

# Glacial Ridge National Wildlife Refuge: A Partnership from the Beginning

By Mark Hayek

The first time I visited the recently established Glacial Ridge National Wildlife Refuge (GRNWR), it became apparent to me that this was no ordinary conservation project. Upon glancing across the acres of restored tallgrass prairie and wetland basins, one begins to realize that a single organization could not have tackled this project alone. It is astounding to think over 30 partnering organizations were involved in the Glacial Ridge Project. Getting just two organizations pulling in one direction can be difficult at times and working with partners isn't always easy, or successful, but the Glacial Ridge Project can provide all of us with insight on how to make partnerships work.

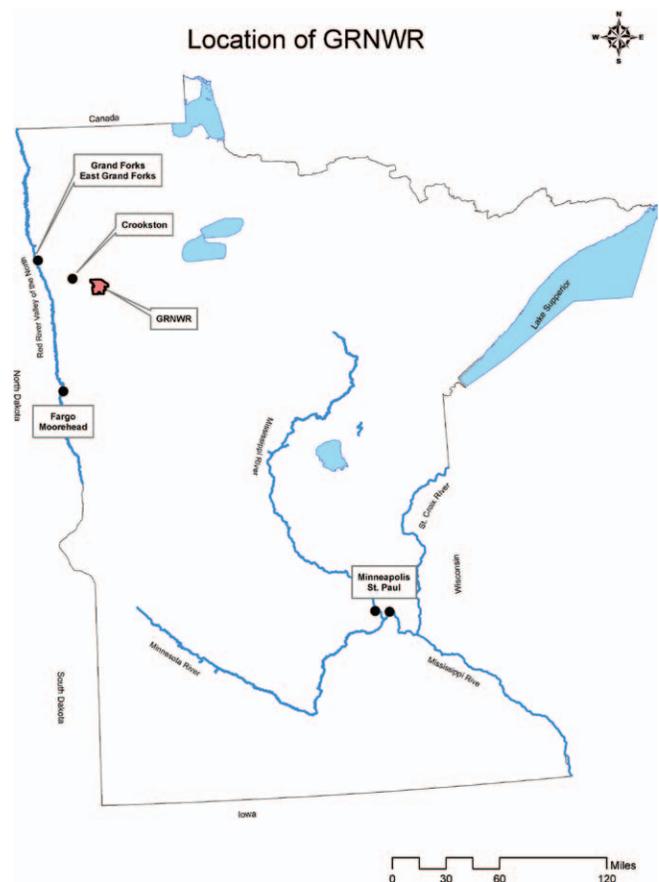
The Glacial Ridge Project had many challenges and complexities that required an armada of organizations pulling in the right direction. I invite you to read further; I hope to share with you the brief history behind the land, explain the obstacles the partnerships overcame, reveal the birth of a National Wildlife Refuge, and provide an example of how partnerships are still playing an important role in the management of GRNWR. Perhaps I can offer examples of why these partnerships were successful, or more importantly how these partnerships overcame challenges to make this project a reality.

## Location and Landscape of GRNWR

GRNWR is located in northwestern Minnesota, seven miles east of Crookston, Minnesota (Fig. 1), and lies within the northern tallgrass prairie region. The northern tallgrass prairie once extended from central Iowa through eastern South and North Dakota, western Minnesota, and as far north as southern Manitoba.<sup>1</sup> The landscape within the GRNWR and surrounding area consists of multiple beach ridges and interbeach formations produced by ancient Glacial Lake Agassiz (Fig. 2). Groundwater seep areas are a common feature within this glacially formed landscape. GRNWR lies between two prominent beach ridge formations, and is a part of the eastern shoreline of the ancient lake. Periods of stable lake levels formed the two prominent strand lines (beach ridges): the Campbell and the Herman. Small strandlines formed in between the Campbell and

Herman as the lake's water table experienced cycles of retreat and stabilization. These strandlines give the GRNWR its unique landscape and also its name.

Present-day land use surrounding the refuge includes idled grasslands and cropland. The vegetation within GRNWR can be summarized as dry prairie dominating the sand and gravel ridge tops, with wet prairie, sedge meadows, and deep marshes occupying the interbeach areas. In Minnesota and Iowa, 10 million ha of northern tallgrass prairie is thought to have existed; less than 134,000 ha of this native grassland



**Figure 1.** General location of Glacial Ridge National Wildlife Refuge (GRNWR) within Minnesota.