

AUDUBON COUNTY INTEGRATED ROADSIDE VEGETATION MANAGEMENT PROGRAM GENERAL PLAN

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a. Update/ Version

February, 2022

4th Update of the Audubon County IRVM Plan

b. Contributors to the Plan

Kent Grabill- Audubon County Roadside Manager/ Weed Commissioner

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II. EXECUTIVE PROGRAM

- a. Goals

Goal 1: Establish and maintain a self-sustaining and visually interesting plant community within the County Right of Way that also provides for public safety, controls weeds, reduces erosion, improves infiltration, maintains drainage patterns, provides habitat, and provides a reduction in long term maintenance costs.

Objectives:

- Promote, establish, and manage native plant materials whenever possible.

- Survey and maintain an updated inventory of the plant species found within the County Right of Way.
- Determine and implement the best IRVM practices for maintaining the Right of Way for Public safety and an economically and environmentally sustainable plant community.
- Continually evaluate and monitor the effectiveness of implemented IRVM techniques.
- Work with landowners and Community groups to implement IRVM principals and Roadside beautification projects.
- Adjust the Plan as needed to accommodate new concepts.

Goal 2: Provide a public relations program to build Community support for the County

IRVM Plan

Objectives:

- Develop and submit news releases to the Local print and media.
- Develop and present oral presentations to Local community groups including Government Officials
- Provide printed materials such as brochures and signage to promote the IRVM program
- Provide support and endorse special roadway designations such as The Scenic Byways Program

Goal 3: Network with other Organizations to provide an efficient and cost effective

Program for the residents of Audubon County

Objectives:

- Coordinate roadside management activities with the State IRVM Coordinator and IDOT Living Roadways Trust Fund Coordinator
- Coordinate roadside management activities with the Tallgrass Prairie Center, UNI
- Work with officials representing local conservation organizations to establish support for the IRVM program

Goal 4: Implement Chapter 317 of the Code of Iowa, Iowa's Noxious Weed Law, using

Principles adopted by the IRVM program

Objectives:

- Work with the local FSA office and NRCS to burn Right of Way when landowners burn CRP acres.
- Work with private landowners to implement IRVM practices in controlling noxious weeds.
- Maintain written records and submit reports as required by the Noxious Weed Law.

Goal 5: Work towards a roadside spraying program that promotes the reduction of

herbicide use whenever possible. Calibrate sprayer / update sprayer

Objectives:

- Favor equipment and best management practices for weed and brush control that maximize efficiency and effectiveness of herbicide applications.
- Constantly scrutinize those Species of brush and weeds that can be controlled with herbicides and those that do not, as well as the effectiveness of the herbicides and control measures used.
- Focus herbicide applications on those Species of weeds, including State listed Noxious Weeds, un-listed invasive Species, and other Species, that need to be controlled with herbicide on the basis of their current potential economic threat Or hardship to Agriculture, ecological threat to natural areas, as well as their potential threat to the establishment of a sustainable vegetative community in roadsides
- Ensure that any comprehensive spraying program for weeds and or brush, is economically and environmentally sustainable.

B. Program History

Audubon County set in place its first Roadside Management Plan on March 26th, 1992. The main goals were to reestablish Native vegetation and reduce the amount of spraying that was being done. An updated version was approved by the Board of Supervisors in 1996. The most recent Plan was in March, 2021. GIS software and mapping capabilities were added. The 2021 Plan had an internal software issue. Whether being sent by email as an attachment, or being printed, the new Plan was partially encrypted. Thus, a new Plan in 2022 will correct that.

C. IRVM Decision Making Process

Disturbance and change in roadsides is inherent and unavoidable in many cases. New construction and drainage maintenance, along with Utilities and other actions covered by Alteration of Right of Way Permits, are opportunities to re-establish a ground cover of diverse native plant communities as outlined in the Mission/ Vision of IRVM in Audubon County. Current IRVM methods will be used as these instances arise, and will be considered first priority.

D. Executive Summary

The Audubon County IRVM Program recognizes that it is in the general public welfare of Audubon County and a prudent use of county roadsides that the vegetation of

Audubon County's roadsides be preserved, planted and maintained to be safe, visually interesting, ecologically integrated, and useful for many purposes. The Audubon County Roadside Department provides an annual vegetation program which is designed to promote the following:

- Maintenance of a safe travel environment by providing adequate line of site at Intersections, minimizing snow drifting, and removing potentially dangerous trees and other obstructions.
- Serve a variety of purposes including drainage, erosion control, wildlife habitat, recreational uses, noxious weed control, scenic qualities, utility easements, and sustenance of water quality.
- Emphasize the establishment of adaptable and long-lived native vegetation.
- Establishing a map of noxious weed areas within the Right of Way.
- Build a public education program allowing input from landowners and the Public

E. Area Map (Appendix)

F. Program Type

The Audubon County IRVM Program is housed and administered through the Audubon County Roadside Department

III. JURISDICTIONAL RECOGNITION AND APPROVAL

a. Management

The Roadside Manager works under the County Engineer and in daily coordination with the Maintenance Superintendent in the following context:

County Engineer: Makes decisions on where major construction takes place. The Engineer is also involved in the permitting process (except No Spray Requests) The Engineer and Roadside Manager make the final decisions on all contracted services and annual budget.

Roadside Manager: Administers the Roadside Program, seeds all bare soil in a timely manner, decides what types of seed to use and when it should be planted, what type of soil prep is needed, additional erosion control measures to be taken if needed, management of all native vegetation (Spot spraying, burning, etc.) Administers roadside spraying program: determines what areas are to be treated, what herbicide is to be used, what rates are to be used, if spot spraying or broadcast spraying is needed. Does Public education work as needed. Decides on annual budget items. In direct communication with the Engineer and Road Superintendent on special Projects and day to day work priorities.

Maintenance Superintendent: Delegates daily work load to Secondary Road employees, decides where and when ROW maintenance projects occur. Works with Roadside Manager to determine where seeding takes place. Provides Roadside Manager extra workers as needed.

- b. Board of Supervisors
The Audubon County Board of Supervisors oversee all aspects of the planning and Implementation of the County budgets, equipment updates. The Roadside Manager Gives the Board an annual report that points out herbicide use, equipment evaluations, future personnel plans, etc.
- c. Iowa Code, State Laws and Regulations
Section 314.22 Integrated Roadside Vegetation Management
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 and crops in ROW
Chapter 317 Iowa Weed Law- Noxious Weeds and Enforcement Procedures
- d. Local Laws and Regulations
All local laws, regulations, and County Policies pertaining to IRVM reflect that of The Iowa Code, as well as other State and Federal Regulations. These include but are not limited to:
Iowa Code Chapter 314.22 IRVM. Adopted by resolution by the County Board of Supervisors
Iowa Code Chapter 317- Governs County noxious weed spraying program and Weed Commissioner actions.
No Spray Requests- Allows landowners to opt out of County roadside spraying adjacent to their property in the form of a request.
- e. Permits
Permits are obtained at the Engineers Office. Any work to be done in the ROW needs a permit. Each permit is filed with the County. Some require fees. The Roadside Manager needs to be notified anytime the soil is disturbed in the ROW.
- f. Work with "Organic" growers, bee keepers. Keep area map up to date for spraying.

IV. COUNTY PROGRAM STRUCTURE

- a. Staff Organizational Chart

County Engineer
Roadside Manager
Road Supervisor
Roadside Assistant

The County Engineer works with the Road Superintendent on delegation of Workload. The Roadside Manager manages the seeding, spraying, mowing and erosion control as time, availability of equipment and labor, and weather allow. Through daily communication and prioritization, all Secondary Roads Department staff is subject to work duties as needed.

b. Staffing Needs

Historically, Audubon County hired 2-3 Seasonal part-time each Spring to assist with seeding and mowing. In 2020, a fulltime Roadside Assistant was hired. The Roadside Assistant helps with seeding, mowing, and spraying weeds and volunteer trees. Since 2014, Audubon County has hired a Licensed Commercial Applicator for spraying volunteer trees in the ROW. This has enabled the Roadside Department to basically double the amount of areas sprayed each year for volunteer trees.

V. PUBLIC INVOLVEMENT

a. Steering Committee

The Audubon County IRVM Steering Committee consists of the following members:

Audubon County Roadside Manager

Audubon County Engineer

Three County Board of Supervisors

b. Partners

Local Chapter of Pheasants Forever

Soil and Water Conservation District

c. Stakeholders

Integrated Roadside Vegetation Management is implemented on behalf of the citizens of Audubon County.

d. Education and Outreach

The main goal of IRVM in Audubon County is to focus on the basic ideas that aid in the establishment of a thriving and maintainable native plant/ animal ecosystem that is consistent with the overall goals of IRVM. Public awareness is a high priority for the program.

e. Communication Mechanisms

* Local Media

* Internet (County webpage)

* Local Newspaper

* Brochures

* Oral and visual programs (Presentation at Pheasants Forever Banquet)

VII. INVENTORY AND ANALYSIS

a. Tools

- * Ground Photography “before and after” pictures
- * GPS – records areas sprayed with herbicide
- * Aerial Photography
- * GIS – records native planting areas
- * Paper Records- office use, temporary vehicle use

b. Vegetation

Vegetation inventory is done by the Roadside Manager on a daily basis. When spraying, mowing, cutting trees, seeding, the Roadside Manager is aware of the weed/ volunteer tree pressure in that immediate area. The presence of Native vegetation is also recognized. A detailed mapping system is very important for this reason.

c. Equipment

Large Equipment

- John Deere 6410 tractor
- John Deere 6140M tractor (leased)
- IH Bucket truck
- 2018 Chevy pickup
- 2014 Chevy pickup
- Morbark 2012D chipper
- Truax no-till drill
- John Deere CX-15 mower
- Bowie hydro seeder

Small Equipment

- Polaris Ranger 6x6
- 2004 Honda ATV
- Del Laptop computer
- ATV 3-point disc
- Chainsaws
- Miscellaneous hand tools
- Trimble GIS unit

The condition of IRVM equipment is satisfactory at this time. This includes the following:

- GPS capable skid sprayer for pickup truck
- Bowie hydro seeder has low hours
- Ranger 6x6 is under 500 miles

- Miscellaneous firefighting hand tools
- Skid sprayer for Ranger used in controlled burns
- 1000 gal. tank used to store water for spraying

Seed Storage: A new 40x100 steel building was purchased by the Roadside Department in 2018. A seed storage room was also added inside the new building. It is equipped with a thermostat-controlled heater/ air conditioner, and separate dehumidifier. The Roadside Department requests native seed from the TAP program, usually 40-60 acres/ year. Additional native seed is purchased as needed. Rye grass is used as a cover.

VII. A. PROGRAM OPERATIONS

January- March: Cutting/ tree removal, Weed Commissioner Annual Conference, Annual weed report to Supervisors and State Weed Commissioner, Roadside Budget maintenance on equipment.

March-April: Prescribed burning, LRTF grant application, Spring seeding

May- October: Seeding, Weed Commissioner duties, spraying weeds/ brush, Mowing

October- December: Tree removal, Fall seeding, Roadside Budget.

B. Work Areas

Rural areas of the County are the only areas currently being treated.

C. Vegetation Types for Specific Uses

Native seed along with Rye grass used as a cover crop are primarily the only seed mixture that is used in the ROW. The rare exception would be work done near a residence that is mowed, then Kentucky Bluegrass is seeded.

D. Special Projects

A major Wind Turbine Project started in 2019 is nearing completion. 115 turbines have been erected in the County. Large areas of vegetation are disrupted in the ROW, this includes: temporary culverts, dry fills, entrances, widening the radius. These temporary areas have to be seeded once work is completed.

VIII. METHODS OF SEEDING

A. Vegetation Establishment

- * Site Preparation- Soil is leveled and cultivated to a depth of 2 to 3 inches, or as needed for different soil types.

- * Seeding mixes and rates

Native grasses and forbs are mixed and seeded at rates based on the Iowa Department Of Transportation recommendation. Annual Rye grass used as a cover crop is seeded at a rate of 10 lbs./ acre.

T.A.P. Seed acquired from the Tallgrass Prairie Center varies each year by species, therefore, the seeding mix changes.

- * Seeding Techniques

Hydroseeder- seed is broadcast, then covered with mulch.

Broadcast- seed is spread evenly on top of soil and usually harrowed in.

No-till drill- Drill is pulled with tractor, planting depth is usually $\frac{1}{4}$ ".

- * Erosion and Sediment Control

Small square bales of oat or ryegrass is chopped and fed into a chipper at a rate of 1.5 tons/ acre.

An 800-gallon hydro seeder is used with purchased mulch to seed ditch cleanouts and other bare ground areas.

Fast growing cover crops are seeded along with desired native species.

On long or very steep slopes, erosion "tubes" are installed after seeding is complete.

- * Vegetation Maintenance

After seeding is completed, several different steps are used to help control unwanted vegetation. These include the following: burning, mowing, spot spraying.

- * Planting Evaluation and Documentation

Records including seeding dates, mix used, acreage, cover crop used, undesired vegetation, all contribute to evaluating steps that will be taken to promote desired vegetation.

* Mowing

Mowing the shoulders on County hard surfaced roads occurs 2-3 times per year. Shoulders on gravel roads are mowed as needed. It is County policy that the landowner is responsible for mowing shoulders on gravel roads.

* Chemical Control

The Roadside Manager determines what products are used for weed control. His decision is based upon weed pressure, weed type, environmental concerns. Other determining factors are spot spraying or broadcast spraying needed, nearby crops, bees, organic farming, considering other options to replace using chemicals.

* Tree and Brush Control

Trees and brush are controlled in the ROW for specific reasons. They can cause visibility issues, and can cause snow trap problems. Larger trees are cut near ground level, then a stump treatment is used. The tree is then piled, then burned after it dries for about a year. Smaller trees and brush are mowed with a skid loader and sprayed late Summer as needed.

* Prescribed Burning

A Controlled Burn Plan for the ROW is filled out by the Roadside Manager. The Plan records the specific area where the burn will take place, date, time, personnel, equipment used, what the targeted species is (Weeds, trees, brush etc.) The Sheriff's Department is notified prior to starting the burn, along with area residents. After the controlled burn, a report is filled out and a copy is sent to the State DNR office.

IX. MATERIAL PROCUREMENT

a. Sourcing

Seed, herbicides, erosion control products, and other materials needed to complete jobs are purchased locally if possible. Some items can only be purchased through certain vendors.

b. Material Handling and Storage

* Seed- Seed is stored in humidity and temperature-controlled building.

* Herbicide- All herbicide is stored in an approved, locked storage cabinet inside the Roadside building. Carryover herbicide is kept from freezing.

* Erosion control materials are stored inside the Roadside Building.

X. APPENDICES

* Position Description and Qualifications

The Roadside Manager is an employee of the Audubon County Secondary Road Department whose responsibilities are to address the provisions of Section 314.22 Of the Code of Iowa, the IRVM Law, and Section 317- the Noxious Weed Law. The Manager shall administer, develop, plan, and conduct a program of vegetative habitat management that seeks to control unwanted vegetation and promote desirable vegetation on County ROW, and perform related duties as required by the County Engineer. The Roadside Manager coordinates work activities with the Engineer and Road Superintendent. The Manager's responsibilities shall include:

- 1) Control of noxious weeds in County ROW
- 2) Planting and maintenance of native grass/ forbs in County ROW
- 3) Develop a program for Public Information and Education to help better understand IRVM
- 4) Inventory plant communities in County ROW
- 5) Removal of trees/ brush in County ROW
- 6) Other duties assigned by the County Engineer

* Requirements

- 1) Maintain a Commercial Pesticide License with Category 6 and Category 1
- 2) Maintain a Class A or B Commercial Drivers License
- 3) Continue "in service" training as needed.
- 4) Maintain records and SDS files on chemicals.
- 5) Submit and keep on file annual reports to the Iowa Dept. of Agriculture pertaining to the application of chemicals.
- 6) Oversee maintenance on all Roadside equipment and vehicles.
- 7) Have prior experience/ or education involving plants

* Necessary Knowledge and Skills

- 1) Knowledge of principles of land use and the environmental, social, and economic problems that affect it.
- 2) Ability to plan work, think clearly, analyze data, observe and evaluate, and make

sound decisions and recommendations.

- 3) Ability to work well with the public and private sector.
- 4) Ability to communicate effectively both orally and in writing.
- 5) Ability to use a computer in word processing, data management, and Geographical Information Systems.
- 6) Ability to identify native and introduced plant species, including weeds.
- 7) Knowledge of principles of wildlife management.
- 8) Familiar with traditional and new agriculture methods.
- 9) Ability to supervise staff engaged to carry out program.
- 10) Ability to operate and maintain power equipment.

* No Spray Request Form

**AUDUBON COUNTY
NO SPRAY/LIABILITY
RELEASE
FORM**

Name _____ Phone Number _____

Address _____

City/State/Zip _____

AREAS NOT TO BE TREATED

Location (township, section, street, and description of property)

You have requested that Audubon County not apply any herbicides in the right-of-way next to the above stated property which you control.

By doing so, you are required to assume the responsibility for vegetation control in this area. The vegetation you are required to control

includes all weeds on the Iowa noxious weed list and falls under Code of Iowa chapter 317 for control of noxious weeds. Mowing or hand-pulling will be considered as acceptable methods of control. For mowing or pulling to be a viable weed control option, it shall be done as often as is necessary to control noxious weeds in the right-of-way to prevent the spread, growth, or scattering of the weeds. The weed control timelines will be the same as the Audubon County weed policy.

In consideration of your desire and willingness to perform weed control on the applicable right-of-way, Audubon County will refrain from spraying in those locations properly designated.

If upon inspection by the County Weed Commissioner, the vegetation is found to be improperly managed by non-chemical means, we reserve the right to spray the affected area, and the area requested not to be sprayed will be returned to the regular Roadside spraying program. For organic purposes, any required buffers will NOT include County right-of-way.

You also agree to do the following:

- 1.) Request and designate the no spray areas annually prior to May 1st of each year.
- 2.) Assist the County employees in identifying the areas not to be sprayed.
- 3.) Place and maintain DO NOT SPRAY signs, easily visible to traffic, at either end of the no spray area on the landowner's property.
- 4.) Release the County from liability for any and all injury to persons or property that may occur as a result of your weed control efforts in the County right-of-way.

I have read and understand the conditions set above and agree to these conditions.

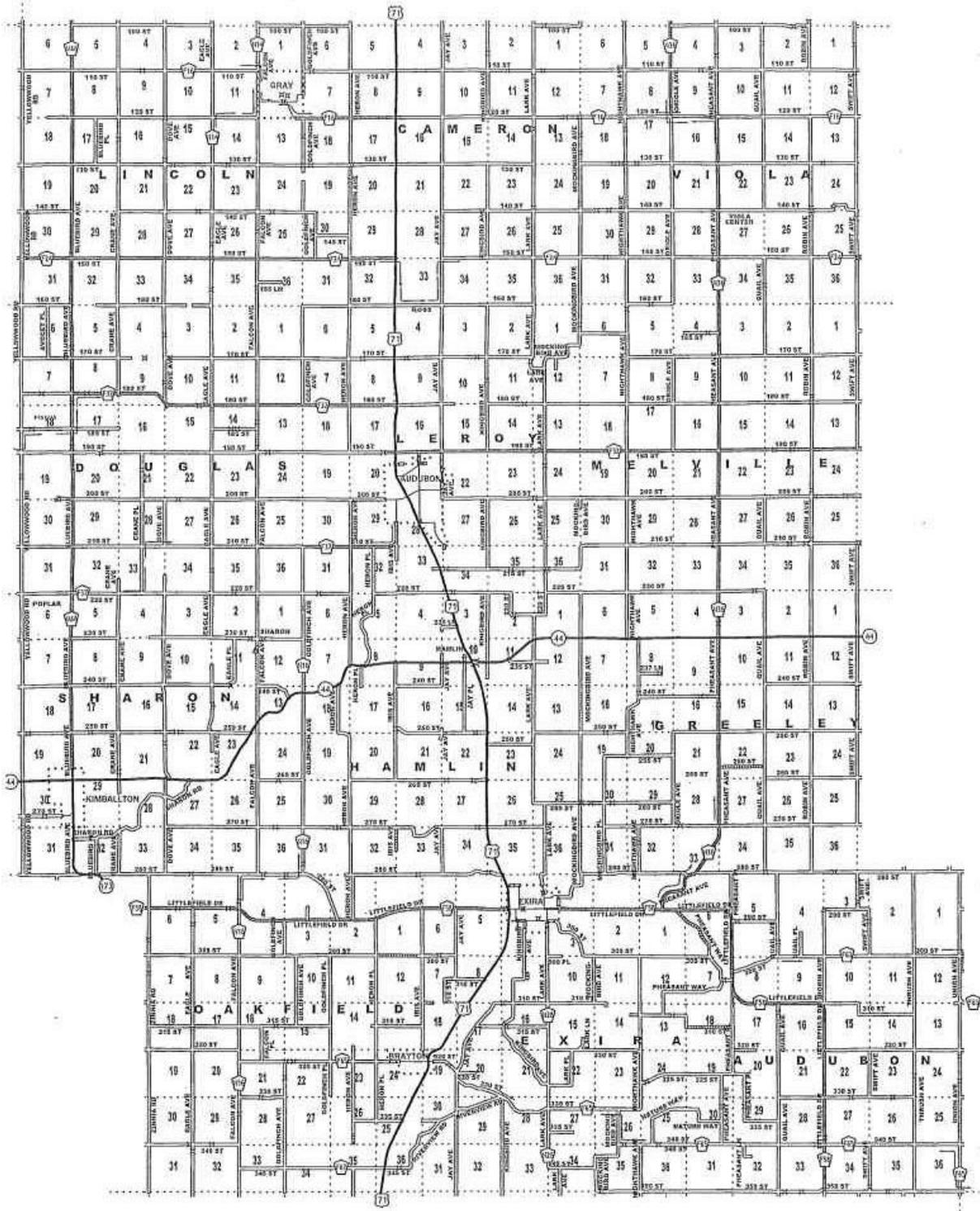
Name _____ Date _____

• ATTACHMENT TO NO SPRAY REQUEST

- 1) The No Spray Request only applies to those sections of ROW that are adjacent to land owned by the applicant.
- 2) The landowner is responsible for proper placement of the signs and maintaining visibility of the signs. Each No Spray area requires 2 signs (one at each end) facing the road.
- 3) Audubon County Roadside Department maintains the right to mow or spray noxious weeds or brush in the ROW if landowner is not doing so.
- 4) Any spraying of herbicides in the ROW requires a Category 6 Commercial Applicators license in the State of Iowa.

5) Any questions, concerns, or comments about the County No Spray Request, Noxious Weed Law, Brush Control please contact the Roadside Manager @ 712-563-2486

AUDUBON COUNTY AREA MAP



JOB DESCRIPTION

Name: _____ **Department:** Roadside Management

Title: Roadside Manager/Weed Commissioner **FLSA:** Exempt

Date: April 22, 2010 **Reports to:** County Engineer

PURPOSE OF POSITION

Develops, promotes and implements a biologically sound roadside management plan based on desirable plant species management; carries out chemical and other recognized control of weeds, brush and unwanted vegetation pursuant to Iowa Weed Law (Chapter 317 of Iowa Code).

ESSENTIAL DUTIES AND RESPONSIBILITIES

The following duties are normal for this position. These are not to be construed as exclusive or all inclusive. Other duties may be required and assigned.

Controls brush and other vegetation that is likely to cause road maintenance and/or public safety problems.

Carries out chemical and hand control of weeds, brush and vegetation in specific problem areas; locates and destroys noxious weeds in rural roadside areas.

Develops, promotes and implements a sound roadside management plan for Audubon County; conducts training sessions for landowners to encourage proper species management.

Provides media with periodic information on the management of roadsides to gain community support and enlist voluntary cooperation from private individuals and groups.

Prepares construction and renovation sites for planting of desirable species; operates truck mounted hydro-sprayer to cover median strips, hillsides and right of way with appropriate of grass seed, cover, fertilizer and mulch.

Coordinates and updates roadside inventory; supervises necessary part-time staff in conducting roadside inventory and management.

Performs preventative maintenance on equipment operated including mowers, tractors, chippers etc.

During emergencies or other designated periods, performs any maintenance, equipment operation or related tasks as assigned.

Serves on Safety Committee on rotating basis.

MINIMUM TRAINING AND EXPERIENCE REQUIRED TO PERFORM ESSENTIAL FUNCTIONS

Certified as a pesticide/herbicide applicator by the Dept. of Land Stewardship in Iowa. Prior practical experience or job-related education involving a comprehensive knowledge of plants, plant physiology with emphasis on native grasses and flowers. Practical "Hands on" experience operating roadside management equipment including mowers, seeders, chainsaws, chemical applicators and related equipment. Possession of a valid CDL with appropriate Hazmat and related endorsements determined to be necessary by Iowa Department of Transportation.

MINIMUM PHYSICAL AND MENTAL ABILITIES REQUIRED TO PERFORM ESSENTIAL FUNCTIONS

Physical Requirements

Requires the capacity to use correctly a variety of tools, equipment associated with roadside management functions including operation of seed drills, chippers, sprayers, chainsaws, rakes, shovels, brooms, etc. Standing, walking and related physical activity utilizing use of fingers, hands, arms, legs and body torso are job requisites. Requires exceptional field and depth perception, clarity of vision 20 ft. or more, motor coordination, manual dexterity, color discrimination and related aptitudes. Capacity to push/pull, lift/carry chemicals and other objects weighing up to 50 lbs. and over 50 lbs. with help on an occasional basis.

Cognitive Demands

The ability to develop and implement policy; make decisions and evaluate success or failure of management techniques; respond to routine correspondence effectively; recognize, identify and develop management strategies for specific plant communities. Skills in the operation of computers and related software to complete and update information base, knowledge of ecological principles, knowledge of commonly used farm and roadside management chemicals and their effects and general knowledge of engineering and planning processes.

Language Ability & Interpersonal Communication

The individual requires the ability to: meet people effectively and communicate with people of various educational and social backgrounds; influence behavior of others through communication skills; supervise support staff and to provide adequate training for such support staff and effectively deal with controversy.

Environmental Adaptability

Occupational hazards are those associated with the operation of mechanical machinery, exposure to toxic agents and chemicals in the elimination of noxious weeds, brush and other undesirable species.

Employee's Signature

Date

Department Head

Date

Audubon County is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the County will provide reasonable accommodations to qualified individuals with disabilities and encourages prospective employees and incumbents to discuss potential accommodations with the employ

2022 IRVM PLAN UPDATE

This is a flexible plan that will require changes necessary to fit the constantly changing circumstances associated with roadside vegetation management.

once 

County Supervisor Chairperson

Date Feb 1 2022



County Engineer

Date 2/1/2022



County Roadside Manager

Date 2/1/2022