## The Clearing of Michigan's Forests

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By Dirk Bloemendaal

#### Michigan Forests

"This country, so temperate, so fertile, and so beautiful that it may justly be called the earthly paradise of North America, deserves all the care of the King to keep it up to attract inhabitants to it, so that a solid settlement may be formed there which shall not be liable to the usual vicissitudes of the other posts in which only a mere garrison is placed."

-Cadillac to King Louis IV (1694)



#### **Early History**

Michigan has a long and rich history. Home to the Ottawa, Ojibway, Chippewa, Potawatomi, Menominee, Wyandot and Dakota tribes.

Explored and claimed by the French, Spanish, British and Americans.

U.S. Congress created the Northwest Territory in 1787 & the Michigan Territory in 1805.

John Jacob Astor created the American Fur Company in 1808 & became the richest man on the continent (after co-opting the Northwest Co & the Mackinac Co.

The Indians sided with the French during the French-Indian War. The Indian Wars overlapped the War of 1812, with the Indians again backing a losing hand - this time the British.

The Americans then began fully settling and taming the Michigan wilderness.

#### The Michigan Territory Opens Up

The Erie Canal opened in 1825, opening Detroit to the Eastern markets.

Gov. Lewis Cass of the Michigan Territory pushed MI on the East Coast.

In 1826, furs worth \$200,000 went across Lake Erie east to Buffalo.

In less than 10 years wheat began to move, and by 1841 - four years after MI became a state - Detroit shipped out 180,000 bushels of flour, 12,000 barrels of whiskey, and \$75,000 worth of sawed lumber.

At Buffalo, MI-bound Easterners switched from canal packet boats to deep-draft lake steamers. Settlers on wagons came up from Indiana and Ohio, and southerners came up the Ohio River.

#### Part of a Greater Forest

Northern Michigan's timber was part of a vast band of forests that began far to the east in Canada's Maritime Provinces and swept westward through New England, the St.

Lawrence Valley, New York, Pennsylvania and on to Michigan, Wisconsin and Minnesota.

Of the forests' variety of trees - oak, maple, beech, hickory, cedar, hemlock and walnut, just to name some - white pine was the most highly prized. It dominated the lumber industry the way that beaver pelts dominated the fur trade.



#### The Lumbermen Cometh

By the 1830's, Michigan's untapped timber resources were attracting lumbermen. They first appeared in the Saginaw Valley, which remained the state's leading lumber producer.

Until late in the century, the industry depended upon rivers to transport logs to the sawmills. Mills along the Saginaw had access - through the tributaries of the Tittabawasee, Shiawassee, Flint and Cass Rivers - to the largest watershed in the state.



#### Michigan's Trees Were at First an Afterthought

At first, little need for Michigan's lumber - the East had what it needed.

But Chicago was beginning to grow, and in 1837, a sawmill went up at the mouth of the Muskegon.

White pine was soon recognized as the best building lumber on earth - straight-grained, easy to work, lightweight but very strong.

Settlers wanted to clear the land to plant crops. When it was realized that boards could be sold for a profit - big bonus.

Precedent: John Jacob Astor set it - Take what there is, take all of it, take it as fast as you can, and let tomorrow's people handle tomorrow's problem.

#### Finding the White Pine

Land-lookers (timber cruisers)

Worked off the surveyor's grid, with a compass, tramping the countryside

Marked out the stand and filed a claim at the Ionia Land Office. Working light, carrying what he needed on his back, often buying on his own account.

Famous timber-cruiser race: cruiser David Ward found a fine stand of cork pine between the headwaters of the Manistee and AuSable. A competitor was looking, too.

Ward collected his data, but had to get to Ionia (and first Detroit to get the money). Hiked 80 miles to the Tobacco River, took a canoe 80 miles to the Saginaw, took a stage to Detroit, horse and buggy to Lansing (18 hours), coach to Ionia. Beat the competing land cruiser by three hours.

In 1834, Harvey Williams installed the first steam-powered mill, on the Saginaw.

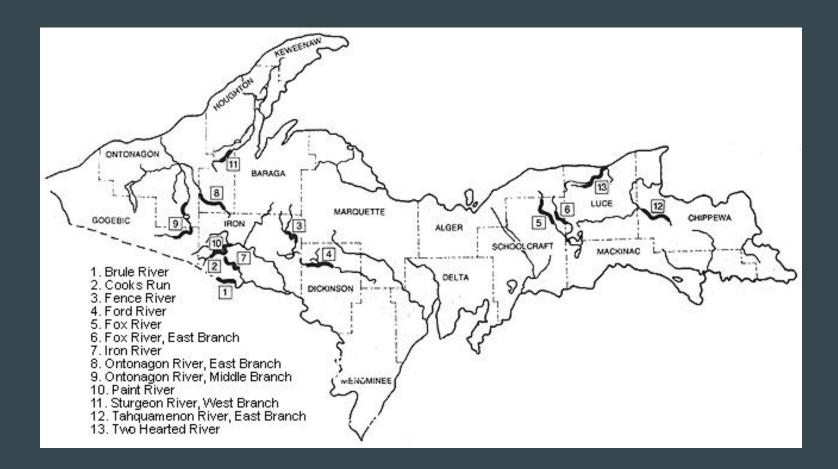
Michigan's logging rivers flowed into the Great Lakes, with Lakes Michigan and Huron controlling the trade.

The sawmills were located near river mouths, enabling transporting, cutting and shipping.

The Emerson sawmill boasted it could cut enough timber to build a privy six feet high and six feet wide from Saginaw to Albany, NY - the lumber capital of the East.



FIG. 26. River valleys in Michigan.



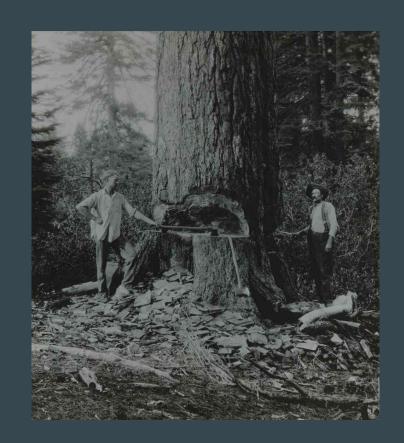


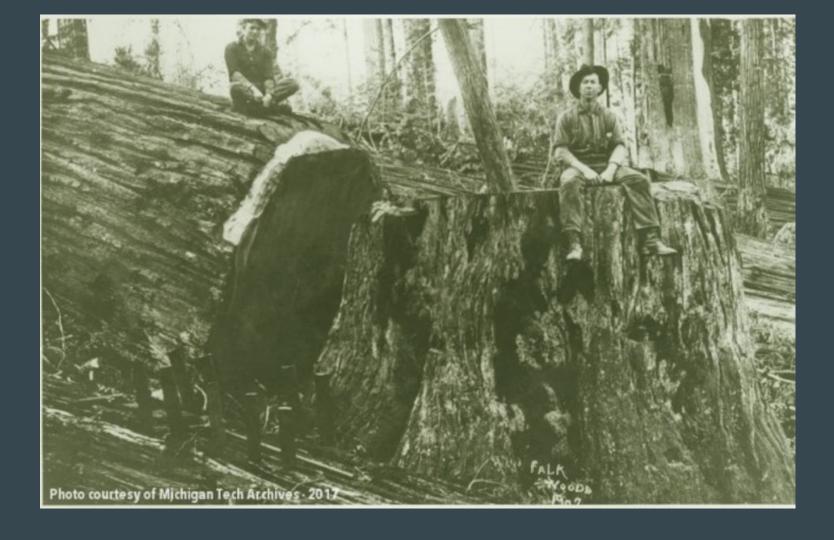
#### The Cutting of the White Pine

Many of the earliest loggers were Mainers and Quebecers, working in teams of two with axes..

A cut pine was typically cut into logs, once it was felled and trimmed. The slash was left where it lay, and the logs had to be hauled to the nearest river bank (later, small narrow-gauge railroads were used).

Before sawmills took hold, the logs had to be cut into boards, and a pit was used with a two-man rip saw.





#### The Technology Improves

Water power was used next, using the "whip saw" and "sash saw."

Then steam-powered sawmills. Early one set up in 1834 using the engine from "Walk in the Water," a steamboat operating above Niagara Falls..

Cut planks were usually 12 feet long, one inch thick and 12 inches wide, equalling 12 board feet of lumber.

First load of first-rate cork pine went out to Albany. Investors were impressed. By 1854, there were 12 mills in Saginaw Valley and that year, 60M board feet was shipped.

Buzz saw supplanted by the gate saw, then the gang saw, then the band saws.

#### The Logging Camp

Early logging camps were both primitive and downright repellent.

A single log shanty housed everybody but the oxen, had a packed earthen floor and no windows. It had a single hearth of stones (no stove) and a hole in the roof for the smoke.

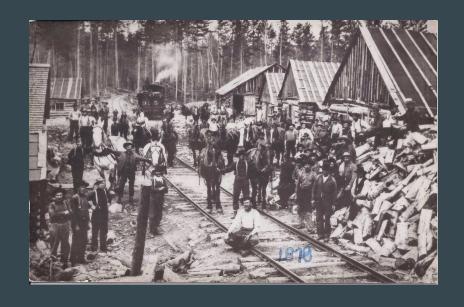
Early camps had about 15 loggers. Beds were pine boughs or hay set on log poles.



#### The Camps Grow

Increased competition meant better conditions and better food as logging camps worked to attract and keep loggers.

At first, food was simple - salt pork, salt beef, bread, tea.



#### Conditions in the Camps Improve

Conditions improved as competition for workers accelerated

Bunk houses were built, along with cooking and eating facilities, stables for the animals, blacksmith and supply shacks







#### A Logging Army Moves on its Stomach

Pork and beans now supplemented by:

Pancakes with molasses, great platters of fried or boiled potatoes

Thick beef stew, fried salt pork, slabs of corned beef, pork gravy

Canned tomatoes, pies, doughnuts and cookies

Tubs of margarine, called "axle grease"

Huge amounts - robust, simple and filling

# The Cutting Technology Improves

The ax was supplemented by the crosscut saw.







#### The Big Wheel

Invented in Manistee

10-12 feet across, could hold three-four big logs

Pulled by a team of oxen or a pair of Percherons, usually to a railroad siding



#### Moving the logs by sleigh

The rivers were key and the iced roads were crucial.

The roads to the rivers were iced using sprinklers at night.

The horses wore calked horseshoes, the equivalent of studs.

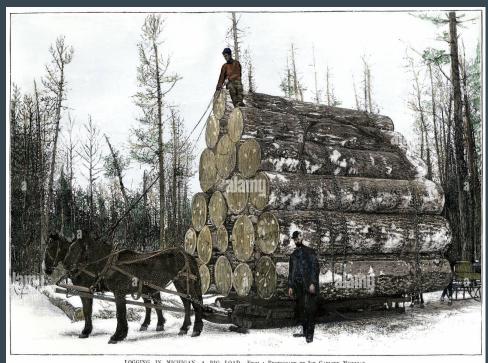




#### Stacking was an Art Form

Stacking the logs, weighing many tons, took great experience and skill.

Downhill runs could be an adventure!



LOGGING IN MICHIGAN-A BIG LOAD.-FROM A PHOTOGRAPH BY ISH, GAYLORD, MICHIGAN.

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#### The Railroads Arrive

The railroads began to criss-cross Michigan in the 1850's.

One important line was pushed out of Detroit, to Pontiac, to Grand Rapids and on to Grand Haven. Lines ran up to the Straits.

The U.P. had lines tying Marquette, Escanaba and Ontonagan.



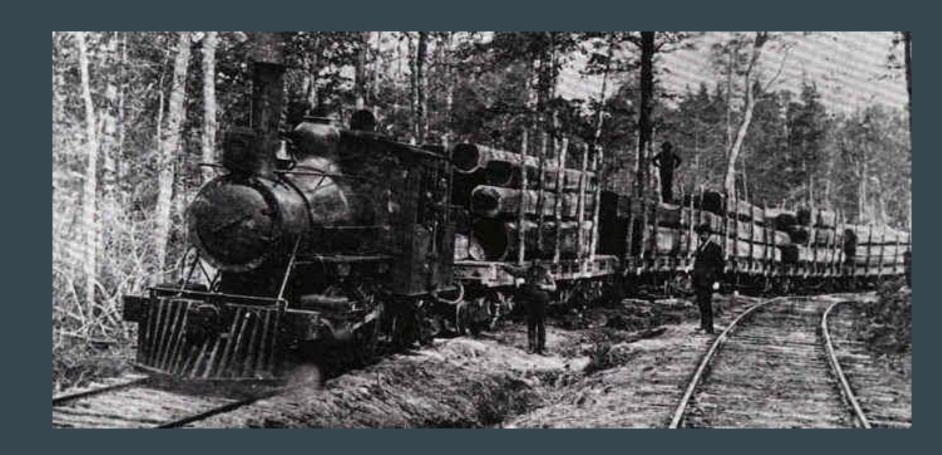
#### The Arrival of the Narrow Gauge RR

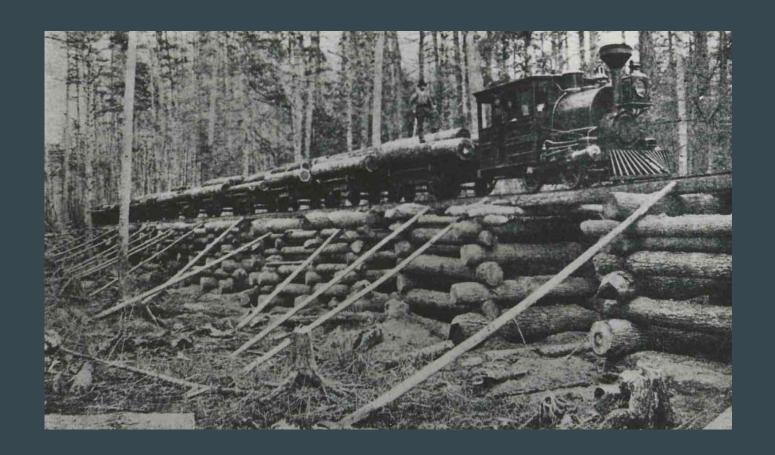
In 1876 a young lumberman named Scott Gerish achieved a breakthrough.

He visited the Centennial Exposition in Philadelphia and saw a narrow gauge locomotive on display.

Gerish owned a fine stand of white pine in Clare County, at ten miles off just a bit too far from the Muskegon River. He formed a small stock company and ran a narrow gauge RR into the woods. That did it. Michigan's woods were now accessible no matter the weather.

Eventually, 49 narrow gauge RR's criss-crossed the state.





### **Loading in Pequaming**



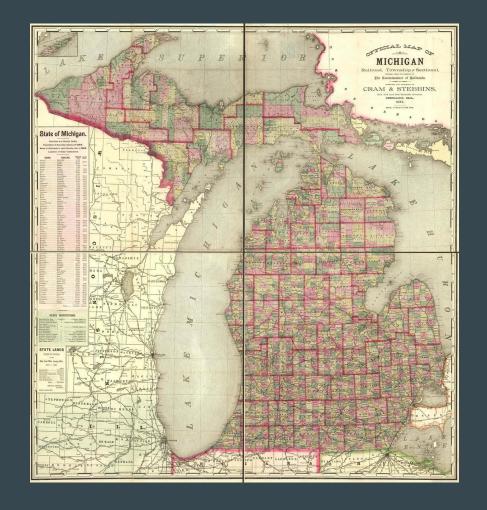
#### State Criss-Crossed by RR's

The railroads figured that once the land was logged, farmers would take over and use the lines to ship goods to market.

Problem: The sandy soil of the northern Lower Peninsula and the swampy soil of the UP were not like the rich soil of the southern Lower Peninsula.

Many small villages and towns popped up but eventually withered away.

Some farms survived as subsistence farms but many did not.

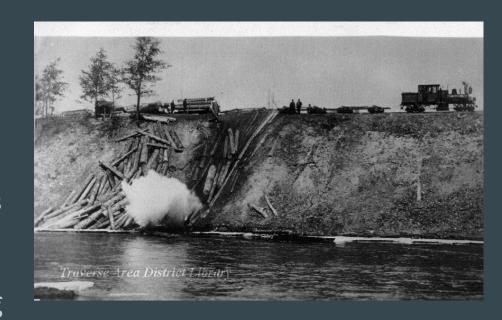


#### The Rivers Remained Key

Railroads grew but up to the last 20 years of the boom - 1840 to 1900 - the rivers were the key.

The rivermen were kings.

Fact: Estimate that in the 60 years beginning in 1847, value of MI lumber output was at least \$1B greater than the value of gold dug in CA during that time.

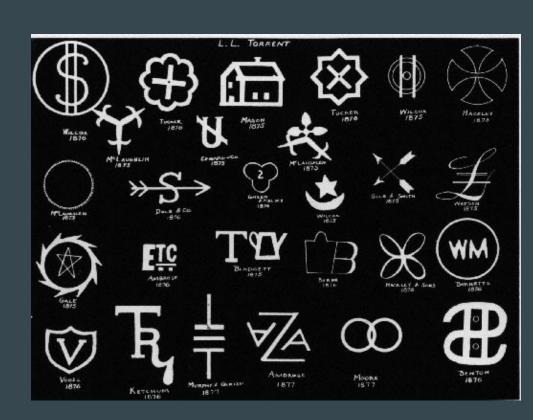


#### Tree Branding

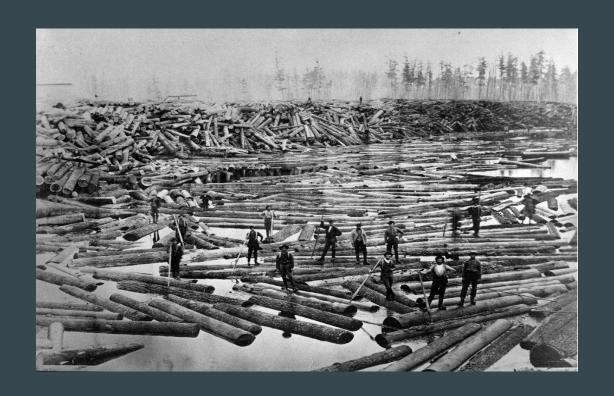
Logs stamp-branded to mark them for their owners before they went into the river at the spillways.

Sorted out at journey's end at the sawmills by the rivermen, working with pikes and even dynamite.

One can still see such logs when canoeing on Michigan's large rivers, including the Muskegon and Manistee. The brands still often show on the log end..









## Menominee 1899



# **Lumber Mill - Hart**



## **Detroit Lumber Yard 1868**

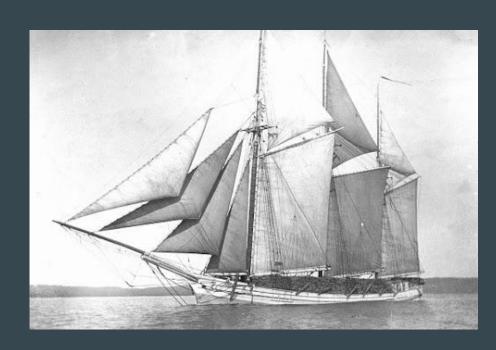


Schooners could haul large amounts of cut timber to cities along the Great Lakes, particularly Chicago, Detroit, Milwaukee and Buffalo.

Many were rigged to haul barges - old schooners with their masts removed.

Called "lumber hookers."

Their use ran until Michigan's forests gave out.





#### The Result

Miles upon miles of stumps

Much of the soil proved too poor to successfully farm

The bet that RR's made that lines would simply swap out logs for agricultural products was a losing one.





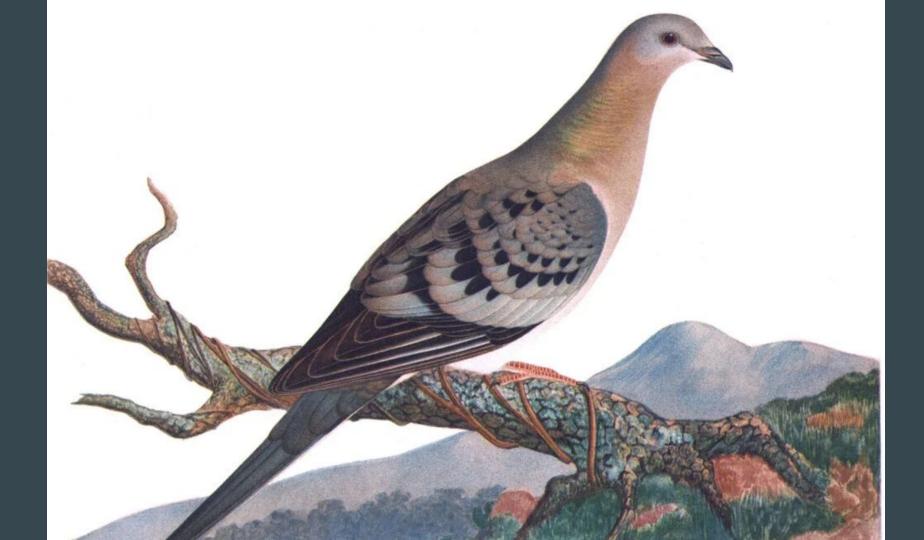
#### Clear-Cutting Was the Norm

The slash was left, existing as a fire risk

Early settlers burned it, sometimes with ill results.







### The Chicago Fire of 1871

Widely attributed to Mrs. O'Leary's cow kicking over a lantern (although others say it was a group of men gambling who knocked it over, others say it was a stray spark from a nearby chimney, others say it was a boarder in the O'Leary household having a few drinks with friends in the barn while smoking pipes.

The O'Leary story took hold, helped by significant anti-Catholic feeling in the city at that time.

3 square miles of Chicago burned

17,000 structures destroyed

### Holland (MI) Fire

October 8 - 10, 1871

76 businesses burned

243 homes burned

5 churches, 3 hotels, 45 other buildings & 5 warehouses

300 families homeless

One person died

Total loss = \$1M (equal to \$26M now)



Ruins of the Cappon & Bertsch Leather Co. after the 1871 fire. next to him with his arms folded.

### Peshtigo Fire (WI)

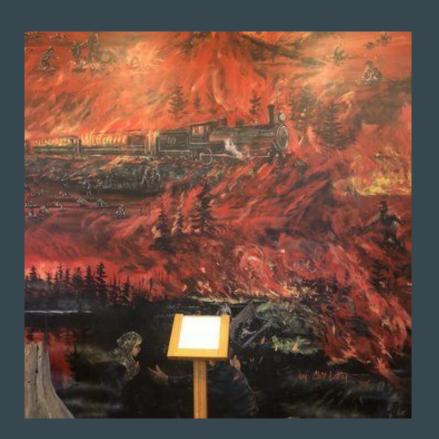
- Also on October 8
- Laid waste to an area of forest 10 by 40 miles
- Between 1,500 and 2,500 killed
- Peshtigo and Brussels completely destroyed
- Overshadowed by Chicago fire



#### Was it a Comet?

Holland, Manistee, Alpena, Port Huron and Peshtigo burned on the same day.

Biela's Comet theory



### Hinckley (MN) - Sept. 1894

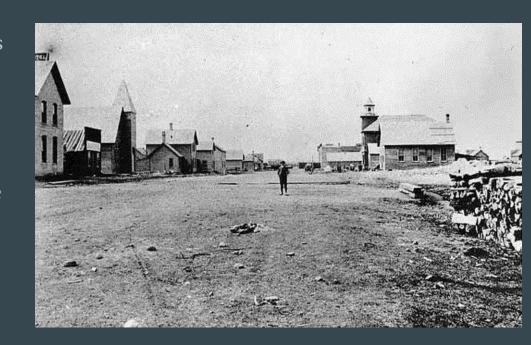
A thriving sawmill town

Many Norwegians, Swedes, Finns, Germans

Population 1,200, two RRs, a huge lumber mill, 3 churches, 5 hotels, a new two-story brick schoolhouse and a new firehouse.

A terribly dry summer, with the topsoil like tinder and the slash in the surrounding forests lying in wait.

Two fires started in different places well outside of town, and were pushed by high winds.



Between 450-500 killed; 310 square miles burned.

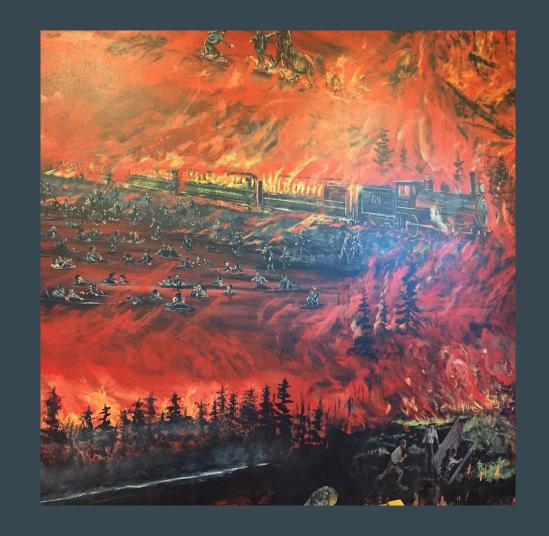
Tremendously dry summer, much slash on the ground, temperature inversion, temperatures up to 2000 degrees F.

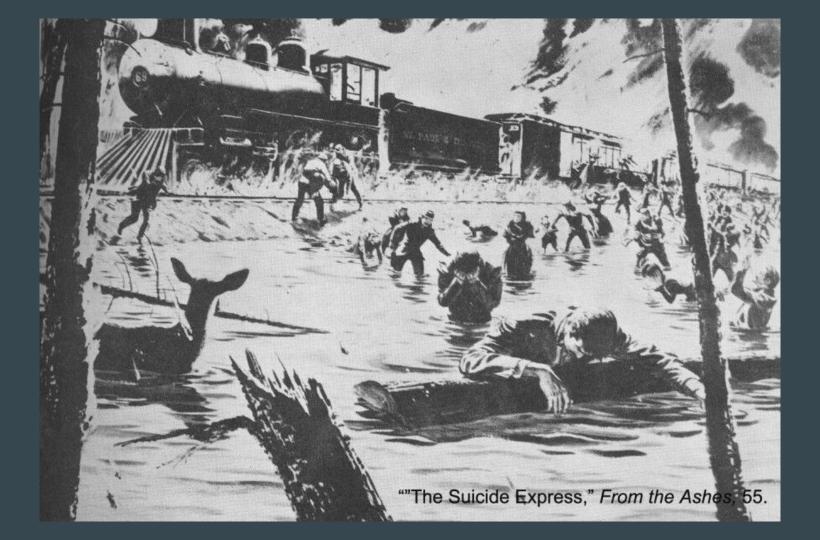
Many escaped by sheltering in wells, ponds and the Grindstone River.

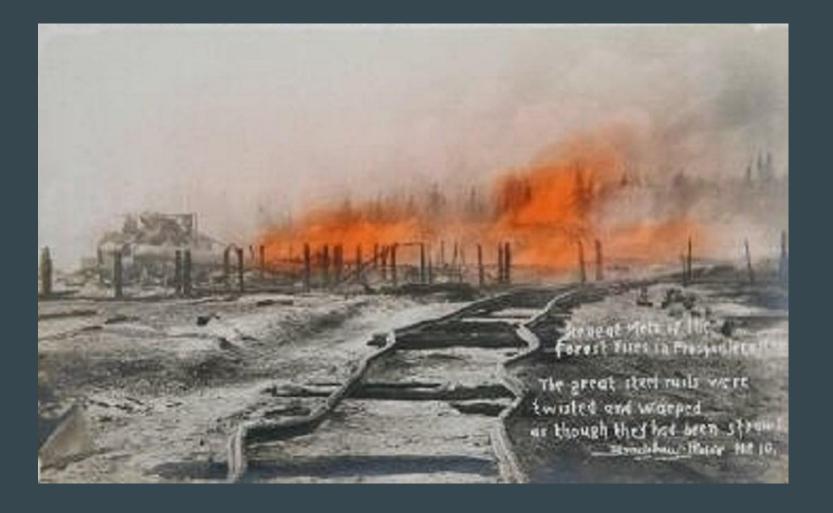
Two jammed trains escaped from town minutes ahead of the fire.

The No. 4 Limited, just in from Duluth, backed up five miles to Skunk Lake with 300 on board.









### Michigan's Forests Have Come Back

Forests cover half the state

Provide home to iconic wildlife that include white tail deer, black bear, gray wolf, cougars, beavers, river otters, migratory songbirds and waterfowl, just to name a few

Beech, oak, sugar maples to the south

Hardwoods in the north, along with conifers

Aspen forests in the Lower Peninsula and the UP



# Hartwick Pines (Grayling)







# Sylvania. Michigan



### Lake of the Clouds





