

Benton County Secondary Roads Department



2017 Annual Report



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BENTON COUNTY SECONDARY ROADS

Integrated Roadside Vegetation Management

Benton County utilizes Integrated Roadside Vegetation Management as a tool to control noxious weeds, prevent erosion, improve water quality and preserve pollinator habitat. This is done through the planting of native vegetation and management techniques such as spot spraying, prescribed fire and prescribed mowing.

IRVM activities began in the county following the adoption of an initial management plan in 2005. The program is guided by an advisory committee and roadside manager. The advisory committee meets four times a year and aids in establishing the goals of the program. The roadside manager works as a part of the secondary roads department and is charged with implementing all aspects of IRVM.

Benton County is fortunate to have a fully developed IRVM program. This allows the secondary roads department to apply annually for native prairie seed which comes at no cost. Additionally, with the hiring of a Roadside Manager, Benton County is also eligible for grants that cover all or part of the cost of equipment used in the establishment of native vegetation.



"Committed to preserving our rich ecological past. Striving to conserve our natural resources, restore ecosystem services and protect our environment."



MISSION STATEMENT

The mission of the Benton County Integrated Roadside Vegetation Management program is to create public awareness and provide ecologically diverse, environmentally integrated and aesthetically pleasing safe roadsides. Per Iowa Code 314.22

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BENTON COUNTY SECONDARY ROADS

Right-of-Way Projects

Overview

Each year the Secondary Roads Department completes ditch clean-outs, right-of-way (ROW) re-grading projects and other work that disturb the vegetation in the ROW. The Benton County IRVM program is tasked with planting native vegetation in Benton County ROW where these projects have occurred.

Planting native vegetation restores the functionality and benefits that the ROW provides the county secondary road system. The following sections provide more information on some of the work we do.



Ditch Clean-Outs

When a section of right-of-way (ROW) loses some of its function by filling up with soil or other debris from neighboring land, Benton County is tasked with restoring more safe ROW conditions. This is done by removing the soil or debris causing the problem.

Removing soil and debris from right-of-way often leaves the soil bare and prone to weed infestations. The IRVM program plants native vegetation in these areas as a long term solution to this problem. Ditch clean-outs are often in areas that are not easily accessible with a tractor and seed drill. Thus, they are often seeded with the county's hydroseeder. This machine shoots a mixture of green colored wood mulch, water and prairie seed that stabilizes and plants the site in a single application.



High Road Project

In 2017, our largest prairie reconstruction project occurred along 58th Street just north of Vinton.

In total, we reconstructed **4.58 acres** of prairie vegetation. This section of right-of-way exists between the original 58th Street and the current. Due to the nature of the surrounding topography, this site will showcase several of Iowa's original land cover types. These include forest, oak savannah, dry prairie, mesic prairie and wetland.

2017 Total Acres Planted: 26

2017 Total Acres Drilled: 0

2017 Total Acres Hydroseeded: 26

Major Reconstruction Areas to Keep an Eye On:

- ◆ 58th Street (High Road)
- ◆ Oak Grove Project (61st St Ln, 33rd Ave Dr, 59th Street Trail)

2017 Summary

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Right-of-Way Management

Tree Clearing

The Benton County IRVM program is responsible for removing tree and brush problems within the county right-of-way (ROW). This is done to make the ROW more safe for roadway users. Trees and brush can cause line of site issues, become obstructions that people can hit if they go in the ditch or fall on the road in bad storms.



Prescribed Fire

Prescribed fire is a management tool that helps to stimulate prairie growth and deter noxious and invasive species. The IRVM program burns section of right-of-way that have remnant communities of native plants or been planted with native vegetation.

We were able to conduct 3 prescribed fires throughout the 2017 burn season. One was conducted on a remnant prairie near Urbana, one on a reconstructed prairie south of Urbana by the Cedar River bridge and the third was on reconstructed prairies South of Atkins.



The Benton County IRVM program also conducts all of the roadside spraying throughout the county. We are tasked with eradicating all noxious and invasive weeds that compromise the integrity of our roadside plantings. Noxious weeds are declared by the state but the county can amend this list to be more restrictive within its borders.

Our program sprays a combination of Vastlan and Escort to control problematic plants. Both the Roadside Manager and Roadside Technician are certified Commercial Pesticide Applicators. Following IRVM principles, our staff members spot spray weed infestations which saves the county money and reduces environmental impacts.

WEED CONTROL

Roadside Spraying

We had a very successful spraying season in 2017. Both spray trucks were able to run and our crew covered every mile of the county. Our most problematic species include Canada Thistle, Musk Thistle, Yellow Sweet Clover, White Sweet Clover and Wild Parsnip. However, we have several other species that are encroaching on our borders. Japanese Knotweed and Leafy Spurge are two of these species. Now that we know where the majority of these plants are, it will make it much easier to control them in the future.

BENTON COUNTY SECONDARY ROADS

Living Roadway Trust Fund Grants

The Living Roadway Trust Fund (LRTF) was established by the Iowa Legislature in 1988. This was done to support Integrated Roadside Vegetation Management (IRVM) programs in their efforts to establish native vegetation in Iowa road-sides.

Appropriations for the LRTF are allocated from the road use tax fund, the Resource Enhancement and Protection (REAP) fund and other sources. This money is then used annually to fund competitive grants for IRVM programs.

Benton County was very fortunate to receive funding for 3 different grants this year. Though our program is still very young, equipment purchases that were received with the help of LRTF funds will make our program more efficient and productive in the coming years.

Living Roadway Trust Fund Grants:

Overall Funding Received Since 2014:

\$46,363.4

2018 LRTF Grant Priorities:

1. Seed Production Facility

- The program wishes to create a seed production facility in collaboration with the Benton County Conservation Department and Iowa DNR.

1. Communication Equipment

- The program wishes to purchase more advanced communication equipment to aid in prescribed fire operations and hydroseeding.

2. UTV Pull Behind Mower

- The program wishes to purchase a pull behind mower to mow sections of right-of-way that are not easily accessible with the equipment we currently own.



BENTON COUNTY SECONDARY ROADS

2017 Highroad Project



Beginning



Middle

2017 Highroad Project

End



Project Goals:

- Improve Visibility
- Establish an accessible IRVM Demonstration Site
- Develop a Seed Bank for Future Reconstructions
- Provide a Large Block of Habitat for Native Pollinators

Seed Mix:

- Planted with IRVM Diversity Prairie Mix (33 Species)
- Supplemented with Benton County Native Plants (20 Species)
- Supplemented with Nursery Bought Seed (14 Species)

Management:

- Year 1: Establishment Mowing and Spot Spraying
- Year 2: Establishment Mowing / Prescribed Fire
- Year 3 On: Prescribed Fire



BENTON COUNTY SECONDARY ROADS

Goals and Projects for 2018



2018 Benton County IRVM Objectives:

1. Update IRVM Management Plan
2. Write and Secure Funding for 2018 LRTF Grants
3. Conduct Management on Atkins Reconstruction
4. Manage Oak Grove Project ROW
5. Conduct Prescribed Fires on Benton County Remnants
6. Develop Management Strategy for Oval Ladies Tresses
7. Develop Partnership with the Iowa DNR Prairie Center
8. Conduct IRVM Presentations and Workshops
9. Finish IRVM Website Page
10. Continue Work on Highroad Project



BENTON COUNTY SECONDARY ROADS

2017 Summary

The 2017 Benton County IRVM Advisory Committee was composed of 6 private members and 4 public members. The members include James Huber, Randy Scheel, Joan Lindberg, Calvin Wolter, John Frazier, Kathy Chamberlain, Becky Van Wey, Mark Droessler, Becky Johnson and Harold Cassens.

- The committee met 4 times in 2017.



2017 Seeding Data

- 20 acres of prairie seed was received from the TPC
- All of this seed was used in calendar year 2017
- ~ 26 acres of native vegetation were reconstructed in the ROW
- 26 acres were planted with the hydroseeder (100%)
- 410.044 acres of native vegetation have been planted since 2005
- There are ~5184 acres of ROW in Benton County
- ~8% of Benton County ROW has been planted to native vegetation.

Program Accomplishments

- Created a 4.58 IRVM Demonstration Site
- Hired our First IRVM Intern
- Obtained 20 acres of diverse prairie seed for the ROW
- Conducted 2 public presentations on IRVM
- Identified several rare native plants in the ROW
- Controlled noxious and invasive weeds by spot spraying infestations in all 5184 acres of ROW.
- Cleared brush and trees causing safety concerns in Benton County ROW with a wood chipper.
- Held several prairie walks with the IRVM Advisory Committee

