

History of Blue Eagle Lake



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Blue Eagle Lake

Introduction

When communities are formed, the settlements are usually near a water source. Water is essential for life. It is no surprise then that Barnesville was formed near Whiskey Creek on the Tall Grass Prairie in southeastern Clay County in 1882. While the Creek was here when the city of Barnesville was formed, the lake was not. Blue Eagle Lake is a man made lake formed from Whiskey Creek and the park was developed after the lake was formed. This location on the city website will provide more information on the general history of the city of Barnesville - (<http://www.barnesvillemn.com/?s=history+of+Barnesville&x=0&y=0>).

Why is the History of the BEL and Park Important?

As a healthy river ecosystem, the lake and park can be enjoyed as a recreational area as intended by city leaders in the early 1930's. Future decisions should be based on understanding good stewardship of natural resources and sustainability.

Blue Eagle Lake Origins

When Barnesville was first established in 1882, the area did not include the present Blue Eagle Lake and Park. Much of the North East quarter of Section 30 was vacant¹.

Property that is now Blue Eagle Lake was purchased by Laures and Anna Olson from Christian and Helen Meyer on September 19, 1928 for "\$1 and other valuable consideration".² The property was the north half of the northwest quarter of the northeast quarter (N $\frac{1}{2}$ of NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 30) and also in Section 19 (SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ and the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$). Using today's map it appears to be the area now known as Wagner Park and then south across highway 34 to include the current softball field and area up to the Lake.

Laures and Anna Olson used the pastureland to operate the Olson Dairy Farm. They produced "pasteurized fresh milk and cream"³, according to their daughter Beatrice Wisted who has given an account of this time dated Feb. 18, 1982, and is in printed form at the Clay County Historical Society.

They started at 5 AM in the morning with chores, then cooled and bottled the milk. Anna would run the churn for butter and the children would look for more eggs. They sold fresh milk, cream, butter and eggs to the residents of Barnesville and Laures would leave the farm about 7:30 AM to make the rounds for delivery to each home driving a cab pulled by two horses. Delivery of the glass bottles of milk and picking up the empties was a daily routine so

much so, that the horses knew exactly where to stop.³ The Olson family made a good living until the WPA came to town. (The Works Progress Administration projects were part of a national program during the Great Depression intended to employ unemployed people to build public works projects in local communities.)

According to Beatrice, some men approached the farm and had a conversation with her father. At that time there were stakes placed in the pasture. Not knowing what they were for, the children pulled them up, resulting in frustrated men. Apparently someone from the city had been staking the area that they were interested in buying from the Olson family. She goes on to say that they were told that their cows could only drink in one location. At that time there was already an area of open water where the creek left the banks of the stream. Of course since the cows could not read, that did not go well. The men returned and insisted on closing the deal for the land.

The WPA project was approved by the Barnesville City Council to purchase 30 acres of the NE part of the city on January 18, 1934.⁴ And so the Dairy became a part of the History of Barnesville as the Olson family sold their land on Jan 23, 1934. It was recorded on Feb 7, 1934 at the courthouse. Purchased by McGrath for \$1500,⁵ it became a part of the city and the beginning of Blue Eagle Lake.

Naming the Artificial Lake

With the formation of a new lake, it was appropriate to give it a name. The Commercial Club active in Barnesville at that time sponsored a contest. The winner, Miss Ruth Wheelright, was selected by the judges for the name Blue Eagle. When the WPA was first promoted through the National Recovery Act (NRA), their symbol, the Blue Eagle, was seen on stickers and signs in many communities.¹⁰



Creating a Lake and City Improvements

During the time when the Olson family farmed that area, there must have been the presence of dams because we know there was an area of open water near the creek. In a Barnesville Record-Review news release from January 25, 1934, "The Old Hans Pederson dam will be doubled in width and the center section filled in. The inner side of the dam will be lined with rock and a spillway of sufficient size will carry off the surplus water around the east side of dam." This was the description of the future WPA project on Whiskey Creek then called Willow Creek. Within a month,

Feb. 22, 1934, the Record-Review reports that the dam is nearly complete. And the “space between the two old remnants of Hans Pederson’s dam was filled in and Willow Creek was dammed.” Dynamite was used to blow out ice and sand in the creek bed before dumping good clay on firm clay subsoil. The old dam was widened by three times its original width. It became 80 feet wide at the bottom and 24 feet wide at the top. The project cost was \$2749.80 and was approved by the state-federal emergency relief administration, according to the County Disbursing Officer. By April 5th, the dam had to be partly redone as it began to give way.

It appears there were two key benefits of the dam: first, it helped to create the artificial lake and recreation area. Second, it allowed a local mill to harness the energy to grind flour. The DeWerd Mill located in this area was near completion in Sept. 20, 1934. It would then be able to grind up to 50 barrels/day of flour.



So 1934 was a big year for Barnesville. A farm is sold, a WPA plan is approved, the dam is enlarged, a lake is formed, and a flourmill is built. The picture above is the lake looking north from the southwest corner of the existing lake. The area was still a Tall Grass Prairie on an old flat lakebed.

Beautification of the Lake and Forward Thinking

A group of local Boy Scouts saw a need for shade and planted trees on the north side of the lake, between the lake and the creek in the spring of 1936. By 1942 those trees had grown and are quite obvious in this view looking northeast from the swimming beach.



Not only were the beach area and the lake more welcoming to local residents, but also to flocks of ducks. In 1935 “200-300 canvasbacks and redheads had settled at Blue Eagle Lake as their place of abode...”¹¹ The lake was a new habitat for waterfowl!

Included in the description of the WPA Project for the new artificial lake from the Jan 25, 1934 newspaper article, the reservoir was to vary in width from 200 feet to 850 feet and about 18 feet deep at the maximum. J.H. Fisch was the contractor in charge of the work and they were to be assured of a lasting and beautiful job. They planned to stock the lake with fish because the lake was to be used for recreational boating, swimming, picnics, and fishing. They also felt that there was potential for tennis courts, which of course were added to the park in the 1970’s.

During these discussions with the City Council, a citizen recommended that they form a park commission to develop and oversee these areas in the city with the intent to make the stream into “the most beautiful part of the city.”⁴

People and Water Connections

Simply put, people need clean water to survive! It’s no accident that many cities worldwide have developed along the shores of a river or lake. To be more specific, all living things need a source of clean water. Often in rural areas, domesticated animals are observed in pastures near a creek. While clean water has a vital use, it

is a natural resource that can be misused. Heavy use of waterways by animals upstream can result in illnesses by those who use the water downstream.

A stream is usually not straight. As water flows it forms bends. These meanders are influenced by soil, amount of water and how fast the water moves. Certainly, the flow rate is reduced when it flows back and forth around the bends in the channel. Because of the slower flow, the excess sediment the water picks up is deposited on the inside bank. At one time people thought it was better to make the water flow faster, so the channels were straightened by ditching. It did flow faster but this practice increased erosion and cloudy water. There is a natural beauty in a meandering river. But when the meanders are removed by ditching to solve a man made problem, it creates more problems. The water does flow faster, but more erosion occurs and the water becomes cloudy. This sets up a chain of reactions not sustainable in a natural ecosystem.

In the early years of the Barnesville community, sewage was dumped into Whiskey Creek, a typical practice in most communities at that time. One can only imagine the visual image and smell this created. The Civil Works Plan proposed on Nov. 30, 1933 was intended to help resolve this problem. The plan would create the dam on Whiskey Creek so an artificial lake would be formed. But it also included plans to “straighten Whiskey Creek to better sewage disposal...”⁸ “If the Whiskey Creek project is approved by the state board, the plan for better sewage disposal will...meet with approval of all our citizens.” The area to be straightened was west of McGrath Park for about 800 feet. The result would be a more rapid flow of water, which will tend to more readily dispose of the sewage. No machines were used for this job; the new channel was all cleared by hand. Of the 29 men who worked on this job, 17 were residents of Barnesville.⁹

More Recent Changes in the Park

In 1960 after much fund raising sponsored by the Lion’s Club, sand was hauled into the Lake to extend the beach area.⁶ As time passed aquatic plants became established in the lake and spread, and more silt had entered the lake from the Creek, gradually reducing the depth of the lake. This condition reduced oxygen for fish and degraded the water habitat. The lake became unattractive, often with unpleasant odors for the residents of the area.

The Challenge of Shallow Lakes

During the summer of 1985 Blue Eagle Lake was drained and the sediment was removed under a DNR permit. The sediment was used to create the existing “sliding hill”. The dike was constructed to isolate the lake from the creek, with inlet and outlet structures put in place to control the lake level. The result of this is the “sediment pond” created between BEL and Highway 34. Whiskey Creek flows through the sediment pond and as the water turns toward the dam it is slowed

down, resulting in deposition of silt that the stream has picked up. It was thought that this fix might last 20-25 years before the sediment from the pond would need to be removed.



The sediment pond has prevented most of the silt from entering the lake as seen in the aerial photo from 2013. The sediment was mostly confined to the sediment pond for the last 28 years, but as predicted will need to be maintained by dredging periodically.

There are two parts to the aging of a shallow lake. Sediment is one half of the problem. The other is the excessive plant and algae growth that limits the oxygen supply in the lake. As the plants and algae die back, bacteria that break them down and recycle nutrients, require more oxygen. Bacteria increase in numbers as the quantity of dead plants increases. Then in the summer when decomposition is at its peak and oxygen demand is highest, the other aquatic organisms such as fish become starved from lack of oxygen. The overnight hours are the most stressful and can result in fish kills by early hours of the morning, before oxygen is restored through photosynthesis.

To address this concern, the City of Barnesville installed mechanical aerators in the lake to provide extra oxygen. They run 24/7 and 365 days/year. This is beneficial but didn't stop the resulting nutrients from that decomposition from producing greater plant and algae growth. It did slow it down but did not resolve the problem. The cause of the excessive plant growth is excessive nutrients coming from the dying plants, and some from the creek water.

Before 1985 the city storm sewers emptied into the lake taking with it run off from fertilized lawns. This was changed in 1985 when storm sewers were altered to bypass the lake.⁷ This also helped slow the growth, but more needed to be done.



In 2013 the City purchased a Weed Harvester to remove plants during the growing season so there is less that needs to be broken down, resulting in less nutrients available for next year's growing season. Using this mechanical harvester regularly should reduce the nutrient input and leave more oxygen for the natural organisms in the lake and maintain the beauty of this park for years to come.

The forward thinking of Barnesville residents in the 1930's laid the foundation for the development of a beautiful park. It is the responsibility of the community today to ensure the natural balance of this ecosystem. Lessons from the past can help us protect and insure the sustainability of our natural resource, Blue Eagle Lake and Park for future generations.

Link to Water Quality Data

Water quality research has been done in past years on Whiskey Creek. In 2002 a River Watch program was begun at the High School so that students could learn field research skills. These students since 2002 have been sampling surface water along Whiskey Creek east and west of Barnesville measuring water quality. To review that data, go to <http://riverwatch.wq.io>.

References

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