

To Conquer a Marsh and Save a Species

By Matt Provost



Figure 1

Geography 469—Dr. William Cronon

Section 308—Ben Kasten

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I grew up in Kellner, WI; a peripheral town on the edge of Wisconsin Rapids, WI. As a child, my mental map was quite simple. I knew how to get to my grandparents' house and school as both were only a few blocks away. More abstractly, I knew that getting in the car with my mom and driving ten minutes in one direction would take me "into town," and getting in the truck with my dad and driving the other direction would take me to a place that was the very opposite of the city. This seemingly boundless landscape to the East filled my little head with wonder and satisfied that natural lust for adventure given to all children.

The Buena Vista Grasslands, East of Wisconsin Rapids and South of Stevens Point in Southwestern Portage County stretches wide and flat for thousands of acres, and to this day does not have specific borders (though figure 2 shows the general area). The area consists of wild grasslands, plowed fields, some woodlands, and a series of drainage ditches and ponds. The vast openness and utter flatness, may give the impression that not much ever really happens here, but that could not be farther from the truth. I first came to know the dynamics of this ecosystem through the animals I trapped here with my father. I learned things like how the muskrats dig dens into the sides of the ditches and ponds and store food in beds and even have designated areas to defecate. I learned how the coyotes run along the edges of fields in search of food, or how the mink run and swim through the ditches peaking their heads into every hole in hopes of finding an unlucky muskrat at home in its den. I learned how all these animals' communal struggle to survive

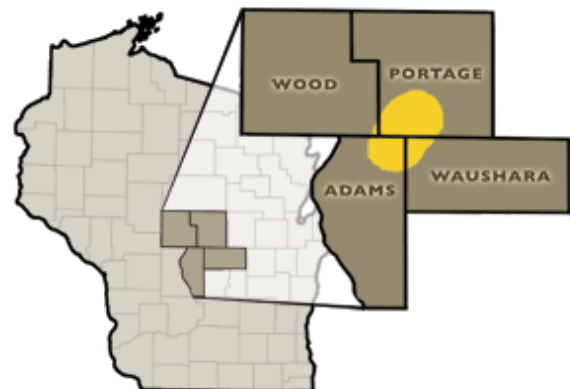


Figure 2

creates a breathtakingly beautiful complexity that tires but never rests, slows but never stops.

What I did not know about this landscape as a child was just how different it looked to me than it would have looked a century ago. Prior to settlement the area “was an expansive sedge meadow surrounded by spruce-tamarack bogs and islands of sand which supported white pine.”¹ Europeans were also not the first people living here. The Menominee Indians had claims to large parts of Wisconsin, including this area. However, they were forced out by treaty negotiations midway through the twentieth Century. The First European settlers in Central Wisconsin were concentrated mainly at Stevens Point, as the city served as an important point in the transportation of White Pine from the north flowing down the Wisconsin River. Grand Rapids (now Wisconsin Rapids) grew in a similar fashion to Stevens Point. Being a large marsh, the Buena Vista represented more of an obstacle to transportation than a viable settlement area at first. It was not until 1901, when the first railroad tracks were laid through Kellner on their way to Grand Rapids that Kellner and the area to its East started to be developed.²

As more and more settlers moved into this area of Central Wisconsin, more and more interest in developing the area arose. First, the Tamarack and White Pine were logged off leaving behind mostly marsh. The chief problem with developing a marsh for agricultural production is that it is wet. The chief solution, draining it. This simple answer proved to be a highly difficult undertaking. The first attempt at draining the Buena Vista happened right around the turn of the century when “Bradley University in northern Illinois became interested

¹ Sharon Schwab, “Buena Vista Wildlife Area,” in *From Where They Came to Where We Are!* 85.

² It is important to note that Ho-Chunk Indians also had claims to land in Central Wisconsin, and although they also signed a treaty forcing them to move, many chose to remain in the area. Dorothy Raasch, *From Where They Came to Where We Are!* 7-9.

in the land and felt if it was drained it had excellent agricultural potential. They purchased the land and began drainage.”³ Unfortunately, thousands of years of natural processes have created mucky soils that refuse to change quickly. According to the Web Soil Survey, to this day, the dominant soil series is Roscommon Muck, a histosol the USDA considers to be “not prime farmland.”⁴ Because the soil was still too wet to farm productively, a second drainage program went underway in the 1930s as part of the New Deal’s Work Progress Administration.⁵ However, only one crop was able to survive the short growing season, severe frost (that sometimes occurred during the growing season), and still fairly waterlogged landscape: Kentucky Bluegrass. This crop rose to dominate the landscape in the 1930s and marked the switch from marsh to grassland, redefining the future of the area.

In 1935 a young couple began their lifelong devotion to studying the Greater Prairie Chicken in Central Wisconsin under the direction of none other than famed conservationist Aldo Leopold. Frances Hamerstrom earned a graduate degree under Leopold in 1940 and Frederick Hamerstrom earned his doctorate under Leopold in 1941. In 1949 the Wisconsin Department of Natural Resources (WDNR) employed the Hamerstroms to lead a research effort on prairie chickens⁶. Though they were based out of Plainfield, the brunt of their research was centered in the Buena Vista. This research culminated in 1957 with the publication of *A Guide to Prairie Chicken Management*. In this manifesto, they call for quick action to be taken toward

³ Doug Hambach, *Memories Are Made of This*. 34

⁴ Web Soil Survey description of Roscommon Muck

⁵ Dorothy Raasch, *From Where They Came to Where We Are!* 43

⁶ Frances Hamerstrom was the only woman to ever earn a graduate degree under Aldo Leopold, and later became only the second woman to be employed as a wildlife professional in Wisconsin. Wisconsin Conservation Hall of Fame.

the conservation of the Greater Prairie Chicken or it may go extinct in Wisconsin never to return.

The real genius behind the Hamerstoms comes from their pragmatism. In their guide, they claim, “management should consider nothing less than half a township.” Of course, it is not economically feasible for half a township to be bought and then devoted to conservation. To solve this problem, the Hamerstoms suggested that only certain areas scattered throughout the Buena Vista need to be designated specifically for conservation. These areas will serve as unchanging anchor points for breeding and nesting. The surrounding fields of bluegrass, which are usually left standing after the seed is harvested, provide a structure similar enough to wild grasslands that prairie chickens will use it. Even the fields used for grazing and hay production add to a sense of openness the prairie chickens need.⁷

Now that a practical plan was in place, action could be taken. Paul Olson, founder of the Dane County Conservation League (DCCL) took a trip to see prairie chickens booming (which is the word for the males’ lively mating dance) in 1958. So inspired, he spearheaded a fundraising effort by the DCCL to purchase these necessary lands. In a similar manner, Willis Sullivan from Milwaukee saw the booming displays in April of 1961 and shortly after created the Society of Tympanuchus Cupido Pinnatus, which generated funds from donors all over the world. Together these two organizations bought over 12,000 acres of land in scattered plots that were turned over to the WDNR for management.⁸ The map on the following page from the WDNR shows the majority of the existing conservation lands on the Buena Vista.

⁷ Frederick and Frances Hamerstrom, *A Guide to Prairie Chicken Management*.

⁸ University of Wisconsin-Stevens Point, “Wisconsin’s Prairie Chickens,” web article.

The Hamerstroms' project was a major success. The land has been successfully managed to ensure the continued existence of prairie chicken populations. However, the story of the Buena Vista Grasslands continues. During the 1950s, "competition from foreign markets resulted in the fall of the grass seed production industry."⁹ Soon after this, much of the former bluegrass land was turned over to cattle grazing. Fortunately, this land remained suitable habitat for prairie chickens and the other species in the area. Doug Hambach, one of these cattle ranchers recalls the first time he drove through the Buena Vista in the late 1950s: "I had never seen a better grassland. What a place to run cattle and no one was using it."¹⁰ Unlike the conservationists who saw the land as a potential refuge for a dwindling species, Hambach saw the Buena Vista as untapped economic potential—and he was not the only one. In the 1960s, just as the conservation effort was finally being realized, "advances in farming technologies resulted in land being converted into row-crops. Higher intensity agriculture, including irrigated vegetables and upland cranberries followed."¹¹ Furthermore, in 1978 another large scale drainage project, focused on improving existing ditches, was completed. This set the stage for large agribusinesses, including McCain Foods and Del Monte, to buy land in the area and erect processing plants nearby.¹²

Although the Hamerstroms' plan never accounted for center-pivot irrigated monoculture, and is contingent on the continued existence of grasslands outside the conservation areas, there remains a healthy prairie chicken population on the Buena Vista

⁹ Sharon Schwab, "Buena Vista Wildlife Area," in *From Where They Came to Where We Are!* 85.

¹⁰ Doug Hambach, *Memories are Made of This*, 4.

¹¹ Sharon Schwab, "Buena Vista Wildlife Area," in *From Where They Came to Where We Are!* 85.

¹² Doug Hambach, "The Birth of an Agricultural Paradise," in *From Where They Came to Where We Are!* 82.

Grasslands today. In fact, the area hosts the greatest concentration of prairie chickens East of the Mississippi River. The grassland also supports many other bird species including Henslow sparrows, short-eared owls, upland sandpipers, northern harriers, bobolinks, eastern and western meadowlarks, and even the occasional snowy owl that I had the pleasure of seeing some years ago.¹³

Finally, I would like to end on a note about the potentially misleading title of this essay. The Buena Vista Marsh was drained not specifically to save the Greater Prairie Chicken species from local extinction in Wisconsin, but to boost the local economy by opening thousands of acres for potential farming. The fact that this artificial draining of a naturally wet land eventually led to the creation of a grassland suitable for sustaining large concentrations of the bird is a tale of individuals making the best of their land for their situations at hand, whether that be eking out a living or desperately trying to fulfill a vision of a future where prairie chickens continue to dance in Wisconsin. This unique dynamic between using the land for conservation and economic gain is a beacon of hope in a world of continued habitat loss and dwindling biodiversity. It is an example that humans are not all bad; that we can live without ruining the natural beauty of the earth.

¹³ Wisconsin Department of Natural Resources, "Buena Vista Grasslands," web article.

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List of Figures

Figure 1: Photograph taken by myself on the Buena Vista Grasslands near ditch #4 on
November 5th, 2016.

Figure 2: Map taken from kestrelresearch.com.

Figure 3: Map taken from dnr.wi.gov from the web article, "Buena Vista Grasslands".