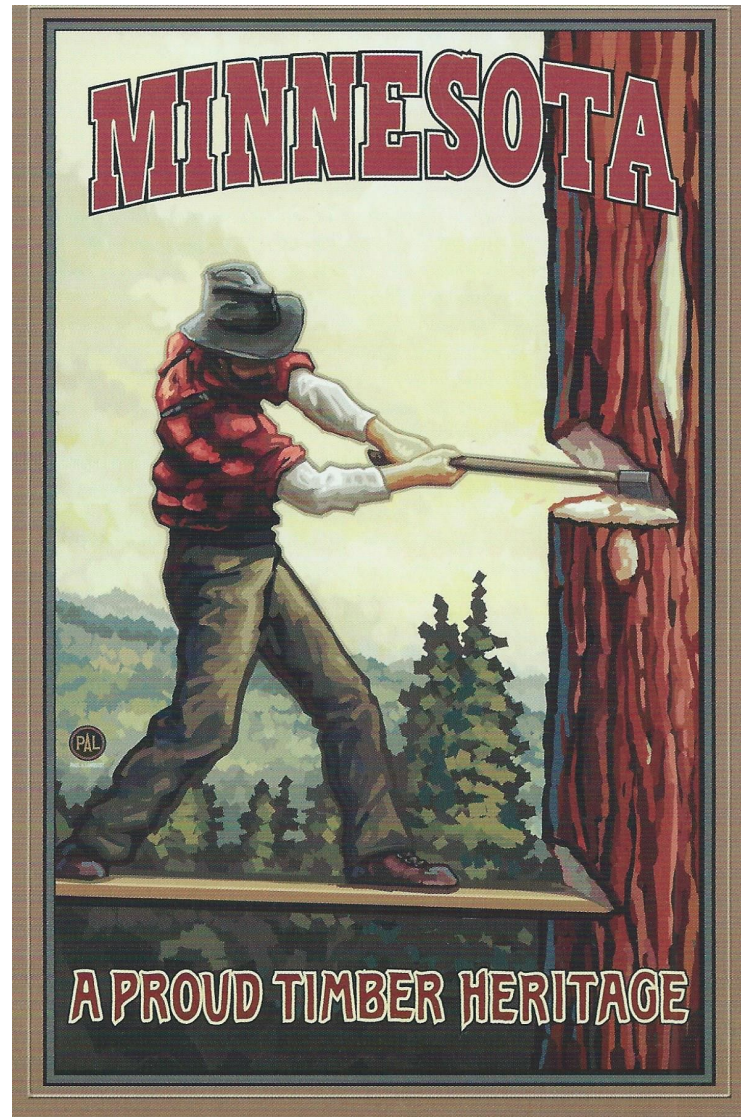


“The Forest for the Trees”



*Minnesota's first lumber companies

- 1830s- Lumbermen entered Minnesota (then part of Wisconsin Territory)
- 1838 - pioneer Franklin Steele at the **Falls of St. Anthony** (later became Minneapolis)
- Lumber driven down from near what is now Princeton down the **Rum River** to confluence of **Mississippi** where present day Anoka is located
- 1839- **New England businessmen** headed by Orange Walker and L.S. Judd started Marine Lumber Company along the **St Croix River**; town grew around it
- 1840- Mill erected at **Stillwater**

Minnesota's Lumbering Boom Began!

- By 1870, 207 mills operating in Minnesota
- 2952 men employed by the industry
- \$ 3,311,140 capital invested
- What caused rapid increase in 32 yr span?

developments in equipment

- Early Equipment
- *Pit Saw
- *Up-and-Down Saw
- *Old Muley- cut 5000 feet lumber in a day
- Circular saw invented by men from Maine,
- Patented in 1820,
Cut 4000 feet lumber in an hour



More Improvements

- New Edging tools could cut both edges at once
- Result of speed-up, Off-bearers, who removed the lumber from the piles couldn't keep up
- Log Slips do 4 logs at a time, creating endless chain
- Steam Engines automatically carried lumber
- Steam replaced water power rapidly when they realized they could use shavings and sawdust to power engines

Largest production in state was in Minneapolis

- 1860- Minneapolis grew as the **saw-milling center** using vast white pine forests of the Mississippi River Valley
- By 1870- Minneapolis had largest number of mills with **13** at St Anthony Falls, employing 8
 - *8 run by Water Power
 - *5 run by Steam Turbine
- Stretched 2 ½ miles- 4th Ave N to 38th Ave N

Minneapolis Mills

- J. Dean and Co. (Pacific Mill) steam mill cut 13, 000,000 feet of lumber and shingles, laths, and pickets per year
- W. D. Washburn's water powered mill cut 10,170,388 feet per year
- 1873- Minneapolis had largest production to date 189,909,782 feet, "right smart heap!" (*Minneapolis Tribune* article, March 28)

Minneapolis Mills

- 1870- cut an average of between 50,000 to 100,000 feet per day
- By 1875, one mill cut 130,000 feet per day
- In 1878, Minneapolis had **17 mills** and employed 1500 men



“Saw Towns” bring other Industries

Wood Products Made in Minneapolis

- *Railroad cars
 - *Lucifer matches
 - *Doors, sashes, blinds
 - *Lounges, bedstead, wagons, carriages
 - *Barrels for flour and salt, in 1873 350,000 barrels made
 - *1874- 8 barrel factories
 - *Boats
 - *Furniture
- 1871- “New Nicollet Hotel” opened, boasted every piece of furniture made in Minneapolis by Barnard & Shuey

“Saw Towns”

- Stillwater- 1871- Schulenburg, Boeckeler and Co cut over 26 million feet.’ Branched out, owned their own: towboats, boardinghouses and residences; farms
- 1874- 9 mills in town
- 1874- In 7 month season running day and night except Sat. night and Sunday made 30,000,000 feet lumber
- Northwestern Sawmill, Stillwater
- 1854- produced 125,000’ in 24
- 1875- produced 150,000’ in 11 hours
- Winona Lumber Company, Cut 175,000’ per day

Railroads

- 1870- **Lake Superior and Mississippi RR** from St Paul to Duluth. Opened another group of “saw-towns”
- Penetrated **St Croix Valley**, stripped its white pines fastest of any region in state



Ft. of Lumber per Yr.
Hinkley 5,855,840'
Pine City 3,733,720'
North Branch 1,379,480'
Anoka 90,000 to
100,000' per day in 1873

Full Steam Ahead!

- Perham on the Northern Pacific RR opened retail yards at Melrose, Moorhead, St. Joseph, Winnipeg, Minneapolis and Alexandria
- Brainerd 1880 Pillsburys owned land near Gull Lake. Mill employed 125 men. So remote, the company opened a general store for laborers' necessities
- Crookston on Northwest Slope, "Queen City" of the Red River Valley, greatest wheat producing region and "Saw-Dust City" at the same time

St. Cloud

- St Cloud- 1880s-“white pine lay on one side of it, the prairie on the other”
- Lumber sold in Winnipeg
- Grew to be largest town on RR line



St. Cloud's **Munsinger Gardens** are located on the site of the former saw mill. Bought by city in 1915



Securing the “Stumpage”

- **Timber cruiser**, looked for the valuable timber, AKA “land looker”
- Determine without error the number of feet of timber in each acre of “forty”- 40 acres of land, basic unit of his calculations
- Land sold for little as \$1.25 an acre
- Brave, often alone; large crew was 4 men
- Secretive, self-reliant, resourceful
- Danger of accidents, broken bones, illness, hundreds of miles from anywhere

The Lost Forty

Today, less than two percent of Minnesota's forested land contains virgin or "old growth" timber.

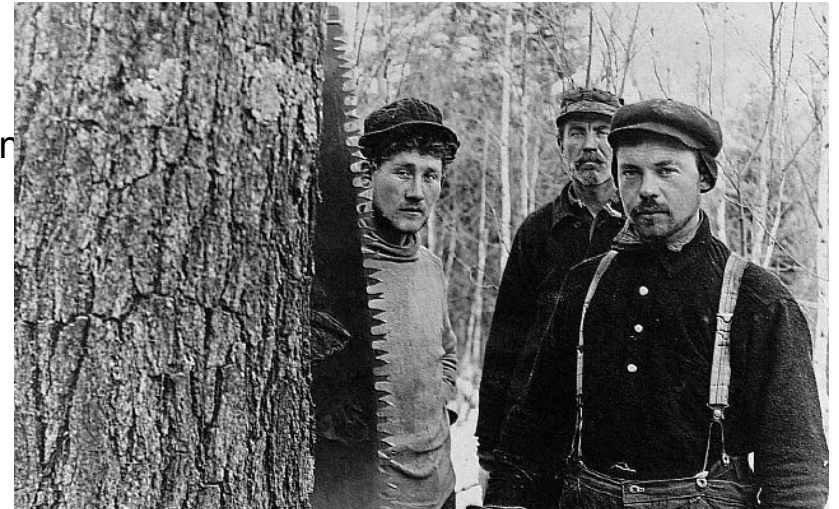
In 1882, a land surveyor by the name of Josiah A. King, and his three-man crew, traveled 40 miles from the nearest white settlement called "the Grand Rapids of the Mississippi."



The crew became confused, and they ended up plotting Coddington Lake about a half mile from where it was actually located. Josiah's crew's error is Minnesota's great northwest than fortune. Some of these trees are 300 years old.

Lumber Camps

- Crew built camp after cruiser found best stands of White Pine
- **Shanties** gave way to **camps**
- Early shanty, one-room for eating and shelter with hovel for oxen, became a camp
- After wood was harvested, the camp was **moved** to new forest
- **No transportation** for workers, so they “hoofed it”
- **Hay** put up from nearby marshes in summer
- Initial load of supplies; More provisions brought in with sleighs every week



Tools and supplies

- The logging company wanagan train, called a “*Mary Anne*,” caravan of wagons pulled by four- or six-horse teams where roads followed the river to transport the tents, blankets, food, stoves, and tools needed by the log drivers
- Grain for teams, hay for animals, straw for bedding
- Blankets, logging sleds, carpenter tools, axes, saws, pots and pans for cooking, stoves, food
- chains, bolts and clevises, tools for felling trees & driving logs, iron for repairing sleds, horse and ox-shoe nails, complete blacksmith outfit

“Village of the Wilderness”

- Buildings made of logs with Clay & straw chinking
- Men's living quarters- warmly built, lighted with 2 windows
- Some with skylights, ventilation
- Housed 50-80 men
- Bunkhouse- 2 men per bed, filled with hay or straw, no longer on floor on pine boughs
- 2 blankets
- Bunks built along wall, sometimes in tiers, “muzzle-loader” & the “side-loader” & “Turkey” for Pillow
- Cedar best wood for bed



Living Quarters

- Box stove replaced open fire of the shanty
- Water-barrel, wash-sink
- Table for writing, kerosene lamp
- Deacon's bench
- Wires for wet socks, mittens, & other clothing
- Cook stove in rear for cook and “cookee”

Shopping

- Wanigan- supply boat for loggers to buy mittens, socks, mackinaw, tobacco, etc. from the Clerk, known as waniganeer or “Commissary Jimmie,” also kept record of crew and the count of the logs and sent reports to headquarters



The Camp

- Office- the foreman's headquarters ("his Nibs")
- Scaler's office, upper caste of loggers, measured the logs with an implement nicknamed the "robber stick"
- Stables replaced hovels, had granary for baled hay
- Blacksmith shop
- Root house
- Saw-filer's shack



Job Hazards

- News from the woods almost always carried note of **death**
- **Accidents**
- Wild animals, wolf **attacks**
- **Disease**, such as small pox, some doctors vaccinated several hundred men in one visit
- Men would pay for **hospital ticket**, “life-savers,” usually \$5 for one 6 month season, remote areas like Stillwater, Bemidji, Duluth, Hibbing, Cass Lake

The Lumberjack

- Shanty-boy from Maine, Canadians, French, and Scottish
- Replaced by Scandinavians, descended from a long line of ancestors who had lived for centuries in northern Europe
- Used to enduring hardships of rigorous climate
- Understood woodcraft
- In forests of Michigan, Wisconsin and Minnesota and the Northwest, **Shanty-boys and Woodsmen** known as **Lumberjacks**



Hardy Stock

- Mighty men- hardy, alert, self-reliant, resourceful
- Possessed great courage and endurance
- Understood bond of brotherhood
- Rugged Wilderness- Accommodations were crude
- In early days, no roads, only trails into woods
- Used horses and ox team (Buck and Bright) Cared for by the Teamster



Jobs of Lumberjacks

- **Choppers**- felled the trees
- **Sawyers**- sawed the trees into log lengths
- **“Swampers”**-cut the brush, trees and old logs to make roads to get to “choppings”
- **Loader**- Supervised log loading
- **Sled–tender**- handled skids and the parbuckle or chains
- **Landing man**- helped unload logs and mark logs with company’s ID

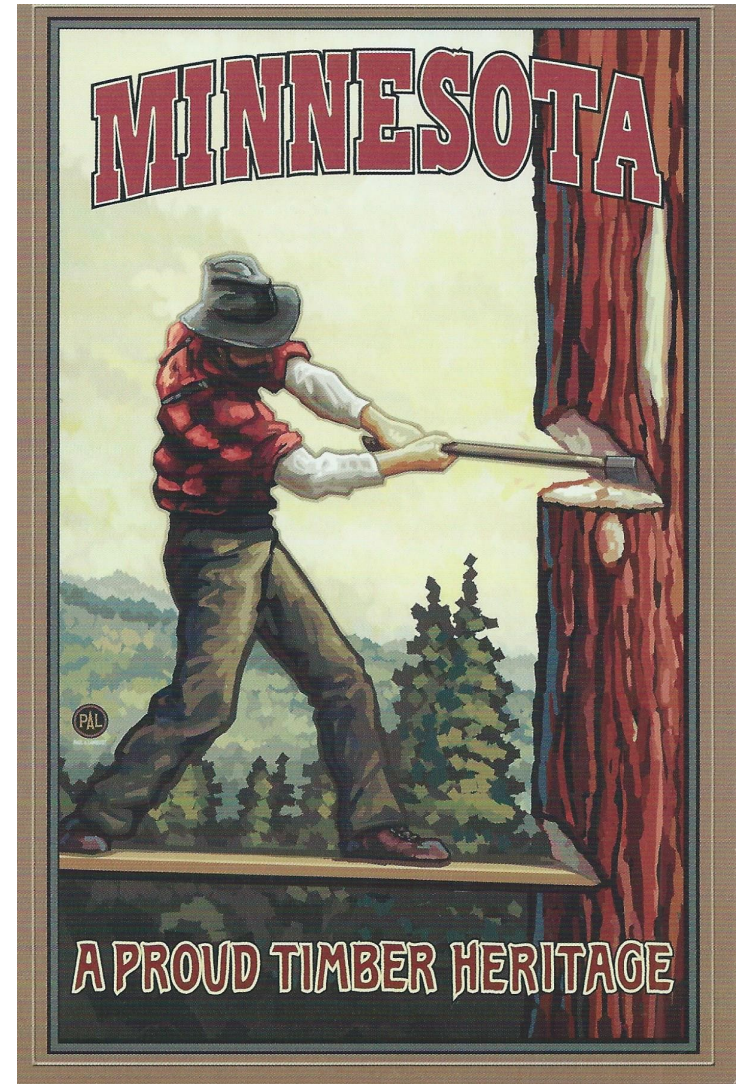
Log Marks

- Logs were marked for the drive, floated downstream then sorted at the boom
 - Stamps and Stamping Hammer were used on ends
 - Obliterating or altering a timber mark was a crime
-
- Each company had own mark
 - S and H for Staples and Hersey
 - Collection, Mark McGinley Marine on St Croix



Felling the Trees

- Felled for easy access with sleds
- If being skidded out, got at with “go-devil”
- Careful not to lodge into other trees
- Not break in two when they struck ground
- Could make them fall in any direction
- Cut notch, or “calf” in tree on side
- Sawed into opposite side of tree
- Drove in iron wedges, saw more
- When nearly cut through, it would fall where desired!



getting the Logs to “Landing”

- “Go-devil”-usually the crotch of some hardwood tree
- Branches cut off 6 or 7 feet from crotch, forming runners or prongs
- Beam fastened across runners, rest log on
- Auger hole for chain
- Practical for short logs or short hauls

Loading the sleds

- Sky-loader- loaded logs at the skidway
- Early sled runners shod with hardwood
- Later shod with cast iron, flat, or rounded
- Rolled onto sleds with chains and oxen
- Logs were piled high at landing
- Scaled by a state deputy
- Daily reports to company foreman, and sent reports to state head office in St. Paul



“Grub”

- *Plenty* of navy beans, salt pork, corned beef, brown sugar, flour, blackstrap or New Orleans molasses
- Dried apples
- Coffee, tea
- Vegetables- potatoes, rutabagas, cabbage
- Doughnuts!! Yeah!!!



A “Bean Hole” (Early oven)

- A hole or trench dug in the ground
- Held a cast iron kettle to cook beans
- Fire built, to make coals
- Beans soaked in water, salt pork and blackstrap (molasses) and salt added
- Tight cover to keep the ashes out
- Placed in hole and covered with coals
- Beans again? Oh Yum!!

Daily Grind

- Season 6–7 months long
- Teamsters got up at 4 to feed ox and horses
- Breakfast ready 4-4:30
- “Daylight and the swamp boys-Roll out!”
- “Rooooooooll out!”
- “Roll out, tumble out, any way to get out. This is the day to make your fortune.”
- Work started at daylight
- Noon lunch in woods around campfire, boiled coffee there Brought out by cook and/or cookee
- Never saw daylight at camp
- Supper at 6, bed by 9, except for Saturday night
- Music and stag dance



Driving the Logs in spring

- **Log drivers-**, called "river pigs"
- Floated logs from the forests safely to sawmills miles away
- In the broader, slower stretches of a river, the logs might be bound together into timber rafts
- In the smaller, wilder stretches of a river, masses of individual logs driven down the river like huge herds of cattle
- Log jams- Drivers tried to break up, using peaveys & possibly dynamite
- Wannigan was a kitchen built on a raft which followed the drivers down the river
- Logs were captured by a **log boom** at mill, logs were sorted for ownership before being sawn



Folklore

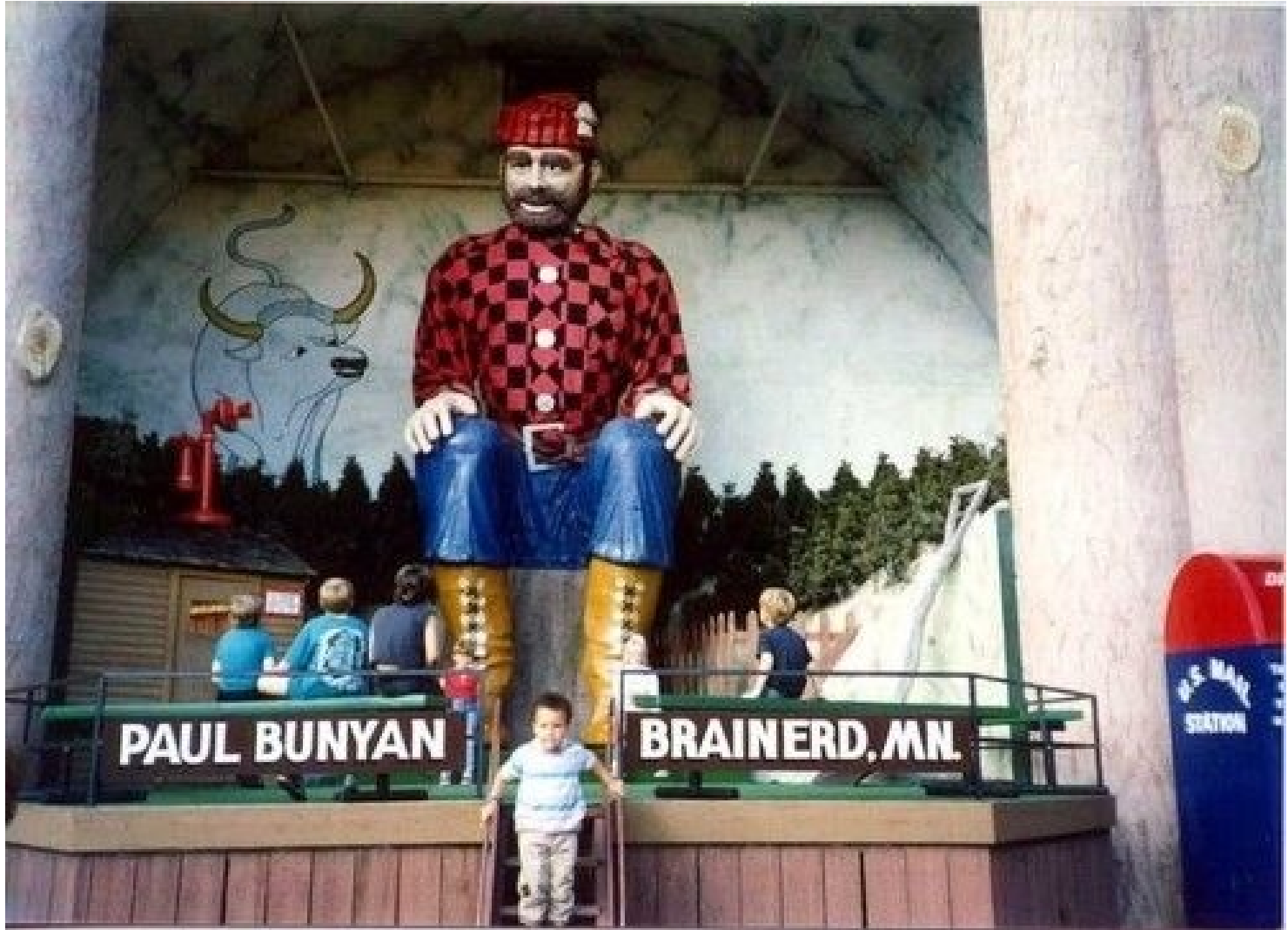
- In the woods for many months with only Sundays off
- Sang and made up stories
- Great respect for a man of physical prowess
- Most famous is **Paul Bunyon and Babe**, the Blue Ox
- Many stories & statues in MN, WI and MI



Paul got around!



Talking paul



Lumberjack Jargon

- Can you guess any of these?
- *Tab*
- *Sky Pilot*
- *Swedish Snowstorm*
- *Timber wolf*
- *Jobbers-sun*
- *Section 37*
- *Brass collar*
- *Prize log*
- *India Silks*



Buffalo Plaid

- Buffalo plaid originated from none other than Woolrich Mills in Penn.
- Began producing in 1850's
- Been rocking this plaid for over 150 years
- The shirt was an instant hit with workers and outdoorsmen braving the elements.
- Legend has it that Woolrich's designer of the distinctive style owned a herd of buffalo and that's how it got its name.



End of An Era

- 1910- Annual cut began to drop, and many mills closed their doors
- 1911- Minnesota Forest Service created
- 1929- Virginia & Rainy Lake Lumber Co, largest in world, closed its doors
- In less than 100 years, over 68 billion board feet of pine from state's forests logged
- 1900- Peak year of white pine logging with over 2.3 billion board feet of lumber cut from State's forests

End of an Era



Last logs come through the St Croix Boom (just north of Stillwater)
on June 12, 1914

Stillwater hosted a celebration in 2014 to mark the 100th
anniversary

Lumbering History Lives on

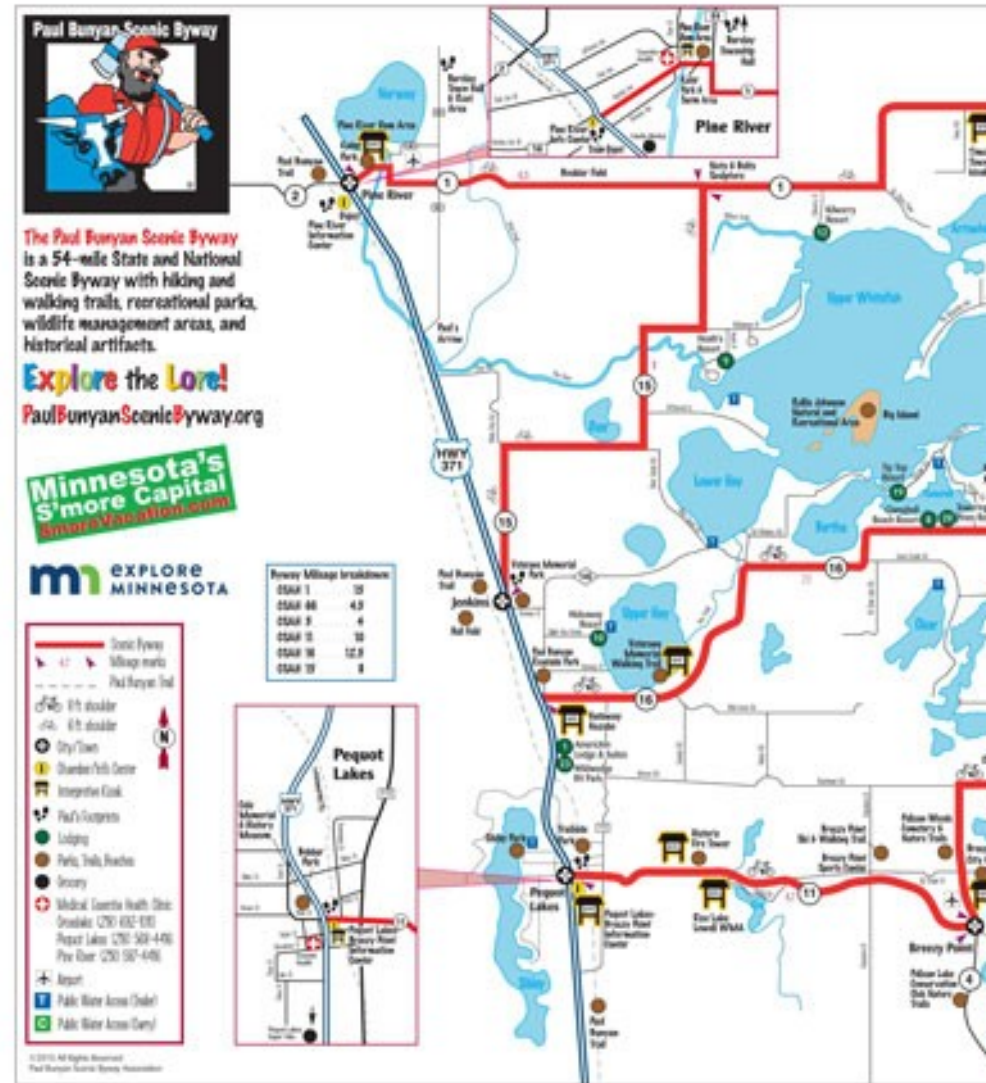
- Lumbering Festivals in numerous communities in Minnesota
- Log Rolling contests
- Hand Sawing contests
- Lumber Camps
- Lumberjack Pancake Feeds
- Ray Family Reunion Lumberjack Breakfast



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

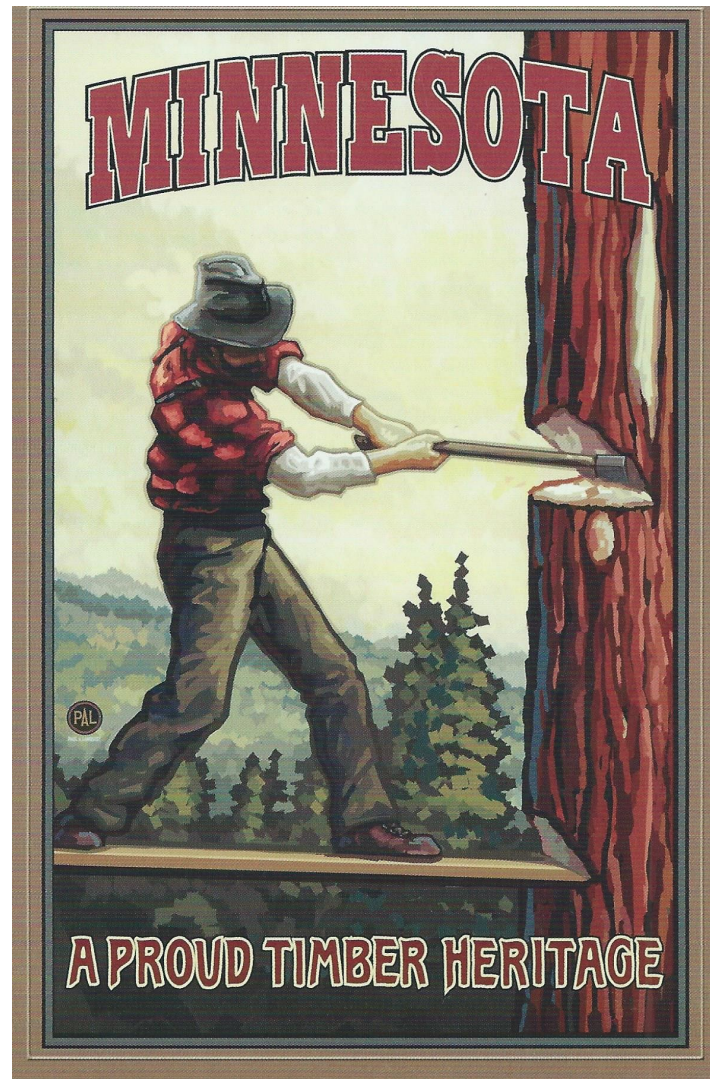
Lumbering Lives on

- “Lumberjack Hall” of Fame Buena Vista Village Ski Area, Bemidji, Nov 28-Mar 22
 - “Logging Days,” Bemidji, Feb.
 - “Wannigan Days” Taylors Falls, June
 - “Legend & Logging Days,” Park Rapids, August
 - “Tall Timber Days Festival” & Forestry History Center, Grand Rapids
- Tom’s LOGGING CAMP, Duluth
Paul Bunyon Scenic Byway



- “Chop your own wood, and it will warm you twice.”

Henry Ford



The end!

