

# Wisconsin's Early Forest Rangers

by Jim Bokern

Today, the Northern Highland-American Legion State Forest continues a great Northwoods legacy. The forests, lakes and streams in Vilas, Oneida, and Iron counties are the cradle of both modern forestry and abundant public lands throughout Wisconsin.

In 1904, E. M. Griffith was hired as the first State Forester to create a comprehensive forestry management system. Griffith proved to be a gifted forester with a keen focus on data driven solutions. By 1910, his ambitious forest reserve plan propelled Wisconsin to the forefront of states seeking to better manage forest resources. Griffith hoped to expand the northern forest reserve of public lands to two million acres. In 1911, Griffith understood that a new corps of Wisconsin forest rangers was pivotal to success of Wisconsin's fledgling forest reserves.

“It is the intention to appoint forest rangers who will live in the reserves, act as fire patrols to prevent the setting or spread of forest fires, build fire lines, roads' and trails, plant areas that have been denuded, and scale the mature timber that is cut from reserve lands by the purchasers.”<sup>i</sup>

E. M. Griffith had international forestry training, and in 1898 was employed by his mentor Gifford Pinchot, Chief of the National Forest Division.<sup>ii</sup> Both men embraced scientific management and multi-use of forests. Once hired by Wisconsin, Griffith applied his considerable talents to collecting data, professional collaboration, drafting solutions, and forging alliances with both politicians and lumber interests. Griffith had accelerated the growth of the forest reserve by selling agricultural land held by the state to purchase land better suited for forestry in Vilas, Oneida, Forest and Iron Counties<sup>iii</sup>. Griffith hoped the scientific management of Wisconsin's expanding forest reserve would ultimately become a showcase of forestry best practices and land use.

Griffith's multi-faceted approach to forestry and ambitious goals required a new kind of state employee who could advance the mission of forestry on the ground while overcoming the rugged challenges of Wisconsin's Northwoods. Griffith immediately rejected creating a school for forestry, because several Midwest universities already had programs. Griffith envisioned a specialized school for forest rangers:

“These rangers will be appointed after Civil Service examinations so practical in character that there should be no trouble in selecting men well equipped for the work and who can be taught the rudiments of forestry that it is essential that each ranger should know. The men must have tact, as they will come in contact in their work with settlers, lumbermen, resort and cottage owners, campers, hunters, fishermen, etc., and must know how to treat them pleasantly and respectfully, and still strictly enforce the laws and regulations governing the forest reserves. They must be good woodsmen and good axemen, with a natural liking for the woods and the life of the pioneer. The men will be paid \$50.00 to \$90.00 per month and their promotion should depend absolutely upon their ability, energy and general fitness and not in the least upon their age or length of service.”

The need for a comprehensive forest management plan with a focus on fire suppression created a true sense of urgency for Griffith. The historic practice of using regional and community fire wardens continued to be important, but in 1908 and 1910 over 2 million acres of Wisconsin forests burned at a cost of \$14 million.<sup>iv</sup> During this period, communities like Buswell in western Vilas county were burned to the ground, displacing over 200 people.<sup>v</sup> The costs in human suffering and dollars led to a call for new action.

Civil Servant exams were given in Rhinelander in the spring of 1911 to a pool of forest ranger candidates, and 12 new rangers soon began the heavylifting required to implement Griffith's forestry vision. Among the first forest rangers was Fred Wilson, who proved to be one of the most influential conservation leaders in Wisconsin. Wilson's early narratives included in his publication, *E. M. GRIFFITH AND THE EARLY STORY OF WISCONSIN FORESTRY (1903 – 1915)*, provides important insights into the first years of Wisconsin's forest rangers. Shortly after arriving at the emerging Trout Lake forestry headquarters in 1911, Wilson was sent west to control fires.

It is hard to imagine that one ranger with hand tools, and on foot, could suppress a wild fire even with the help of locals. Wilson traveled to Manitowish Waters and made his way to Rest Lake.

“A smoke was beginning to show in the west, so I walked down the Chicago and Northwestern track to the Powell siding and westward, and slept that night in a tent of a settler who had built his cabin where Bear Creek joins the Manitowish to form the North Fork of the Flambeau. After a breakfast at the small sawmill operation called Emerson, I found two small fires near Springstead Lake, which were extinguished with volunteer help. I stayed at a summer resort where the owner was so pleased to see a ranger that he would not accept payment for meals and lodging.”<sup>vi</sup>

With the quick resolution of the Springstead Lake fires, Wilson continued his fire detail.

“The next morning a helpful guide rowed me across the lake and put me on a foot trail heading west. Being well off the area covered by my plat book, I had but to head for the big fire. By noon the smoke carried by the west wind was blotting out the sun, but there was a strong breeze on my back sucked in by the conflagration. Snowshoe rabbits and two deer were coming off a ridge into the open swamp. A man yelled to come arunning. Joining him before the back fire met the main fire, I soon heard a tremendous roar as the two fires met. At the camp of the Atwood Lumber Company of Park Falls, the camp buildings had been saved and a small crew was hauling barrels of water on stoneboats to wet down the log decks on the landing. One team of horses was magnificent as they quivered but stayed under control when buckets of water were thrown on them while passing the hottest part of the fire. Meanwhile, Ellis M. Weaver, the ranger who had a crew building roads and firelines in the Bearskin country, had arrived, and I learned I was in the Town of Eisenstein in Price County. After the logs were safe, we were fed and given clean blankets. That night there was a heavy rain and we were free to return.”<sup>vii</sup>

Heroic efforts of firefighters and quenching rain seem to have ended the 1911 fire season, but a more systematic means of identifying, reporting, traveling to, and suppressing fires was clearly necessary.

In 1912, Griffith's forestry plan called for establishing four additional ranger stations in the forest reserve to create the infrastructure for systemic fire control. These stations were built in the winter of 1911-12, mostly by the forest rangers:

“Comfortable houses for the rangers, with barns, wood and ice houses, etc., have already been built at the following ranger stations: Little Carr Lake, Plum lake, Oxley and Rest lake; and during the winter of 1912-13, houses will be built at Star lake and Carroll lake. All ranger stations are connected by telephone with the nearest towns and with the forestry headquarters building.”<sup>viii</sup>

Like spokes in a wheel extending from the Trout Lake Headquarters, new ranger stations could spot fires from 55-foot towers and report back to Trout Lake on new phone lines where Trout Lake rangers triangulated the fire's location and coordinated fire responses. Rangers also utilized specialized firefighting tools and portable phones cached throughout the forest reserve to resupply and get fire

updates from Trout Lake. Ranger stations also had bunk houses to maintain a corps of men for fire suppression, fire watch, and building telephone lines, roads and fire lanes. Remote patrol cabins and auxiliary fire watch towers were later built to improve coverage and response time during fire season.<sup>ix</sup> Over time, new ranger facilities improved forestry employees' response to critical needs within the forest reserve.

In 1912, automobiles and trucks were just beginning to appear in the Northwoods, but a lack of infrastructure required to quickly access distant and remote areas caused the rangers to rely on railroads, horses, and walking to move freely both within and outside the Forest Reserve. "The foresters and rangers will be mounted on strong and tough western horses so that they can cover their districts rapidly and get to fires with the least possible delay."<sup>x</sup>

Wisconsin's first forest rangers would be trained mostly in the field, based out of the Trout Lake Headquarters, while partnering with the University of Wisconsin Department of Agriculture.

"Young, strong men who have worked in the woods should be given the preference and the school should be located at a camp in the forest reserve as all the instruction in woods work should be practical and given in the field. It may also be found necessary to give the men some instruction at the University in connection with the work of the College of Agriculture, but if they spend two summers in the forest reserves and one winter at the University they should be well fitted for their work."<sup>xi</sup>

Forest rangers were to be wilderness journeymen advancing the goals of the foresters and the forest reserve. Tough, smart men, specially trained in executing and supervising all forms of forestry field work, delivered immediate results.

"The purpose of the Ranger School is to meet this demand by preparing men for such secondary positions as rangers, guards, tree planting experts, nursery foremen, and for responsible employment by lumber companies, commercial nurserymen, and the owners of timbered estates."<sup>xii</sup>

Importantly, Griffith envisioned many of the forest rangers working for private interests, collaborating with the state, and following scientific models to create sustainable industrial forestry.<sup>xiii</sup> Additionally, Griffith's systematic forestry model encouraged both counties and municipalities to create their own forests, which would also benefit from a trained corps of forest rangers.<sup>xiv</sup>

Replanting the cut-over areas required new state nurseries, strategic plans, equipment and specially trained workers. Trout Lake nursery was developed first in the forest reserve, with elaborate plans to build several additional state nurseries near selected ranger stations. Starting in 1911, seedlings were shipped by train to Trout Lake, and pine seeds were also locally harvested and planted to begin developing a self-sufficient nursery system for Wisconsin.<sup>xv</sup> Eventually, forest rangers and forestry workers constructed two large nurseries at Trout and Star lakes, along with a smaller, short-term nursery near Lake Tomahawk. Forest rangers helped supervise nurseries and planting activities, including a unique research-based planting of European Scotch pine from Trout Lake to Star Lake along the old Sayner rail line. Scotch pines were also planted in the 1930's by the Civilian Conservation Corps under the supervision of state forest rangers, and several of these special stands are still visible today. These first forest nurseries became prototypes for current state forest nurseries, with two of the three modern nurseries properly named for both Wilson and Griffith.

Forest ranger curriculum was staged from forest reserve headquarters on Big Trout Lake and numerous ranger stations. Limited to only 10 to 12 ranger candidates, direct instruction was combined with lots of challenging fieldwork.

“Exceptional opportunities will be given the student to gain practical field experience in the various lines of forestry management, such as making roads, trails and fire lines, building bridges, telephone lines, and lookout towers, establishing section lines and corners, fighting fires and patrolling, burning slash, and studying tree growth and logging methods.”<sup>xvi</sup>

Early forest rangers and forestry workers also needed to resurvey much of the forest reserve to accurately establish boundaries. The ambitious Northwoods original land surveys from the 1860's were critically important in early Wisconsin property distribution, but included many inaccuracies. Corrective land surveys were inevitable. The early rangers had to find old witness trees and remove the bark, revealing the section, township and range incised on the cambium of the tree from a half century earlier.<sup>xvii</sup> The aggressive logging of the Northwoods often required rangers to set new witness trees and posts for section corners. Today, some state forest section corners and meander lines along water ways have witness trees from multiple surveys. Careful hikers and paddlers can discover witness trees along section lines by looking for two over-grown tree scars, bright paint, steel pipes with brass caps, and most recently plastic markers. Some witness trees still have exposed cambium with incised coordinates visible.

Neal Harrington, then a recent graduate from Hurley High School and aspiring forester, worked alongside ranger candidates in 1911. Harrington captured numerous pictures of the earliest days of the forest reserve, including camping during field work and instruction.<sup>xviii</sup> Building fire lanes, roads and telephone lines were important and difficult work, but were essential to the systematic fire suppression model Griffith envisioned.

Walter Mulford, wrote *The Forest Rangers- Course 1914*, for the University of Wisconsin College of Agriculture and reported:

“The region offers an exceptional opportunity for the student to study all phases of forestry, especially from the standpoint of fire protection, which is the greatest problem confronting the lumbermen and foresters of the present day. Side trips will be taken to all points of the reserve and much of the time will be spent in tents during the summer months.”<sup>xix</sup>

A unique legacy of Griffith's forestry model was the creation of leased lands on selected lakes (usually near ranger cabins) in the forest reserves. Opportunities for leased lands would also be extended to state park properties, offering relatively inexpensive access to state land, including prime waterfront property. This progressive element of the forest reserve was featured in *LaFollette Weekly Magazine*, advancing the egalitarian goals of Robert LaFollette and his Progressive party. Cabin sites could be leased for \$10 to \$50 annually, while tent camps could be leased for \$2 to \$5 annually.<sup>xx</sup> Griffith had already analyzed the huge economic impact of tourism in New York's and New Hampshire's forest and lakes regions, predicting a windfall of tourist development for many portions of the forest reserve.<sup>xxi</sup> The leased land program would allow middle class Americans from across the nation affordable access to some of the best lake front properties in the Northwoods. Leased land sites on Big Trout, Rest, Star, Carroll, Tomahawk, Palmer, Plum, and Clear (in Oneida county) lakes were popular, with a few folks constructing grand summer residences, while most cabins were modest. By 1917, the Chicago Northwestern Railroad promoted state forest leased lands as a great opportunity to enjoy the wilderness, lakes and streams of the Northwoods. Predictably, families with state leases fell in love with their choice properties and valued generational memories of sharing time in the Northwoods.

Fred Wilson departed from his mentor's advocacy of state leases and considered the program as mostly a nuisance to forest rangers. In the near-term, rangers were obligated to enforce regulations and oversee properties.<sup>xxii</sup> Ultimately, the forest reserve lease program would prove to be a greater challenge, and the early termination of most leases met serious resistance between 1950 and 1976. Today, old state leased land sites have become celebrated parks, campsites and points of interest in the NHAL forest. A few former lease sites have ghostly remnants and building sites, testifying to a unique outcome of the early forest reserve.

Tax issues regarding timbered and cut-overland proved to be a vexing point of conflict between advocates for the forest reserve and local taxpayers.<sup>xxiii</sup> Griffith's inability to resolve the tax issue created sharp political battles in the Northwoods. County agricultural extension employees joined newspapers and farm publications in the aggressive promotion of Northwoods cutover lands as fine agricultural investments for realtors, farmers and speculators.<sup>xxiv</sup> Some of the 20<sup>th</sup> century data-driven forest reserve goals were perceived as a threat to growing agriculture development in the Northwoods. In 1915, the Wisconsin Supreme Court declared the purchase of lands to build a forest reserve and Wisconsin's resulting debt as unconstitutional.

In the midst of 1915 political turmoil surrounding the forest reserve, Griffith explored the possibilities of using new sea-planes to monitor the forest reserve with pioneer aviator Jack Vilas. Griffith and Vilas famously flew over the forest reserve together, resulting in Vilas agreeing to conduct the first aerial fire spotting effort to support forest rangers on the ground. Proudly, Vilas became the first commissioned flying forest ranger in the world, protecting Wisconsin's forest reserve. The resulting "Wisconsin Plan" of aircraft supported fire protection would be adopted worldwide. After 1917, the "Wisconsin Plan" was deemed too costly, and for the next 32 years the only fire routes in Wisconsin were flown by federal aircraft.<sup>xxv</sup> As with any emerging technology, limitations like no radios, weather and maintenance requirements proved to be a challenge. At the close of Griffith's tenure as Wisconsin's State Forester, he was able collaborate with Vilas and launch yet another promising 20<sup>th</sup> century forestry best practice.

As Griffith left the Department of Forestry in the summer of 1915, a restructuring and consolidation of all Wisconsin conservation agencies was soon implemented. "All of the powers granted by former legislatures to the State Board of Forestry and the State Park Board, with respect to the management of the so-called forest reserves and state parks, were delegated to the Conservation Commission. The work of the two divisions since August 1, 1915, has been under the direct supervision of the forester member of the commission."<sup>xxvi</sup>

Frank Moody took over as forester of the Conservation Commission and departed from some of Griffith's forestry practices in the wake of the 1915 Wisconsin Supreme Court decision. Griffith's insights, accomplishments and ongoing progress for 1913 and 1915 were purged from state records. "The report of the former State Forester for the two preceding years prior to the consolidation of the Departments was not issued, and it has not been deemed necessary to report on the work of the Forestry Board for that period, except in a general way."<sup>xxvii</sup> Clearly, Griffith lost a series of political battles to build his version of 20<sup>th</sup> century forestry with a robust forest reserve.

The 1915 Supreme Court decision and new Conservation Commission leadership put the forestry program in its new "place." Rangers continued to be in charge of fire protection, nurseries, plantings, overseeing leased land, surveys, infrastructure improvement and advising private landowners on woodlot management. Forest ranger Wilson left the new conservation commission in 1915, working as a forester for British Columbia, Canada, ultimately returning in 1922 as the first extension forester for the UW Madison.<sup>xxviii</sup>

Even though the former Department of Forestry folded into multiple bureaucracies of the new State Conservation Commission, forest rangers continued their important work. The number of State forest rangers were reduced from 12 in 1911, to eight in 1916.<sup>xxxix</sup> In 1916, Wisconsin received continued funding under the Federal Weeks Act, adding eight new fire patrolmen to the existing fire corps. In 1918, forest rangers and patrolmen in the forest reserve were divided into five new fire districts, stretching across northern Wisconsin, from Burnett to Marinette counties.<sup>xxx</sup> Wisconsin also expanded the use of public fire prevention signage and local fire wardens, and funded local volunteers to help fight fires.<sup>xxxi</sup> Forest rangers were expected to coordinate all fire prevention and suppression efforts.

Ultimately, economic agri-depression in 1920 followed by a national economic depression in 1929 would force Griffith's opponents to embrace many strategies he outlined by 1912. Griffith did have some blind spots regarding his forest management plan, but the majority of his analytical insights would prove hauntingly accurate.

In 1925, Angus McDonald, a Three Lakes resort owner confessed:

“Rocky, hilly, sandy Jack Pine barrens [weren't suitable for farming]. Griffith at the head of the forestry department years ago told us what we would have to do with this and like areas, but we laughed at him and threw him out of office, now we are finding Griffith was right, he was far-sighted enough to see just what was going to happen to us. This land as a Federal Forest is going to be worth more to Wisconsin than the few struggling farms that may locate there in years to come.”<sup>xxxii</sup>

Wisconsin changed its constitution in 1924 to allow the creation of state forests of up to 500,000 acres and created the Northern Highland forest in 1925.<sup>xxxiii</sup> Wilson would skillfully draft the 1929 Legislative Committee Report on Forestry & Public Lands, outlining how the 1927 Forest Crop Law and county zoning could create county forests from tax delinquent lands. Wilson's new plan ultimately added 2.3 million acres of county forests to Wisconsin public lands.<sup>xxxiv</sup> Similarly, in 1925, Wisconsin passed the Enabling Act, which authorized the federal government to purchase land under the Federal Weeks Law of 1911. Requiring approval of county boards, the National Forest Reservation Commission could capture tax delinquent lands as well, ultimately creating the 1.5 million-acre Nicolet-Chequamegon National Forest.<sup>xxxv</sup> Griffith's plan to create a multi-use forest reserve of up to 2 million acres in the Northwoods would be more than doubled. Forest rangers would play a critical role managing and protecting the newly acquired public lands.

In 1933, Franklin D. Roosevelt's New Deal launched the Civilian Conservation Corps (CCC), or Roosevelt's "Tree Army," providing relief for families and reform of environmental practices. The CCC created a specific division of camps for state forests. Wisconsin forest rangers were ready to step up and lead the efforts of the CCC, and not surprisingly, many of the CCC forestry efforts followed Griffith's original forestry model.<sup>xxxvi</sup> From 1935-1942, Camp Mercer was the administrator of the 5<sup>th</sup> Forest Subdivision District, directing numerous Northwoods CCC camps. The camp newspaper, *The Mercer Monitor*, included a special section entitled, "THE RANGERS' TELL US," which documented the impressive accomplishments of the CCC and the leadership of state forest rangers.<sup>xxxvii</sup> This collaboration between the U.S. Army, which operated the CCC camps, and state forests leaders empowered thousands of CCC men to achieve amazing outcomes under the field supervision of forest rangers.

Today, the men and women who protect our public lands as rangers represent an impressive tradition of public service. From the first 12 rangers to the modern DNR, county and national forests employees who work in the field continue a Northwoods legacy that dramatically defines our state. As folks enjoy living or visiting "Up North," it's important that they understand the abundance of public natural resources stem

from careful planning, hard work and formative leadership, thereby ensuring our access to a wealth of lakes, forests and streams.

### **Wisconsin's First Forest Rangers**

E. M. Weaver,  
Head Ranger, Woodruff

G. H. Baily  
Forest Ranger, post unknown

P. C. Christensen,  
Forest Ranger, Tomahawk Lake

J. B. Cook,  
Forest Ranger, Star Lake

A. E. Doolittle,  
Forest Ranger, Woodruff

Henry Freund,  
Forest Ranger, Boulder Junction

H. W. Kruger,  
Forest Ranger, Rest Lake

J. H. Krumm,  
Forest Ranger, North Crandon

Frank J. Long,  
Forest Ranger, Sayner

J. J. McDonald,  
Forest Ranger, Minocqua

P. A. McDonald,  
Forest Ranger, Boulder Junction

F. G. Wilson,  
Forest Ranger, Woodruff<sup>xxxviii</sup>

---

<sup>i</sup> Report of the State Forester of Wisconsin. For 1909 to 1910. Madison Wisconsin: Democratic Printing Company, State Printer, 1910. p. 27.

<sup>ii</sup> Wilson, F.G. *E.M Griffith and the Early Story of Wisconsin Forestry (1903-1915)*. Department of Natural Resources, Madison WI. 1982, p. 8.

<sup>iii</sup> Report of the State Forester of Wisconsin. For 1911 to 1912. Madison Wisconsin: Democratic Printing Company, State Printer, 1913. p. 18.

- 
- <sup>iv</sup> Report of the State Forester of Wisconsin. For 1909 to 1910. Madison Wisconsin: Democratic Printing Company, State Printer, 1910. p. 19.
- <sup>v</sup> "Forest Fires Do Damage." *Montreal Miner*. Accessed January 2, 2020.  
<https://mwhistory.pastperfectonline.com/archive/8480D77E-774D-4558-B5E9-546120930857>.
- <sup>vi</sup> Wilson, F.G. *E.M Griffith and the Early Story of Wisconsin Forestry (1903-1915)*. Department of Natural Resources, Madison WI. 1982, p. 37.
- <sup>vii</sup> Wilson, F.G. *E.M Griffith and the Early Story of Wisconsin Forestry (1903-1915)*. Department of Natural Resources, Madison WI. 1982, pp. 37-38.
- <sup>viii</sup> Report of the State Forester of Wisconsin. For 1911 to 1912. Madison Wisconsin: Democratic Printing Company, State Printer, 1913. p. 81.
- <sup>ix</sup> Biennial Report of the State Conservation Commission of Wisconsin For the Years 1915-1916. Madison Wisconsin: Cantwell Printing Company, State Printer, 1916. p.132.
- <sup>xx</sup> Report of the State Forester of Wisconsin. For 1909 to 1910. Madison Wisconsin: Democratic Printing Company, State Printer, 1910. p. 107.
- <sup>xi</sup> Report of the State Forester of Wisconsin. For 1909 to 1910. Madison Wisconsin: Democratic Printing Company, State Printer, 1910. p. 108.
- <sup>xii</sup> Mulford, Walter. *The Forest Rangers- Course 1914*. BULLETIN OF THE UNIVERSITY OF WISCONSIN Serial No. 590, General Series No. 412. The University of Wisconsin College of Agriculture. p.3.
- <sup>xiii</sup> Report of the State Forester of Wisconsin. For 1909 to 1910. Madison Wisconsin: Democratic Printing Company, State Printer, 1910. p. 44.
- <sup>xiv</sup> Report of the State Forester of Wisconsin. For 1909 to 1910. Madison Wisconsin: Democratic Printing Company, State Printer, 1910. p. 110.
- <sup>xv</sup> Wilson, F.G. *E.M Griffith and the Early Story of Wisconsin Forestry (1903-1915)*. Department of Natural Resources, Madison WI. 1982, pp. 30.
- <sup>xvi</sup> Report of the State Forester of Wisconsin. For 1911 to 1912. Madison Wisconsin: Democratic Printing Company, State Printer, 1913. p. 82.
- <sup>xvii</sup> Wilson, F.G. *E.M Griffith and the Early Story of Wisconsin Forestry (1903-1915)*. Department of Natural Resources, Madison WI. 1982, pp. 32.
- <sup>xviii</sup> Harrington, C. L. (Cornelius Louis), 1891-1966. C. L. Harrington Papers, 1904-1966, n.d. NOTICE, Plum Lake, WI. 1912.
- <sup>xix</sup> Mulford, Walter. *The Forest Rangers- Course 1914*. BULLETIN OF THE UNIVERSITY OF WISCONSIN Serial No. 590, General Series No. 412. The University of Wisconsin College of Agriculture. pp. 9-10.
- <sup>xx</sup> Buchard Orvis, Mary. "Summer Camps on the Bargain Counter-Wisconsin's Unique Forestry Policy." *LaFollette's Weekly Magazine*, July 6, 1912. p. 7.
- <sup>xxi</sup> Report of the State Forester of Wisconsin. For 1911 to 1912. Madison Wisconsin: Democratic Printing Company, State Printer, 1913. pp. 77-78.
- <sup>xxii</sup> Wilson, F.G. *E.M Griffith and the Early Story of Wisconsin Forestry (1903-1915)*. Department of Natural Resources, Madison WI. 1982, p. 34.
- <sup>xxiii</sup> Harrington, C. L. (Cornelius Louis), 1891-1966. C. L. Harrington Papers, 1904-1966, n.d. NOTICE, Plum Lake, WI. 1912.
- <sup>xxiv</sup> *One Hundred Years of Wisconsin Forestry, 1904-2004*. Black Earth, WI: Trails Custom Pub., 2004. pp. 34-36.
- <sup>xxv</sup> Culhane, E. (2020). *Back in the day -- Wisconsin Natural Resources magazine -- June 2015*. [online] Dnr.wi.gov. Available at: <https://dnr.wi.gov/wnrmag/2015/06/back.htm> [Accessed 1 Jan. 2020].
- <sup>xxvi</sup> Biennial Report of the State Conservation Commission of Wisconsin For the Years 1915-1916. Madison Wisconsin: Cantwell Printing Company, State Printer, 1916. p.69.
- <sup>xxvii</sup> Biennial Report of the State Conservation Commission of Wisconsin For the Years 1915-1916. Madison Wisconsin: Cantwell Printing Company, State Printer, 1916. p.69.



- 
- <sup>xxxviii</sup> Wilson, F.G. *E.M Griffith and the Early Story of Wisconsin Forestry (1903-1915)*. Department of Natural Resources, Madison WI. 1982, p. 3.
- <sup>xxxix</sup> Biennial Report of the State Conservation Commission of Wisconsin For the Years 1915-1916. Madison Wisconsin: Cantwell Printing Company, State Printer, 1916. p.85.
- <sup>xxx</sup> Biennial Report of the State Conservation Commission of Wisconsin For the Years June, 1917- June 1918. Madison Wisconsin: Democratic Printing Company, State Printer, 1918. p.115.
- <sup>xxxi</sup> Biennial Report of the State Conservation Commission of Wisconsin For the Years June, 1917- June 1918. Madison Wisconsin: Democratic Printing Company, State Printer, 1918. p.117.
- <sup>xxxii</sup> Bates, John. *Our Living Ancestors: the History and Ecology of Old-Growth Forests in Wisconsin (and Where to Find Them)*. Mercer, WI: Manitowish River Press, 2018. p. 39.
- <sup>xxxiii</sup> "Appendix B: Cultural History Of Wisconsin's Forests". 2010. *Dnr.Wi.Gov*.  
[https://dnr.wi.gov/topic/ForestPlanning/documents/AppendixB\\_100721.pdf](https://dnr.wi.gov/topic/ForestPlanning/documents/AppendixB_100721.pdf). p.4.
- <sup>xxxiv</sup> Wilson, F.G. *E.M Griffith and the Early Story of Wisconsin Forestry (1903-1915)*. Department of Natural Resources, Madison WI. 1982, p. 3
- <sup>xxxv</sup> "History Of The Chequamegon-Nicolet National Forests". 2020. *Fs.Usda.Gov*. Accessed January 1. [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5109506.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5109506.pdf).
- <sup>xxxvi</sup> "Civilian Conservation Corps-660Th Company S-79 - Manitowish Waters Historical Society". 2020. *Manitowish Waters Historical Society*. <https://www.mwhistory.org/early-history/cc-660-co-sf-79/>.
- <sup>xxxvii</sup> Mercer Monitor. "THE RANGERS' TELL US", 1934. [http://ppolinks.com/mwhistory/2019\\_2\\_1.pdf](http://ppolinks.com/mwhistory/2019_2_1.pdf). p.1.
- <sup>xxxviii</sup> Report of the State Forester of Wisconsin. For 1911 to 1912. Madison Wisconsin: Democratic Printing Company, State Printer, 1913. P. 2.