

When the War Put Clallam County to Work

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Division – Senior

Spruce Division and Railroad

Paper length – 1877

America contains 3,140 counties, but not all participated in WWI. The most Northwestern County, however, played a role in WWI by extracting spruce wood to be used for thousands of warplanes. A great deal of this wood in Clallam County was located in the most remotest and inaccessible portion of the country (Williams 7). To obtain the spruce, a Spruce Production Division from the Army Signal Corps was formed and a great railroad had to be constructed. Not only was this the most costly railroad at \$10 million, this was the first large scale use of motor vehicles in the Pacific Northwest (Williams 7-8). Over 100,000 men and women contributed to the Spruce Production Division, many of whom were civilians searching for a job. This Spruce Production Division in Washington State produced just over 88 million board feet of wood, which was enough to manufacture over 12,000 warplanes (Hauff 8). Clallam County may seem secluded and unimportant in global wars, but this idea is certainly false and the Spruce Division proves this. Not only did this project give Clallam County a role in WWI, but we still see its impact today.

Why exactly was the spruce wood critical during World War 1? It all has to do with aircraft. The battles around the world at that time were gradually moving from land to air with the invention of aircraft. Spruce became one of most valuable wood for aircraft. America had a great deal of spruce trees. The spruce wood was more valuable than most because when shot at by ammunition, the wood would not splinter, shatter, or snap. The wood fibers would simply separate, resulting in wood with minimal damage. Surprisingly, it was not normally used in aircraft since it was difficult to find. Spruce was light, strong, and ideal for planes, and played a big role in the development of aircraft.

The demand for aircraft was going from bad to worse in Europe. The Aircraft Production Board of the U.S. desired 3,000,000 board feet per month. Sitka Spruce, which was the most

ideal wood, is found in the U.S. mainly in Washington, Oregon, California, and Alaska. The largest source of which was in our good old Clallam County. It was estimated about 2 billion board feet of wood rested in Clallam County in 1916 (Railway Review 961). Once it was understood where the Spruce was, the extraction began. In the July of 1918, Clallam County spruce extraction began, which meant loggers and lumbermen.

The Loyal Legion of Loggers and Lumbermen (LLLL), which did most of the extraction of Spruce, was formed in 1917. The government had first looked to the private sector for spruce, but the private sector failed miserably. Strikes and sabotage led by disgruntled workers caused short or long annoying work stoppages. After private sectors failed, two organizations started making efforts to improve work and, by all means, get some spruce. They were the Industrial Workers of the World (IWW), and the American Federation of Labor (AFL). The AFL attempted to look for better working methods to be used in this project. The IWW started a program that called for eight hours of production from ten hours on the job, allowing workers breaks and lunches. This was quite successful. The IWW was much more significant in the forming of the LLLL than the AFL. In 1917, after much-complicated negotiations with the IWW, AFL, and politics, the Loyal Legion of Loggers and Lumbermen was born. The LLLL soon started recruiting hordes of men, who had eight-hour days on the job, to start building the railroad.

Diligent men had roles that eventually led to the forming of the LLLL. The Secretary of War at that time was Newton D. Baker. Newton Baker, appointed by President Woodrow Wilson in 1916, suggested that John J. Pershing to be elected as the head of the American Expeditionary Force, which was an independent American army that fought in the Great War. John Pershing chose Brice P. Disque



LLLL Badge
Flying Tiger
Antiques

(pronounced “disk”) to be the Brigadier General for the Spruce Production Division. Brice Disque had been a cavalry officer in the Philippines then a prison warden in Michigan (Hauff p. 18). Disque has been the most recognized individual associated with the SPD with his active role of overseeing the operation and his involvement with the forming of the LLLL. To get the LLLL up and running, many men had to be appointed for tasks that not a normal person could accomplish. Captain C. F. Allen was in charge of a multitude of the construction projects on both the Milwaukee road and the Spruce Division railroad. Morton Boss, known as “Boss Boss”, was put in charge of the railroad construction. All these men and more worked hard on the Spruce Production Project and did a mighty fine job in doing so.

The most valuable aspect of the Spruce Production Division was the men who worked for eight-hour days for about 8 months. At the start of the LLLL, 3,000 civilians and 3,000 military workers were recruited (Kendall 1). By March of 1918, over 62,000 members were recruited. By the end of the war, the SPD had nearly 100,000 members (Hauff 16). Most newcomers had to be trained for work on the railroad and tree felling, but some were skilled Loggers or Lumbermen. They were instructed to extract Sitka Spruce to be used for aircraft as soon as possible. Overall, the LLLL’s workers under Morton Boss and Brice Disque did a splendid job!

The construction of the Railroad led by Morton Boss was costly and required much labor. By the specifics, the railroad was about 37 miles long, had two tunnels, and two bridges over the Sol Duc River. The larger tunnel was named McFee and the shorter, Daley-Rankin. Along the railroad, there were also water tanks and telegraph/telephone wires installed. The beginning of the construction was around June 1st, and ended in January of 1919. It stretched from West Joyce to the Lyre River drainage, along the Lyre River canyon to the Northeast shore of Lake Crescent, and ended in the Sol Duc Valley (Kendall 3). Machines and supplies had to be brought in by the

Milwaukee railroad in Port Angeles. Installing the rails on the ground was especially tedious. After a tree had been cut down, the stump had to be pulled out to make room for the Railroad. This would result in a giant, unnecessary hole that had to be filled with dirt. To loosen rock blocking the path of the railroad, explosions such as dynamite were used. This happened mainly along the shore of Lake Crescent. One of the most significant machines used was the Marion shovel, which is similar to a modern Excavator. For the most part, there was mainly an abundant amount of men, shovels, and wheelbarrows. With hardworking men, helpful tools, and handy machines, the railroad was speedily assembled.



A Marion shovel is similar to a modern Excavator.

Timber Industry Modelers and BIG RENTZ

The Sitka spruce was transported in a process from the deep forests to the Port Angeles mill. After the tree was cut down, the bark would be stripped and then would either be rived or sawed in sections. The process of riving was completed by hammering wedges into the side of a fallen tree lengthwise until it was split in two (Williams 7). Once the log was cut into a portable size, it was loaded onto trucks driving on wooden plank roads called corduroys. It was planned for the wood to be loaded on carts on the railroad, but the Spruce Production Division never got that chance in Clallam County. The spruce was taken to the Port Angeles mill, which was constructed during this operation. At that time, the Port Angeles mill was capable of tuning out 1-1.5 million board feet daily (Hauff 35). The wood was handled carefully through a repeating process



The PA Mill 1919. craigmagnuson.com

that all lasted just about 14 months.

The Armistice was signed on November 11, 1918, ending The Great War and lesser known, the Spruce Production Division. The felling of spruce trees was discontinued on November 12, the next day. Most of the loggers and lumberman were back home and all machines were rolled out by mid-January (Kendall 3). The machines and tools used in Clallam County and other locations along the Washington Coast were shipped to Vancouver where the value of all machinery and tools was estimated to be \$12 million (Williams 9). A few generals of the Spruce Production Division stayed behind for minor clean-ups concerning the camps and tools left lying around. The great Spruce effort was well done but ended too abruptly.

The Spruce Production Division in Clallam County left several reminders for us indicating they were there. The first is that in the 1920s, it flooded the Northwest of America with an excessive amount of tools and machines, which were used in other construction projects. Secondly, the Port Angeles Mill they built is surprisingly still in use. Third, the great railroad constructed by the Spruce Production Division was used for a time. Though not immediately after the discontinuation, the railroad was later used for transportation until 1954 when it was sold for scrap. Fourth, the methods they created and exercised, like the 8-hour workdays, were adopted and used in later wood extraction projects. Lastly, they made a path into the once dense and inaccessible forest to one day become a trail people enjoy today. The Spruce Production Division contributed to World War 1 in some ways and improved Clallam County in others.

The trail where the railroad used to be is the most significant result of the Division and is quite a very nice



Entrance of the McFee Tunnel.

Kodak Camera: Aiden Collection

walk. It is located off East Beach Road. Currently a valuable part of the Olympic Discovery Trail, a non-motor trail that stretches for 134 miles from Port Townsend to La Push, the railroad trail features a 20-minute gravel walkway to the McFee Tunnel then a 30 minute walk to the Daley-Rankin Tunnel surrounded by spruce trees and Lake Crescent. The trail was completed in 1981. It was warned not to go into the tunnels because of falling rocks (Casey 3). However, in 2017, the 450-foot long McFee Tunnel became safe as workers widened the trail and secured the rock walls. On July 16, 2017, the tunnel was reopened to the public. More construction has been planned for the Spruce Railroad Trail to pave the entire length (Ollikainen para. 1-23). The trail is excellent walk and will become more enjoyable in the future.

The Spruce Production Division affected Clallam County in numerous ways. It provided us a trail used by thousands of folks. It proved that a dense, inaccessible forest could be used for countless benefits. It is amazing something that occurred a century ago could still affect lives today. Kathy Estes said recently, “Many people think, ‘Oh, World War I, it happened someplace else, and it did. But Clallam County had quite an active role in the war effort with the Spruce Division...” The world may yet still have another war, and Clallam County may be called on for spruce again. Clallam County proved quite beneficial and it has the potential to be greatly beneficial again. We owe our thanks to the men and women who helped the Spruce Production Division make a critical impact on Clallam County.

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