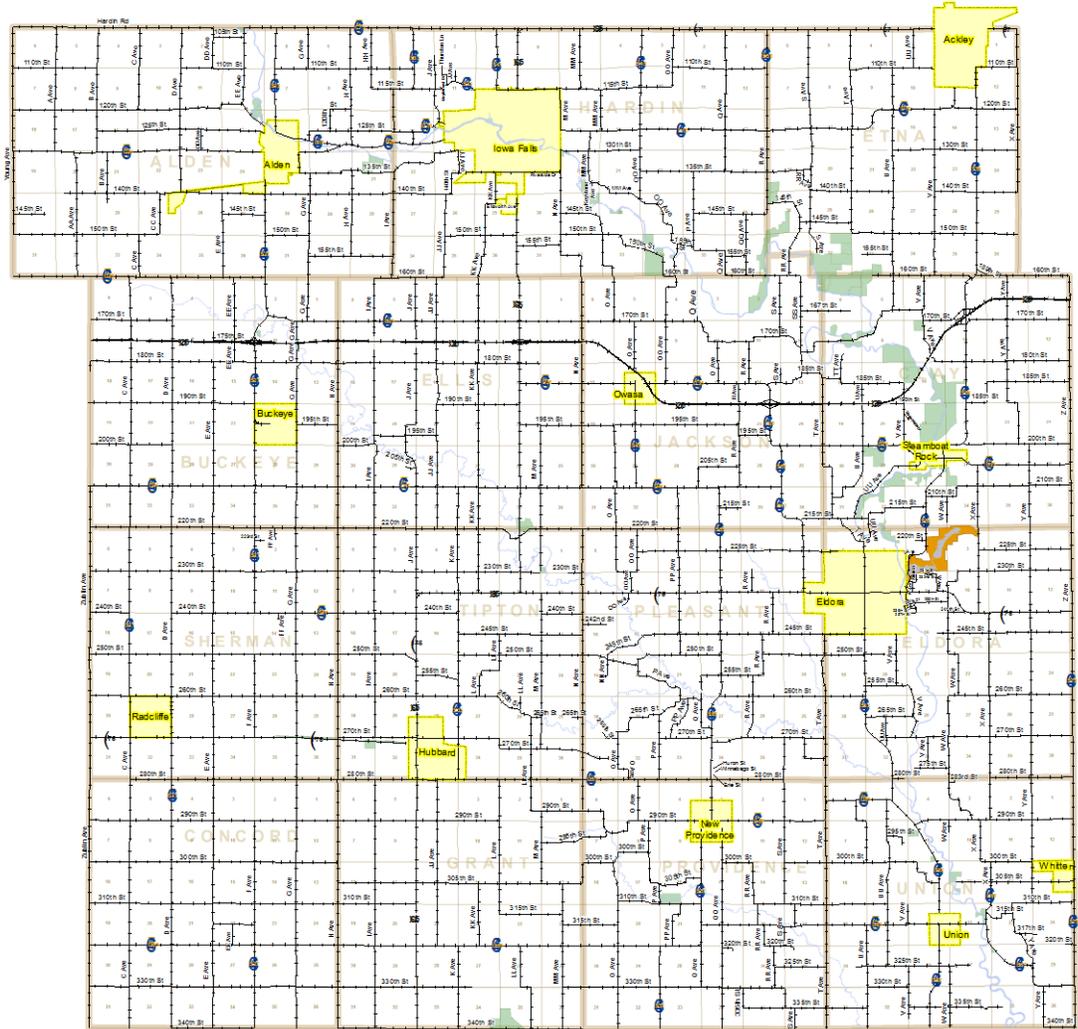
- A. Establish and maintain a self-sustaining and visually interesting plant community within the county right-of-way that provides for public safety.
- B. Providing beauty to the roadsides by planting a variety of native grasses and forbs
- C. Increase wildlife habitat
- D. Work towards a roadside spraying program that promotes the reduction and potential elimination of herbicide use whenever possible by using other methods of maintaining native prairie.
- E. To recognize and stop the spread of newly introduced invasive plant species countywide.
- F. Inform the public of roadside management by providing them with information about the IRVM program.

Executive Summary

Roadside vegetation performs many functions on the landscape. As a sustainable method of controlling erosion and sediment delivery, providing critical habitat and food sources for birds and pollinators, native vegetation in right of way also ensures safe, visible, attractive roadways across Iowa. According to the Iowa Legislature, Integrated Roadside Vegetation Management (IRVM) refers to a comprehensive program that:

- Maintains a safe travel environment.
- Serves a variety of public purposes including erosion control, wildlife habitat, climate control, scenic qualities, weed control, utility easements, recreation uses, and sustenance of water quality.
- Is based on a systematic assessment of conditions existing in roadsides, preservation of valuable vegetation and habitats in the area, and the adoption of a comprehensive plan and strategies for cost-effective maintenance and vegetation planting.
- Emphasizes the establishment of adaptable and long-lived vegetation, often native species, matched to the unique environment found in and adjacent to the roadside.
- Incorporates integrated management practices for the long term control of damaging insect populations, weeds, and invader plant species.
- Builds upon a public education program allowing input from adjacent landowners and the general public.
- Accelerates efforts toward increasing and expanding the effectiveness of plantings to reduce wind-induced and water-induced soil erosion and to increase deposition of snow in desired locations.
- Incorporates integrated roadside vegetation management with other state agency planning and program activities including the recreation trails program, scenic highways, open space, and tourism development efforts. Agencies should annually report their progress in this area to the general assembly.

Area Map



Program Type

The Hardin County IRVM Program is housed and administered through the Hardin County Conservation Department.

Program Structure

The Hardin County IRVM Department is under supervision of the Hardin County Conservation Board. The full-time Roadside Manager decides and carry's out the department's day to day operations, sets priorities, and carries out the business management duties. A seven month roadside technician position is employed from April through October. The roadside technician assists with carrying out all day to day duties as assigned. The roadside manager and conservation director are responsible for managing and maintaining the IRVM budget.

Management

The roadside manager works under the direction of the conservation director. The secondary roads department determines which ditches will be excavated. After they have completed the excavation they contact the roadside manager to hydro seed and complete the project. Mowing and burning are done as time and staff allow.

Board of Supervisors

The Board of Supervisors role with the IRVM program is to set the total budget for the year. The Supervisors will also appoint the IRVM manager as the County Weed Commissioner.

Iowa Code and Administration Rules-State Laws and Regulations

Section 314.22 Integrated Roadside Vegetation Management
Section 314.21 Living Roadway Trust Fund
Section 314.17 Mowing Law – No mowing before July 15th
Section 317.11 Weeds on Roads - Harvesting of Grass
Section 318.3 Obstructions in ROW / Destruction of plants placed in ROW / Crops in ROW
Chapter 317 Iowa Weed Law – Noxious Weeds and Enforcement Procedures

Local Laws and Regulations

Local Laws, Regulations, and Policies pertaining to IRVM in Hardin County reflect that of the Iowa Code, as well as any other State and Federal Regulations that are specific to management activities that occur within the jurisdiction of the Hardin County Conservation Board. These include but are not limited to:
Iowa Code Chapter 314.22
Iowa Code 317
No Spray Requests – Allows landowners to opt out of roadside spraying adjacent to their property in the form of a request.

Staff Organizational Chart

Conservation Director
Roadside Manager
Seasonal Staff

Staff Needs

Continuing education is an essential part of IRVM. New ideas and technologies are always arising in vegetation management. Changes in research, herbicides, and rules and regulations are constant. The roadside manager and/or roadside technician are encouraged to attend conferences, seminars, and meetings. Employees are also required to attend any continuing education to stay current on certifications. The training and education needed to fulfil our IRVM duties are:

Herbicide applicators license (category 6)
Prescribed fire training
GIS/GPS training
Equipment training
Commercial drivers license

Communication Mechanisms

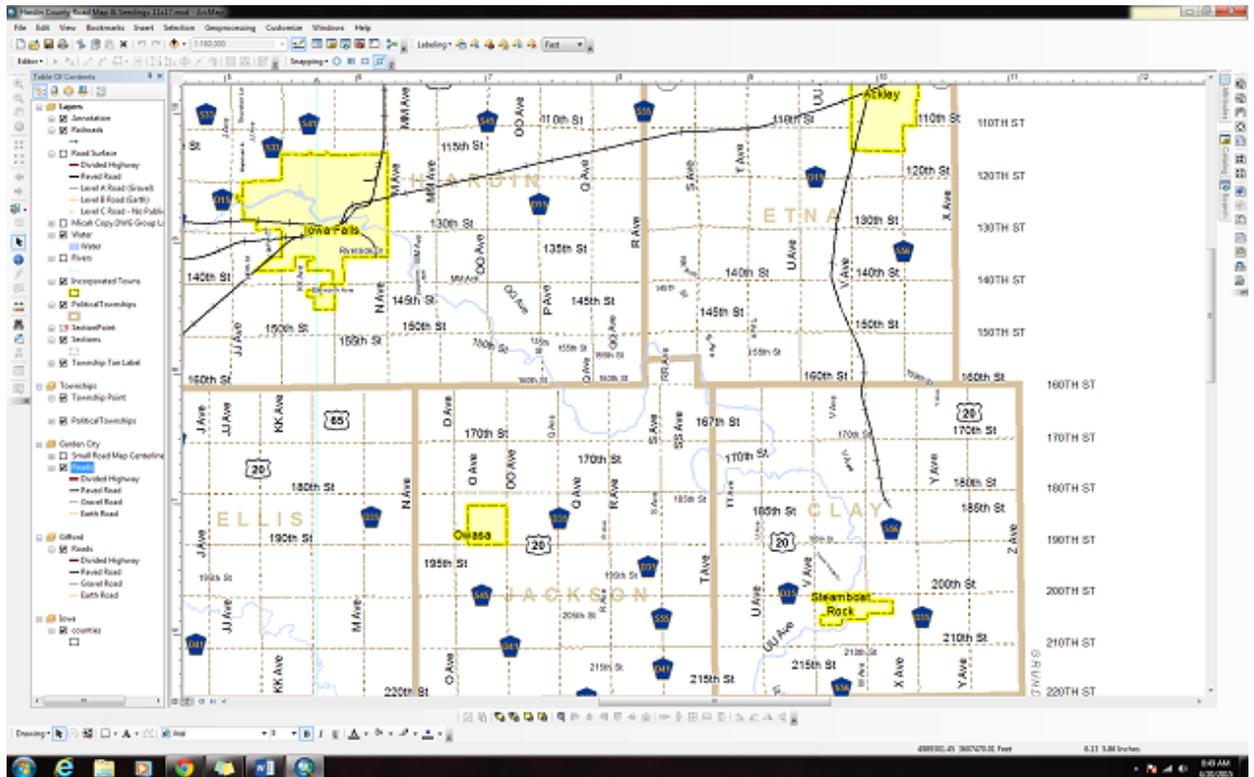
Local media
Internet (<http://www.co.hardin.ia.us/pages/IRVM>)
Social media (www.facebook.com/HardinCountyIAConservation)
Newspapers
Brochures
Oral and visual programs

Hardin County tries to promote the IRVM program as much as possible and to do that we use the mechanisms listed above. You can find information online on our website or on our Facebook page. We have brochures available that gives great information about the IRVM program. We will also have articles in the local newspapers and the Hardin County Conservation newsletter every so often.

Vegetation Inventory

Hardin County's Roadside Inventory was conducted in 2005. The survey mapped Hardin County and recorded areas containing native vegetation, non-native vegetation, sites of encroachment and other various categories. Due to the imminent changes of roadside vegetation, a new survey should be conducted every so often. Employees will monitor such things as roadside seeding projects and invasive weed patches. The department has

been using GIS systems to improve the quality and quantity of our data. GIS allows employees to map and plot out where projects and work have been completed.



Equipment and Condition

- 1989 Truax Flex 88 Drill- *average*
- 1999 Finn T-90 Hydro Seeder- *good*
- 1990 Herd I-92 Broadcast Seeder- *good*
- 1990 Bowie SG 50T Straw Mulcher- *poor*
- 1989 Case 685 Tractor- *average*
- Alamo SHD74 Flail Mower- *good*
- Cultipacker- *good*
- 1999 F-250 Ford Pickup- *average*
- 2011 F-250 Ford Pickup- *good*
- 2014 Polaris 400 ATV- *good*
- Trailer Spray unit 300 gallon tank with Honda GX 160 pump (2) - *average*
- Skid Unit with 150 water tank with Honda GX 160 pump- *average*
- Clipper 2B Fanning Mill- *average*
- Clipper 400 Office Fanning Mill- *average*
- 1990 98-SS Sieve Shaker- *average*

1990 Speed King 915 Hammer Mill- *average*
Digital Camera- *good*
Back Pack Sprayer 4 Gal (2) - *good*
Drip Torches (2) - *good*

The equipment, seed, and chemical storage shed is located at the Secondary Roads Department which is a 30 minute drive from the Hardin County Conservation HQ. Now that the roadside manager works out of the conservation department it would be far more efficient and beneficial for the IRVM equipment to be stored and the Hardin County Conservation HQ. A new storage shed with seed and chemical storage rooms would need to be built for this to happen.

Annual Operations

January

- Budget Work Session
- Weed Commissioner Report due
- Sign up for Weed Commissioners Conference
- Clean up and Finish Yearly GIS maps
- Review Management Plan
- Stratify Seed
- Equipment Maintenance
- Frost Seeding if needed
- Seed and chemical inventory
- Build Wood Duck houses

February

- Fire Refresher Class (RT130)
- Prescribed fire preparation
- Identify herbicide needs and send out quotes for spring
- Plant greenhouse plugs
- Equipment Maintenance
- Frost Seeding if needed
- Create fish habitat
- Advertise for Roadside Tech position if needed
- LRTF Grant Applications

March

- Iowa Invasive Species Conference (IWCA)
- Spring seeding as conditions allow
- Order Herbicide, hydro mulch, seed, and erosion control products
- Prescribed burns if possible
- Equipment Maintenance
- LRTF Grant Applications

- Interview and hire Roadside Tech
- Pick up LRTF seed
- Clean and maintain Wood Duck houses

April

- Prescribed Burns
- Seed all outstanding fall and winter projects
- Start prepping food plots

May

- Finish Spring seeding
- Start county weed spraying
- Prep and plant food plots

June

- LRTF Application due on June 1.
- County weed spraying
- Hydro seeding
- Maintenance mowing of previous year's seeding projects
- Plant plugs
- Finish planting food plots

July

- County weed spraying
- LRTF Grant Review
- Maintenance mowing of previous year's seeding projects

August

- County weed spraying
- Start Fall seeding projects

September

- Finish county weed spraying
- Fall seeding projects
- IRVM Roadside Conference
- Seed harvest

October

- Fall Seeding
- Fall Burning
- Seed Harvest

November

- Fall Seeding
- Begin GIS/GPS data entry for seeding projects
- Update chemical inventory
- Winterize equipment

December

- Begin cleaning harvested seed
- TAP Seed Reports due to UNI
- Annual water use report due

- Gather and fill Iowa Weed Commissioners Report
- Finish GPS/GIS data for seed report

Work Area

- Rural adjacent agriculture – Native seed mixes
- Rural adjacent non-agricultural – Native seed mixes

Vegetation Type for Specific Uses

Non-Residential ROW – native tallgrass prairie – Areas where long term establishment and persistence of tallgrass prairie is deemed feasible by the Roadside Manager.

Vegetation Establishment

Seed Mixes and Rates

- | | |
|--------------------------------|-------------------------------------|
| Big bluestem 1.5 lbs/ac | Purple coneflower 1.6 oz./ac |
| Sideoats gramma 2 lbs/ac | Rattlesnake master 2.4 oz./ac |
| Canada wild rye 2.5 lbs/ac | Ox-eye sunflower 4 oz./ac |
| Little bluestem 2 lbs/ac | Roundheaded bushclover 1 oz./ac |
| Indiangrass 1.5 lbs/ac | Wild bergamot 0.6 oz./ac |
| Partridge pea 8 oz./ac | Foxglove penstamen 0.5 oz./ac |
| Leadplant 0.5 oz./ac | Large flowered penstemon 0.5 oz./ac |
| Butterfly milkweed 0.8 oz./ac | Prairie blazingstar 0.8 oz./ac |
| Swamp milkweed 1 oz./ac | Yellow coneflower 4 oz./ac |
| New England aster 0.3 oz./ac | Blackeyed susan 3 oz./ac |
| Canada milkvetch 0.8 oz./ac | Compass plant 0.5 oz./ac |
| White wild indigo 0.5 oz./ac | Stiff goldenrod 0.3 oz./ac |
| Purple prairie clover 4 oz./ac | Ohio spiderwort 0.8 oz./ac |
| Showy tick trefoil 0.5 oz./ac | Hoary vervain 0.5 oz./ac |
| Goldenrod 0.8 oz./ac | Rough dropseed 16 oz./ac |

The species and amounts are both subject to change with the State wide TAP seed purchase annually.

Spring Cover Crop

- Cover Crop Oats 80 lbs/ac
- Annual Ryegrass 10 lbs/ac
- Timothy 1 lb/ac

Fall Cover Crop

Winter Wheat 100 lbs/ac

Timothy 1 lb/ac

Seeding Techniques

We seed according to the guidelines in the IRVM tech manual using:

Hydroseeder with seed and mulch

Truax drill

Broadcast seeder

Erosion and Sediment Control

Hydromulch on ditch cleanouts and other projects as needed

Guard Rail Applications

Guard rail applications are done by the Secondary Roads Department. Guard rail applications are made to areas around guard rails with a herbicide treatment to prevent vegetation growth and provide season long weed control.

Vegetation Establishment Maintenance

First and second year mowing of annual weeds on new projects

Prescribed burning

Selective spot spraying

Planting Evaluation and Documentation

Documentation is completed at the end of each year. Digital maps will show the areas that were seeded. This also includes the seed used and the date that it was seeded.

Mowing

Shoulder mowing is done by the Secondary Roads Department. Shoulder mowing is only done on paved roads and is usually done twice a year.

Chemical Control for Noxious weeds

Chemical control of State Listed Noxious Weeds is performed on a case by case basis. Chemical control of Noxious Weeds is confined to those species that need to be controlled with herbicide on the basis of their current potential economic threat or hardship to agriculture, as well as their potential threat to the establishment of a sustainable vegetative community in roadsides.

Tree and Brush Control

All tree and brush control is done by the Secondary Roads Department. The three techniques that are used for our brush control is herbicide, mowing, and chainsaws. Herbicide will be used for foliar spraying, basal bark applications, and cut stump treatments. Mowing brush in the county will be done by a brush cutter. Chainsaws are primarily used during the winter season. Trees and brush cut with chainsaws are either hauled to burn piles or mulched in the wood chipper.

Prescribed Burning

Portions of right-of-way containing populations of native plants are to be burned as needed to achieve IRVM management goals and objectives, as determined by the Roadside Manager.

Burning Plan and Records of Previous Burns

Burn plans are created as needed by the Roadside Manager. Burn Notifications are sent to adjacent landowners prior to conducting prescribed burns.

Sourcing

Each year we receive TAP Seed from the Tall Grass Prairie Center. Herbicide, mulch, and any other materials necessary to perform IRVM functions are purchased as needed through reliable vendors.

Material Handling and Storage

Seed and herbicides is stored in a heated room inside the IRVM building.

Appendices

Position description and qualifications

Hardin County CCB ~ Roadside / Wildlife Specialist ~

DESCRIPTION:

This is a permanent full time position under the direct supervision of the Conservation Board Director. The roadside roadside/wildlife specialist performs a wide variety of professional, technical, and field duties. These duties include all aspects of managing wildlife programs and roadside vegetation including but not limited to noxious weed control, prairie restoration/management, equipment operation and maintenance, maintaining records, writing grants, communicating with the County Engineer's office. Wildlife responsibilities include writing wildlife grants, working with crews on prescribed burns and managing all aspects of the conservation board's artificial nesting structures, Fisheries, food plots and wildlife management. Aside from roadside duties this individual will be assigned to work on other conservation properties and projects. The position may be appointed as the County Weed Commissioner. The individual will have a seasonal employee to supervise and implement the program.

EDUCATION, QUALIFICATIONS, AND SPECIAL REQUIREMENTS:

Graduation from an accredited college or university with a Bachelor's Degree in wildlife biology, ecology, forestry, agriculture or closely related subjects and at least two (2) years of experience in roadside management, wildlife, forestry, fire or fisheries work; or an equivalent combination of education and with experience.

MAJOR JOB RESPONSIBILITIES AND DUTIES:

*Communicating with County Engineer's office in regards to seeding and roadside spraying needs.*Creates and keeps detailed management records for seeding and spraying of roadside vegetation. * Assists in the maintenance and operation of conservation parks, wildlife areas, and assigned areas *Ability to work with minimal direct supervision. * Assists when needed on maintenance projects with Conservation staff. *Develop and implement strategies for dealing with Invasive species and weeds in roadsides * Assist in development of promotional and educational material* Operate heavy equipment to perform resource work. * Responsible for writing and executing all types of grants. * Organize and Create management maps using Arc View (GIS) software.

KNOWLEDGE, ABILITIES, SKILLS:

* Ability to apply knowledge and common sense to achieve work objectives. * Able to communicate effectively orally and in writing. *Thorough working knowledge of prairie grass and forb seed, prescribed fire and using fire to meet habitat management goals, objectives, and techniques. * Able to operate heavy farm equipment, 4-wheeldrive ATV, ton truck, power tools. * Able to identify native trees and prairie plants and weed species. * Able to complete needed reports and correspondence in a timely manner. * Able to walk through rough terrain and work out-of-doors in extreme hot or cold temperatures, ability to lift 75 pounds routinely. * Able to train and supervise other employees. * Able to obtain an Iowa drivers license and obtain a Commercial Driver's License (CDL). Able to obtain Pesticide Applicators Permit for Iowa with endorsements related to right of way category B. * Able to adapt to a variety of job situations involving long hours, (occasional weekends) hazardous conditions and difficult circumstances. * Able to establish and maintain an effective working relationship with Engineers Office, Conservation Director, departmental staff and the general public. * Knowledge of erosion control. * Thorough Working Knowledge of seeding rates, chemical application. * Able to plan and prioritize work. * Knowledge of personal computer programs including Word, Excel, CAD and Arcview.

Roadside Vegetation Intern/Technician

Hardin County
Location Ackley, Iowa

Description

Employees will assist the Roadside Vegetation Manager with all aspects of managing roadside vegetation. This will include, but is not limited to; controlled burns, management of noxious weeds, managing roadside trees and brush, native grass planting, and routine maintenance of all agency equipment. Other tasks may include native seed harvesting, utilizing Arc map GIS, and assisting with other agency projects. Intern positions will run from mid-May to mid-August and the seasonal technician position will run from April to October. Employees will undergo a background check in reference to their driving record.

Qualifications

Currently enrolled or have a degree in natural resources management or a related field
Possess a valid Iowa drivers license
Have or acquire an Iowa Commercial Pesticide Applicator Certificate, Category 6

Weed Resolution

BE IT RESOLVED by the Board of Supervisors for Hardin County, Iowa: That pursuant to the provisions of Chapter 317, 2011 Code of Iowa, it is hereby ordered:

1. That each owner and each person in the possession or control of any land in Hardin County shall control all noxious weeds thereon, as defined in this chapter at such time each year and in such manner as shall prevent said weeds from blooming or coming to maturity, and shall keep such lands from such growths of the weeds as shall render the streets or highways adjoining said lands unsafe for public travel. Noxious weeds shall be cut or otherwise controlled as often as is necessary to prevent seed production. Noxious weeds are:

PRIMARY NOXIOUS WEEDS: Quack Grass, Perennial Sow Thistle, Canada Thistle, Bull Thistle, Field Bindweed, Horse Nettle, Leafy Spurge, Hoary Cress (Perennial Pepper-grass), Russian Knapweed, Tall Thistle, Musk Thistle, and Buckthorn.

SECONDARY NOXIOUS WEEDS; Wild Mustard, Velvetleaf (Butterprint), Cocklebur, Wild Carrot, Shattercane, Buckhorn Plantain, Red (Sheep) Sorrel, Curly Dock, Smooth Dock, Poison Hemlock, Multiflora Rose, Wild Sunflower, Teasel, Purple Loosestrife, Puncture Vine.

2. That each owner and each person in the possession or control of any lands in Hardin County infested with primary noxious weeds shall adopt a program of weed control described by the Weed Commissioner which in five years may be expected to control and will immediately keep under control such infections of said noxious weeds.

3. That if owners or persons in possession or control of any lands in Hardin County shall fail to comply with the foregoing orders, the Weed Commissioner shall cause this to be done and the expense of said work including the costs of serving notice and other costs, if any, to be assessed against the real estate on which noxious weeds are controlled.

4. That the County Auditor be and is hereby directed to cause notice of the making and entering of the foregoing order by one publication in each of the official newspapers of the county.

314.17 MOWING ON INTERSTATES AND PRIMARY HIGHWAYS.

On or after January 1, 2003, the department shall not mow roadside vegetation on the rights-of-way or medians on any primary or interstate highway. Mowing shall be permitted as follows:

1. On rights-of-way which include drainage ditch areas.
2. On rights-of-way within three miles of the corporate limits of a city.
3. To promote native species of vegetation or other long-lived and adaptable vegetation.
4. For establishing control of damaging insect populations, noxious weeds, and invader plant species.
5. For visibility and safety reasons. This also includes the secondary roads in Iowa and has been extended to July 15.

314.21 LIVING ROADWAY TRUST FUND.

1. a. The living roadway trust fund is created in the office of the treasurer of state. The moneys in this fund shall be used exclusively for the development and implementation of integrated roadside vegetation plans. Except as provided in subsections 2 and 3, the moneys shall only be expended for areas on or adjacent to road, street, and highway right-of-ways. The state department of transportation in consultation with the department of natural resources shall establish standards relating to the type of projects available for assistance. For the fiscal period beginning July 1, 1988, and ending March 31, 1990, the moneys in the fund shall be expended as follows: fifty-six percent on state department of transportation projects; thirty percent on county projects; and fourteen percent on city projects.

b. A city or county which has a project which qualifies for the use of these funds shall submit a request for the funds to the state department of transportation. A city or county may, at its option, apply moneys allocated for use on city or county projects under this subsection toward qualifying projects on the primary system. The state department of transportation in consultation with the department of natural resources shall determine which projects qualify for the funds and which projects shall be funded if the requests for the funds exceed the availability of the funds. In ranking applications for funds, the department shall consider the proportion of political subdivision matching funds to be provided, if any, and the proportion of private contributions to be provided, if any. In considering the proportion of political subdivision matching funds provided, the department shall consider only those moneys which are in addition to those which the political subdivision has historically provided toward such projects. Funds allocated to the cities, the counties, and the department which are not programmed by the end of each fiscal year shall be available for redistribution to any eligible applicant regardless of the original allocation of funds. Such funds shall be awarded for eligible projects based upon their merit in meeting the program objectives established by the department under section 314.22.

The department shall submit a report of all projects funded in the previous fiscal year to the governor and to the general assembly on January 15 of each year.

c. Beginning April 1, 1990, the moneys in the living roadway trust fund shall be allocated between the state, counties, and cities in the same proportion that the road use tax funds are allocated under section 312.2, subsection 1, paragraphs "a", "b", "c", and "d".

However, after April 1, 1990, a city or county shall not be eligible to receive moneys from the living roadway trust fund unless the city or county has an integrated roadside vegetation management plan in place consistent with the objectives in section 314.22.

2. a. The department may authorize projects which provide grants or loans to local governments and organizations which are developing community entryway enhancement and other planting demonstration projects. Planning, public education, installation, and initial maintenance planning and development may be determined by the department to be eligible activities for funding under this paragraph. Projects approved under this paragraph require a local match or contribution toward the overall project cost.

b. The department may authorize projects which provide grants or loans to local governments for the purchase of specialized equipment and special staff training for the establishment of alternative forms of roadside vegetation. Projects approved under this paragraph require a local match or contribution toward the overall project cost.

c. The department, in order to create greater visual effect, shall investigate alternatives for concentrating plantings at strategic locations to gain a greater visual impact and appeal as well as stronger scenic value. Equal attention shall be given to providing safe and effective habitats for wildlife which can coexist with highways.

d. The department may authorize projects which provide grants or loans to local jurisdictions for increased protection through the use of easements, fee title acquisition, covenants, zoning ordinances, or other provisions for protection of vegetation and desirable environment adjacent to the right-of-way. Off-right-of-way projects shall emphasize vegetation protection or enhancement, scenic and wildlife values, erosion control and enhancement of vegetation management projects within the right-of-ways.

3. a. Moneys allocated to the state under subsection 1 shall be expended as follows:

(1) Fifty thousand dollars annually to the department for the services of the integrated roadside vegetation management coordinator and support.

(2) One hundred thousand dollars annually for education programs, research and demonstration projects, and vegetation inventories and strategies, under section 314.22, subsections 5, 6, and 8.

(3) All remaining moneys for the gateways program under section 314.22, subsection 7.

b. Moneys allocated to the counties under subsection 1 shall be expended as follows:

(1) For the fiscal year beginning July 1, 1995, and ending June 30, 1996, and each subsequent fiscal year, seventy-five thousand dollars to the university of northern Iowa to maintain the position of the state roadside specialist and to continue its integrated roadside vegetation management program providing research, education, training, and technical assistance.

(2) All remaining money for grants or loans under subsection 2, paragraph "a". c. Moneys allocated to the cities shall be expended for grants or loans under subsection 2, paragraph "a".

314.22 INTEGRATED ROADSIDE VEGETATION MANAGEMENT.

1. Objectives. It is declared to be in the general public welfare of Iowa and a highway purpose for the vegetation of Iowa's roadsides to be preserved, planted, and maintained to be safe, visually interesting, ecologically integrated, and useful for many purposes. The state department of transportation shall provide an integrated roadside vegetation management plan and program which shall be designed to accomplish all of the following:

- a. Maintain a safe travel environment.
- b. Serve a variety of public purposes including erosion control, wildlife habitat, climate control, scenic qualities, weed control, utility easements, recreation uses, and sustenance of water quality.
- c. Be based on a systematic assessment of conditions existing in roadsides, preservation of valuable vegetation and habitats in the area, and the adoption of a comprehensive plan and strategies for cost-effective maintenance and vegetation planting.
- d. Emphasize the establishment of adaptable and long-lived vegetation, often native species, matched to the unique environment found in and adjacent to the roadside.
- e. Incorporate integrated management practices for the long-term control of damaging insect populations, weeds, and invader plant species.
- f. Build upon a public education program allowing input from adjacent landowners and the general public.
- g. Accelerate efforts toward increasing and expanding the effectiveness of plantings to reduce wind-induced and water-induced soil erosion and to increase deposition of snow in desired locations.
- h. Incorporate integrated roadside vegetation management with other state agency planning and program activities including the recreation trails program, scenic highways, open space, and tourism development efforts. Agencies should annually report their progress in this area to the general assembly.

2. Counties may adopt plans. A county may adopt an integrated roadside vegetation management plan consistent with the integrated roadside vegetation management plan adopted by the department under subsection 1.

3. Integrated roadside vegetation management technical advisory committee.

a. The director of the department shall appoint members to an integrated roadside vegetation management technical advisory committee which is created to provide advice on the development and implementation of a statewide integrated roadside vegetation management plan and program and related projects. The department shall report annually in January to the general assembly regarding its activities and those of the committee. Activities of the committee may include, but are not limited to, providing advice and assistance in the following areas:

- (1) Research efforts.

- (2) Demonstration projects.
- (3) Education and orientation efforts for property owners, public officials, and the general public.
- (4) Activities of the integrated roadside vegetation management coordinator for integrate roadside vegetation management.
- (5) Reviewing applications for funding assistance.
- (6) Securing funding for research and demonstrations.
- (7) Determining needs for revising the state weed law and other applicable Code sections.
- (8) Liaison with the Iowa state association of counties, the Iowa league of cities, and other organizations for integrated roadside vegetation management purposes.

b. The director may appoint any number of persons to the committee but, at a minimum, the committee shall consist of all of the following:

- (1) One member representing the utility industry.
- (2) One member from the Iowa academy of sciences.
- (3) One member representing county government.
- (4) One member representing city government.
- (5) Two members representing the private sector including community interest groups.
- (6) One member representing soil conservation interests.
- (7) One member representing the department of natural resources.
- (8) One member representing county conservation boards.

Members of the committee shall serve without compensation, but may be reimbursed for allowable expenses from the living roadway trust fund created under section 314.21. No more than a simple majority of the members of the committee shall be of the same gender as provided in section 69.16A.

The director of the department shall appoint the chair of the committee and shall establish a minimum schedule of meetings for the committee.

4. Integrated roadside vegetation management coordinator. The integrated roadside vegetation management coordinator shall administer the department's integrated roadside vegetation management plan and program. The department may create the position of integrated roadside vegetation management coordinator within the department or may contract for the services of the coordinator. The duties of the coordinator include, but are not limited to, the following:

- a. Conducting education and awareness programs.
- b. Providing technical advice to the department and the department of natural resources, counties, and cities.
- c. Conducting demonstration projects.
- d. Coordinating inventory and implementation activities.
- e. Providing assistance to local community-based groups for undertaking community entryway projects.
- f. Being a clearinghouse for information from Iowa projects as well as from other states.
- g. Periodically distributing information related to integrated roadside vegetation management.

- e. Effectiveness of techniques for reduced or selected use of herbicides to control weeds.
- f. Identification of cross section and slope steepness design standards which provide for motorist safety as well as for improved establishment, maintenance, and replacement of different types of vegetation.
- g. Identification of a uniform inventory and assessment technique which could be used by many counties in establishing integrated roadside management programs.
- h. Equipment innovations for seeding and harvesting grasses in difficult terrain settings, roadway ditches, and fore-slopes and back-slopes.
- i. Identification of the perceptions of motorists and landowners to various types of roadside vegetation and configuration of plantings.
- j. Market or economic feasibility studies for native seed, forb, and woody plant production and propagation.
- k. Impacts of vegetation modifications on increasing or decreasing wildlife populations in rural and urban areas.
- l. Effects of vegetation on the number and location of wildlife road-kills in rural and urban areas.
- m. Costs to the public for improper off-site resource management adjacent to roadsides.
- n. Advantages, disadvantages, and techniques of establishing pedestrian access adjacent to highways and their impacts on vegetation management.
- o. Identification of alternative techniques for snow catchment on farmland adjacent to roadsides.

7. Gateways program. The department shall develop a gateways program to provide meaningful visual impacts including major new plantings at the important highway entry points to the state and its communities. Substantial and distinctive plantings shall also be designed and installed at these points.

Creative and artistic design solutions shall be sought for these improvements.

Communications about these projects shall be provided to local groups in order to build community involvement, support, and understanding of their importance. Consideration shall be given to a requirement that gateways projects produce a local match or contribution toward the overall project cost.

8. Vegetation inventories and strategies.

a. The department shall coordinate and compile integrated roadside vegetation inventories, classification systems, plans, and implementation strategies for roadsides. Areas of increased program and project emphasis may include, but are not limited to, all of the following:

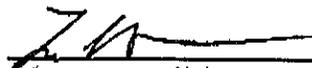
- (1) Additional development and funding of state gateways projects.
- (2) Accelerated replacement of dead and unhealthy plants with native and hardy trees and shrubs.
- (3) Special interest plantings at selected highly visible locations along primary and interstate highways.
- (4) Pilot and demonstration projects.
- (5) Additional snow and erosion control plantings.

(6) Welcome center and rest area plantings with native and aesthetically interesting species to create mini-arboretums around the state.

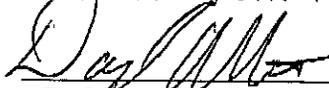
b. The department shall coordinate and compile a reconnaissance of lands to develop an inventory of sites having the potential of being harvested for native grass, forb, and woody plant material seed and growing stock. Highway right-of-ways, parks and recreation areas, converted railroad right-of-ways, state board of regents' property, lands owned by counties, and other types of public property shall be surveyed and documented for seed source potential. Sites volunteered by private organizations may also be included in the inventory. Inventory information shall be made available to state agencies' staffs, county engineers, county conservation board directors, and others.

The Hardin County Board of Supervisors, the Hardin County Secondary Roads Department, the Hardin County Conservation Board and the Hardin County IRVM department came together in cooperation, common goals and shared ideas to manage roadsides in Hardin County by and through integrated roadside principals. We realize that I.R.V.M. will be beneficial to our roadside management goals while being economically and environmentally beneficial. We understand that working in unison toward improving roadside vegetation is the most efficient way to accomplish the goal of improved, safe, and weed free roadsides. These roadsides will also add to the habitat and natural beauty of Hardin County. We hereby agree to manage Hardin County roadsides according to the provisions described within this management plan.

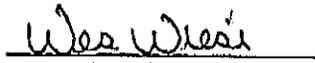
Hardin County Board of Supervisors

 Date: 5/16/2015
Lance Granzow, Chair

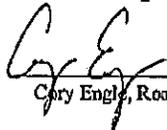
Hardin County Secondary Roads Department

 Date: 5/16/2015
Daryl Albertson, Engineer

Hardin County Conservation Board

 Date: 5/11/2015
Wes Wiese, Director

IRVM Department

 Date: 5/11/2015
Cary Engle, Roadside Vegetation Manager

Hardin County LRTF Funding History through FY 2015

DOTProjectNumber	Applicant	Award	FiscalYear	Description	Type
90-42-LRTF-001	Hardin County	\$ 6,543.75	1990	Special Equipment	County
90-42-LRTF-002	Hardin County	\$ 2,197.81	1990	Special Seeding	County
90-42-LRTF-003	Hardin County	\$ 1,635.00	1990	Special Seed Production	County
90-42-LRTF-104	Hardin County	\$ 2,265.00	1991	Native seed	County
90-42-LRTF-201	Hardin County	\$ 2,320.00	1992	Equipment - No-Till	County
90-42-LRTF-301	Hardin County	\$ 5,108.00	1993	Equipment - Fire Pumper	County
90-42-LRTF-501	Hardin County	\$ 361.12	1995	Kestrel project	County
90-42-LRTF-502	Hardin County	\$ 4,921.00	1995	Equipment - Hydro seeder	County
90-42-LRTF-801	Hardin County	\$ 202.00	1998	Bluebird boxes	County
90-42-LRTF-001	Hardin County	\$ 12,550.00	2000	Equipment - Hydro seeder	County
90-42-LRTF-801	Hardin County IRVM	\$ 134.98	2008	Equipment - Canon digital camera	County
90-42-LRTF-901	Hardin County IRVM	\$ 10,000.00	2009	Equipment - Brush chipper	County
90-42-LRTF-201	Hardin County IRVM	\$ 1,359.20	2012	Equipment - GPS/GIS	County
90-42-LR15-(315)	Hardin County Conservation	\$ 422.37	2015	Equipment - Brushcutter	County
90-42-LR15-(316)	Hardin County Conservation	\$ 280.00	2015	Electronic equipment - Digital camera	County
90-42-LR15-(317)	Hardin County Conservation	\$ 504.75	2015	Equipment - Fire packs	County

Total LRTF Funding Awarded FY1990 - FY2015	\$ 18,438,122.52
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HARDIN COUNTY IOWA

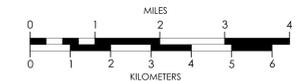


Prepared By
IOWA DOT
OFFICE OF SYSTEMS PLANNING
Phone: (515) 239-1289
WWW.IOWADOT.GOV/MAPS



In Cooperation With
**United States
Department of Transportation**

JANUARY 1, 2014



LEGEND

- INTERSTATE HIGHWAY
- PRIMARY HIGHWAY-DIVIDED
- PRIMARY HIGHWAY
- ASPHALT CEMENT CONCRETE ROAD
- ASPHALT ROAD
- BITUMINOUS ROAD
- GRAVEL ROAD
- EARTHEN ROAD
- INTERSTATE HIGHWAY
- UNITED STATES HIGHWAY
- STATE HIGHWAY
- COUNTY HIGHWAY
- RAILROAD
- PIPELINE
- AIRPORT
- HYDROLOGY
- BRIDGE
- STATE BOUNDARY
- COUNTY BOUNDARY
- CORPORATE BOUNDARY
- TOWNSHIP LINE
- SECTION LINE
- ROAD NAMES
- UNINCORPORATED PLACE
- STATE PARKS
- STATE INSTITUTIONS
- FEDERAL LAND

