

PRAIRIE PASSAGE: A ROUTE TO REDISCOVERY OF THE NORTH AMERICAN PRAIRIE LANDSCAPE, CULTURE AND HISTORY

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Abstract: In 1995 the departments of transportation in Minnesota, Iowa, Missouri, Kansas, Oklahoma and Texas formed a partnership to develop and implement a plan to establish a national wildflower corridor from Canada to Mexico. Plan objectives included identification and protection of prairie remnants and rare species found in highway rights-of-way, establishing local origin native grasses and wildflowers to connect native remnants thus establishing a linear corridor; interpretation and educational efforts to increase awareness of natural and cultural prairie resources; assistance and cooperative efforts with communities along a designated and signed Prairie Passage route.

In 1995 The Federal Highway Administration (FHWA) provided a \$50,000 grant to each of the six states to perform initial surveys and planning for the Prairie Passage. Implementation of each state's plan is being accomplished through a variety of funding packages created by each state. From 1999 through 2003 Minnesota was funded by a \$750,000, 20:80 match between the Legislative Commission on Minnesota Resources and TEA-21. Brochures, guide-books, posters, rest area kiosks, interpretive trails, and signage have been developed with this funding. Kansas and Oklahoma also received TEA-21 funding. Plantings have been established and interpretive materials are being developed. Iowa and Missouri have received other state funding.

Response to signage and distribution of interpretive materials in Minnesota has been enthusiastic and positive. Several communities on the signed route have proposed cooperative projects around Prairie Passage to further promote economic development and tourism in their areas. DOT district personnel have requested further information and training for use in planning and maintenance. It is hoped that other states will see similar results with materials and projects developed for their states.

Introduction

The idea of designating a highway corridor containing native wildflowers was first proposed (in MN) in the early 1980's. In 1989 and 1990 the Minnesota Department of Transportation (Mn/DOT) designated six wildflower routes. At about this time the Federal Highway Administration (FHWA) and departments of transportation between Minnesota and Texas began discussing a national wildflower corridor. Since all of the states (MN, IA, MO, OK, KS, and TX) are prairie states, it was decided that prairie, and prairie wildflowers, would be a good focus. Hence the National Prairie Passage was born (figure 1).

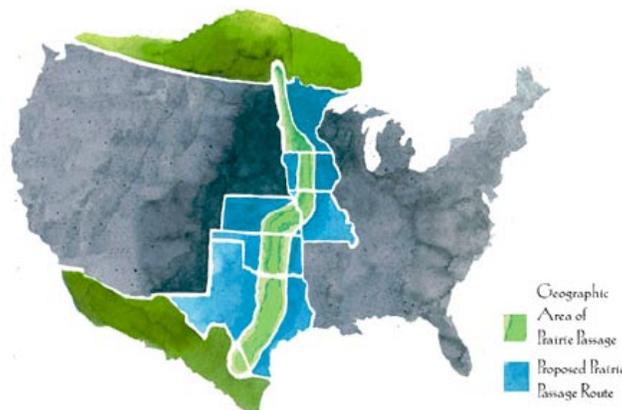


Fig. 1. Prairie passage corridor.

North American Tallgrass Prairie

The North American tallgrass prairie used to stretch north-south from Saskatchewan Canada down to Texas and east-west from the Ohio river valley to west of the Mississippi River. It is composed of myriad species: warm-season grasses (often symbolized by big bluestem, figure 2), forbs (wildflowers) and various wetlands composed of sedge and prairie meadows. The prairie was vast and stretched as far as the eye could see. Native Americans lived on the prairie and relied on bison for much of their day-to-day needs. European settlers found that prairie soils were the best soils in the world for agriculture. Gradually the vast prairie was converted to farmland and large expanses are now quite rare (figure 3). In some states such as Iowa and southeastern Minnesota prairie now only exists in odd-shaped corners and in roadside/railroad ditches (figure 4). Hence, many Midwestern states began surveying roadsides to find remnant patches of prairie to protect them. Interestingly enough, many roadside prairie remnants served as seed sources for companies that produce seed

of prairie species to reconstruct the grasslands that once were here. As with many things, the value of the North American prairie has not been realized until now that it is almost gone.



Fig. 2. Big Bluestem



Fig. 3. Circa 1850 - prairie covered the landscape.



Fig. 4. Circa 1990 - roadside prairie.

Prairie Passage Concept and Vision

There are many aspects to the concept of Prairie Passage. It was developed to be broad-based because of the diverse interests of those involved. In the narrowest viewpoint, the Prairie Passage is simply a signed route containing plantings of native prairie wildflowers and at its broadest, it is a form of ecotourism that leads to various points of historic, cultural and natural resource interest. It also introduces highway department personnel to different ways of managing roadside vegetation because native grassland vegetation has different best management practices than non-native grassland vegetation.

Prairie Passage in Minnesota

The Minnesota Department of Transportation partnered with the Department of Natural Resources (DNR) and a number of communities to develop a main route that passed through or nearby as many sites of interest as possible. Funding was also obtained from the Legislative Commission on Minnesota Resources and TEA-21 to develop two Prairie Passage sites at state parks in SW Minnesota. As part of these projects, large portions of the two state parks were restored to native prairie by converting the existing introduced forage species to prairie. Roadsides leading into the parks were also restored to prairie. The state parks (Blue Mounds and Camden) are both on the Prairie Passage route. Work began in 2002 and will be completed in 2003. A guidebook to MN Prairie Passage sites was also produced, and most of the Prairie Passage signs were produced as well. Materials are distributed at sites, rest areas, and by local communities.

Minnesota's Prairie Passage

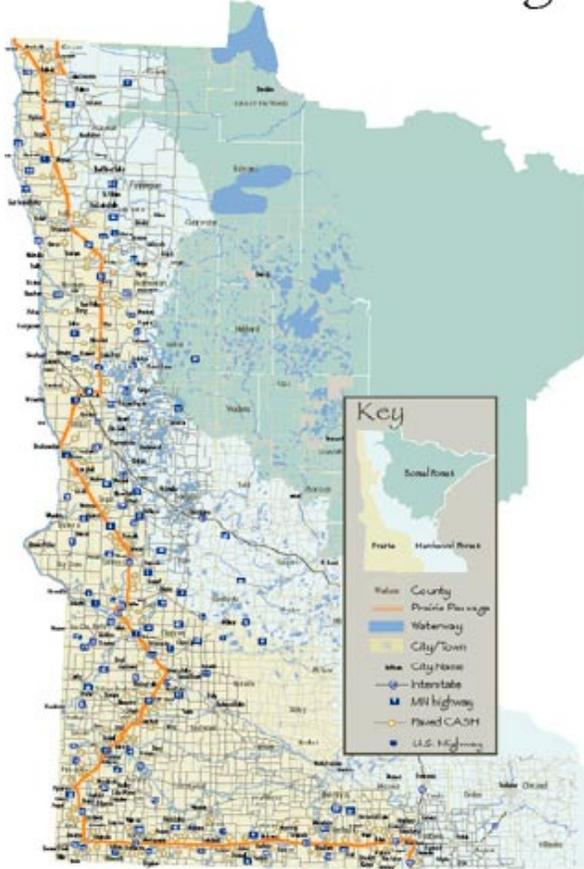


Fig. 5. Prairie passage route in Minnesota.

Prairie Passage Sites and Projects

The Minnesota Prairie Passage guide illustrates the locations of the initial sites designated in 2002. One such site that was designated in 2002 was Blue Mounds state Park (figure 6). Additional sites may still be designated in the future. The following are some of the photos of various sites that can be seen along the Prairie Passage in Minnesota (see figures 7-13).



Fig. 6. Dedication at Blue Mounds State Park in August 2002



Fig. 7. Blue Mounds State Park Prairie.



Fig. 8. Roadside Prairie Restoration.



Fig. 9. Prairie Passage Site Showing Kiosk.



Fig. 10. Prairie Chicken At Pembina Trail NW, MN.



Fig. 11. Aspen Parkland NW, MN.



Fig. 12. Farm Rake SW, MN.



Fig. 13. Jeffers Petroglyphs SW, MN.

Summary

The Prairie Passage project is ongoing. The role of state departments of transportation and they FHWA has been to assemble all of the pieces and people and agencies together, provide some ideas and funding and turn them loose. In Minnesota, the majority of the state roadsides containing prairie remnants have been mapped. Mn/DOT recognizes that these remnants are of significant natural resource value and has gone to great lengths to protect them from construction and maintenance-related impacts. There is a potential to save maintenance operations dollars in managing both remnant and planted prairie on roadsides, and these cost savings are not insignificant. This is because roadside prairie management programs rely less on chemicals and mowing for weed control and more on species competition. Community partners in Prairie Passage have found that they can promote their local natural, cultural and historic resources potentially invigorating tourism and recreation and their economy in general. Copies of the Prairie Passage guide can be obtained from the Mn/DOT Office of Environmental Services which can be contacted via the internet at <http://www.dot.state.mn.us/environment/>.

Acknowledgements: Although a lot of people in Minnesota have been involved with the development of the Prairie Passage, I am certain that we would not be here we are today without the efforts of Kathy Bolin, Mn/DOT Prairie Passage coordinator, who retired from state service in June of 2003. I would also like to acknowledge the efforts of the Prairie Passage coordinators from the departments of transportation in IA, KS, MO, OK, and TX. Finally, Bonnie Harper-Lore (FHWA) provided support and leadership at times when it was needed, and Terry Cederstrom (NPS-retired) who inspired us with a vision of connecting the tip of North America to South America with an "ecological corridor" for people to drive and experience the "New World" natural landscape.

Biographical Sketch: Robert Jacobson earned his B.S. in biology from the University of Minnesota in 1983; in 1987 he received a M.S. in botany/plant physiology. Robert was originally hired in 1989 by the Minnesota Department of Transportation (Mn/DOT) to perform vegetation surveys on roadsides to identify prairie remnants. He became supervisor of the Turf Establishment and Erosion Control unit in 1996. In 2002 established the Ecological Assistance and Planning unit working on wetland restoration and management, roadside management, and vegetation and rare plant impacts from construction projects. Primary areas of interest are native plant community restoration and management and related research.