



Lumbering in Michigan

By Maria Quinlan

The "shanty boys" and the "timber barons" of the lumbering era were some of the most colorful characters in Michigan's history. Tales of the lumberjacks' prodigious strength and of the company owners' opulent houses and manner abound, but the lumbering industry produced more than songs and legends. A vast amount of housing in the Midwest was constructed of Michigan timber, and the profits taken from the state's forests were in turn used to fund a variety of enterprises around the state.

Geographic factors played an important part in the development of Michigan's lumber industry. White pine, the wood most in demand for construction in the nineteenth century, grew in abundance in northern Michigan forests. The state was also crisscrossed by a network of rivers which provided convenient transportation for logs to the sawmills and lake ports.

By 1840 it was apparent that the traditional sources of white pine in Maine and New York would be unable to supply a growing demand for lumber. Michigan, the next state west in the northern pine belt, was the logical place to turn for more lumber. The first commercial logging ventures in the state utilized eastern techniques, capital, and labor, but Michigan lumbering soon expanded beyond the scope of anything previously known and established itself as one of the state's most important industries.

The production of Michigan lumber increased dramatically during the middle decades of the nineteenth century. The Saginaw Valley was the leading lumbering area between 1840 and 1860, when the number of mills in operation throughout the state doubled, and the value of their products increased from \$1 million to \$6 million annually. Rapid growth continued, and by 1869 the Saginaw Valley alone was earning \$7 million yearly.

As the potential of the lumber business became apparent, companies were organized to begin commercial logging in other areas of the state. Many rivers, such as the Muskegon, that could carry logs quickly were transformed into a valuable means of transportation. By 1869 Michigan was producing more lumber than any other state, a distinction it continued to hold for thirty years. During that time loggers penetrated and settled the interiors of both peninsulas and moved away from the rivers in search of timber. Lumbermen became less selective as the years passed, cutting inferior quality white pine and logging other kinds of trees in order to meet a continuing demand for wood. In 1889, the year of greatest lumber production, Michigan produced approximately 5.5 billion board feet. (A board foot, the standard unit of lumber measurement, is a piece of wood 1 foot long, 1 foot wide and 1 inch thick).

The increased lumber production during the final decades of the nineteenth century was due in part to changes in machinery and techniques which brought greater efficiency to the industry. Throughout the first half of the nineteenth century lumbering had been a weather dependent and seasonally limited enterprise. Cutting was done during the winter when timber could be pulled on

large sleds, if there were snow, from where the tree had been felled to banking grounds along a river.

The river drive was also dependent on a good winter snowfall for it was the spring run-off which enabled the rivers to carry the huge pine logs to the sawmills. Log drivers were usually men who had spent the winter in the woods cutting timber. It was their job to control the flow of the river by building and breaking dams and to break up log jams they could not prevent.

Sawmills were most often located at the mouths of the driving rivers. Associations were formed to cooperate in the sorting of logs into a pond or bay where floating "booms" of logs separated the property of one company from that of another. From the booms logs were floated to the mills to be sawed.

The sawmill was the first unit of the lumber industry to achieve increased output through technological change. Although water-powered mills were still common in the 1860s, steam saws, whether up-and-down or circular, were rapidly replacing them. Steam saws so increased the capacity of the mills that it became necessary to devise faster methods of handling both logs and sawn lumber in order to avoid pile-ups and delays. By the end of the 1870s virtually every mill operation had been mechanized to some degree.

In addition to increased speed of mill sawing, mechanical innovations were eventually also able to reduce waste. The first circular saws of the 1860s had wide blades that produced mountains of sawdust. They wobbled as they cut through the timber, so that the boards that were turned out "more nearly resembled washboards than lumber." Within a few years, however, these problems had been almost totally eliminated. The widespread adoption of the band saw in the 1880s further reduced waste. Metal technology now made it possible to build a saw with a thin band of steel operating as a continuous belt that cut both rapidly and efficiently.

Greater mill capacity coupled with a continuing demand for wood also put pressure on the loggers to cut as much as possible each season. A number of small changes improved the efficiency of woods operations somewhat. These included the substitution of the cross-cut saw for the axe in felling timber and the replacement of oxen with horses as sled teams. The development of rutters and water sprinklers to maintain the sled tracks enabled the woodsman to haul heavier loads.

Two Michigan-initiated innovations of the 1870s were responsible for the largest increases in logging production. The [Big Wheels](#) invented by [Silas Overpack](#) of Manistee enabled cutting to continue in the snowless seasons by providing an alternative to sled transportation. As its name implies, this device consisted of a set of enormous wheels drawn by a team of horses. Logs were chained beneath the axle, and once the inertia of the load had been overcome, it was relatively easy to keep the wheels moving.

Like the logging wheels, the narrow gauge railroad helped to make lumbermen independent of the weather. Trains could be used in place of sleds year round for the relatively short run to the riverside banking grounds, or the river drive itself could be ended by carrying the logs to a mainline railroad depot. In addition, the logging railroad was sufficiently economical to allow cutting in areas that had been considered too far from the nearest driving stream to make sledding practical. Michigan lumbermen were not the first to use railroads to carry logs, but the idea of using temporary narrow gauge track to supplement other means of transportation did originate within the state. And the widespread publicity given the successful experiment of Winfield Scott Gerrish during the winter of 1876-77 in Clare County provided the impetus for the development of small railroads industry-wide. (The river drive, however, continued to be an important method of log transportation throughout Michigan's lumbering era.)

Lumbering employed many Michigan residents. It made the fortunes of a few men such as [Charles Hackley](#) of Muskegon, Louis Sands of Manistee, and Perry Hannah of Traverse City. These men were exceptions to the rule, however. The vast majority of men employed in the lumber industry worked long hours for low pay. Lumberjacks, most often single men in their twenties, spent the winter in the woods, working from dawn to dusk six days a week, cutting, hauling, and piling logs. They were usually paid between \$20 and \$26 per month and were also provided room and board. Those who stayed on in the spring as river drivers received higher wages due to the grueling nature and the very real dangers of their job. There were amusements for the few leisure hours such as singing songs and telling stories which became lumbermen's classics, but the company never varied, and often many weeks passed between trips to town. Between 1840 and 1870, Michigan loggers came primarily from New York, Ohio, New England, and Pennsylvania. Throughout this period, however, the proportion of Michigan-born among the population was steadily increasing. Canadians always constituted the largest single group of foreign-born lumberjacks, although many stayed only for one or two seasons and then returned home. The lumber camps were also manned by individuals from many ethnic groups. Near the end of the nineteenth century, however, the number of Scandinavians entering the state increased dramatically; the number of Swedish immigrants, for example, which was a mere 16 in 1850, had grown to 9,412 by 1880, and stood at 26,374 in 1910. During these same decades there was a corresponding influx of Scandinavians into the lumber camps.

Much less is known about the backgrounds of the men who labored in the sawmills in the late nineteenth century, but it is likely that they followed the same general pattern as the loggers. Like the men in the woods, mill hands worked long hours. They did not face the isolation of the logging camps, but their working and living conditions were often worse: noisy, dirty mills and dingy, cramped housing. Although mill workers received higher wages than loggers, from \$30 to \$50 per month, they had to provide their own room and board. They were also more likely to have families to support than were the loggers.

Like workers in other American industries, those employed in lumbering made attempts at organization during the decades following the Civil War. Union organization was most successful among the mill workers because they were concentrated in the towns. Prior to 1884 there were scattered unsuccessful strikes in Michigan mills. They did little to unite the workers but which effectively consolidated the mill owners against the workers.

The largest strike occurred in the Saginaw Valley in 1885. Mill hands demanded an immediate shift to a ten-hour day (which was due to occur soon anyway as the result of a recently enacted law) and more importantly, that the change not be accompanied by a reduction in pay. Within a month, in many mills in Saginaw and East Saginaw, the strike had been broken, but the workers in Bay City, the source of the strike movement, held out for another month. The mill hands had shown a willingness to cooperate in relieving some of the financial hardships caused by the strike; they were less successful in uniting to negotiate with the mill owners. Nor did this strike spur the growth of the labor movement. By the mid-1880s the forests of the Saginaw Valley were nearly exhausted, and as jobs became more difficult to find, disruptions became fewer.

In their haste to move on to new cutting sites, loggers usually gave little thought to the lands they were leaving. By the 1870s stumps and branches already littered much of northern Michigan. There was no longer any barrier to erosion on cutover land, and the dried debris created an enormous fire hazard. At the end of the dry summer months fires frequently broke out, sometimes moving into still uncut timberlands or settled areas, as in 1871 and 1881, when fires broke out across the state. These dangerous conditions in the former logging districts inspired, in large part, the first attempts to conserve Michigan's natural resources.

Lumber companies had no desire to own already logged parcels of land and thus found themselves trying to sell large tracts of land in the 1880s and 90s. They vigorously promoted the former forests as good farmland, ready for the plow, but experience soon proved that this was not

the case. Most of the land simply could not support continuous farming, and its fertility was soon exhausted. Families that had put all their savings and hopes into such a farm often had no alternative but to give it up when they could not pay their taxes. Tax delinquent land as well as acreage simply abandoned by lumber companies was thus acquired by the State of Michigan, forming the basis for its early efforts toward reforestation and land management.

The primary effect of the lumber industry upon the State of Michigan was economic. The timber boom in the latter half of the nineteenth century brought millions of dollars into the state, both to lumbermen and those who supplied them. Thousands of men and some women found employment in some aspect of the business. The decline of lumbering also had its effects; both individuals and entire villages and cities, formerly thriving, lost their most important source of income.

The lumbering era also saw vast changes in the natural environment of northern Michigan. The conservation programs in effect today on state lands grew out of concern over the conditions the loggers had left behind them. Another legacy evident today is the body of songs and stories about lumbering, an important part of the folklore tradition of Michigan, and indeed, of the entire nation.

Between 1840 and 1900, lumbering changed from a small, speculative business to an efficient industry that had lost much of its earlier uncertainty. Michigan, as a top producer for much of the period and cradle for industry innovations, was key to the industry's development.