

# HOW DID THE LOGS END UP ON THE BOTTOM OF FLATHEAD LAKE?

The answer begins long before there were logging trucks or chainsaws when the Somers Lumber Company and others were logging the forests of Northwest Montana. Logging was a winter activity. In fact, freezing cold winter days were ideal. In the first quarter of the twentieth century logging was performed with animals, which created an atmosphere quite different from today. Sounds were everywhere--the creaking of harnesses, the banging of logs, the clanking of chains, the squeaking of sleigh runners upon the snow, the echoing crack of the ax making the first cut in the fated tree, the neighing and snorting of the horses, the cursing and shouts of men, and the crash of trees that shook the earth when they landed. These were all familiar sounds to the woodsman.

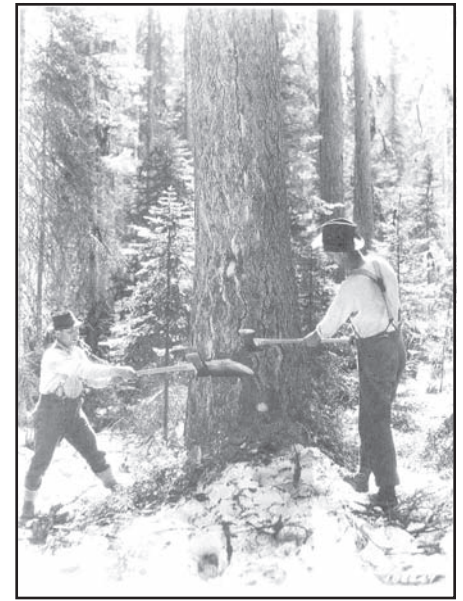
In logging the first task for a woodsman was cutting the trees, a process called falling. When the old time lumberjack headed into the woods he carried two basic tools with him, the axe and the crosscut saw. The heavy four-pound axe had a wooden handle and very sharp double-bitted head; it was used for clearing brush or small trees out of the way and to chop a v-shape wedge out of the base of the tree. This was called an undercut wedge, and when done correctly the tree fell in the direction of the cut out.

Falling a tree sounds simple, but is anything but. The faller's first task was to study the tree and decide the direction he wanted to drop it. Many factors were involved in the decision--safety, saving the small surrounding trees, preventing breakage, difficulty of cutting into lengths, and ease in removal were all factors. On a hillside the tree must be fallen up or down slope and not across the slope, which made skidding much more difficult. Especially important was to watch for a widow maker, a dead or broken branch hanging loose in the top of the tree, which may injure a man or make his wife a widow.

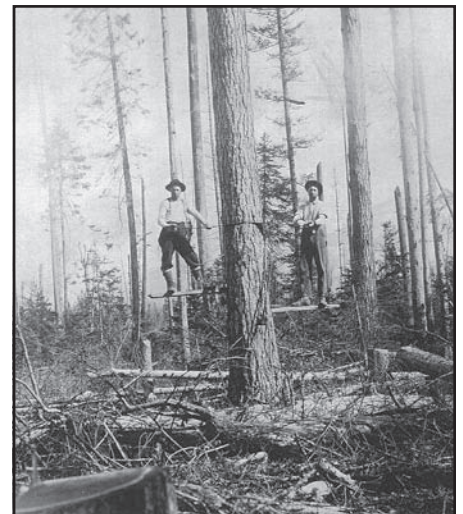
A new invention called the springboard was developed by northwestern loggers to give fallers a platform on which to stand while notching and sawing. The major advantage of a springboard was that sawyers avoided cutting through the thickest part of the tree at its base. Scars, rotten butts, twisted grain or pitchy butts found on trees, especially larch trees could also be avoided.

The springboard was usually a two by eight board, four to five feet long, with a metal tip attached to the end. Sawyers used their axes to make notches about four feet above the base of tree for the springboard and sawing was done about three feet above the board depending on the sawyers' height. When the faller's weight is on the outer end of the board the metal tip spur is forced into the wood, preventing the board from slipping. The springboard actually was quite mobile easily moved with a flip of the feet because the spur acted as a hinge. Today stumps seven to ten feet tall can still be found throughout the forests of Montana.

After the undercut wedge was made, the crosscut or "Misery whip" was used to fall the tree. Two sawyers were assigned as a team. The best teams developed cooperation and understanding of each other and could earn some of the highest wages paid in woods work. Each partner pulls and never pushes the crosscut. There might be silence between them; they might not even like each other, but partners had a constant, easy rhythm in their work. It was pretty hard to find a good partner. Somebody might do well with one man, but not able to work with another. A left-handed man was an advantage. When chopping an undercut and sawing both partners could lead with their strong hands.



*Chopping the undercut wedge*



*Springboards*



*Springboards stump*

The efficiency of any sawyer team also depended on how sharp their crosscut saw was, because a well sharpened saw shoves out a noodle rather than fine pieces of sawdust. New jacks tried to find the best sharpener to partner up with, because they quickly learned that properly sharpened tools were half the job. Axes were similarly important. A dull axe was more dangerous than a sharp one, because it tended to bounce, rather than chop. Lumberjacks would spend many hours at night preparing their tools for work the next day.

Sawyers also carried steel wedges in a pack tied around their waist. During the falling process, the tree sometimes wanted to fall backwards away from the cut out wedge and would rock back pinching the crosscut. Before that could happen, sawyers drove an iron wedge into the cut to prevent the tree from rocking back. This was done with no wasted motion. One man set the wedge and the other hit it with the hammer that was laid next to the tree. Both men did the chore as they continued to saw.

Because the sap of the tree (pitch) buildup on the crosscut hindered the cutting ability, lumberjacks carried a thinning agent. Kerosene would thin the pitch from pine trees and water pitch from larch trees. Carrying the kerosene or water was not a problem; with lumberjack ingenuity, they used a whiskey flask, which was already curved to fit nicely in the back pocket. When cutting both fir and larch, one jack carried a flask of kerosene and the other water. Some jacks would fill the flask opening with pine needles and cut them off even with the neck. They could then give the bottle a flip and sprinkle the kerosene on the crosscut, saving time not having to deal with the cork. Because every move counted, young sawyers were quickly shown how to hand the crosscut to his partner. The crosscut saw was passed with the teeth outward so it could be sprinkled, flipped over and sprinkled again as they began to saw.

One of the sawyers was designated to take care of the crosscut so they wouldn't be fighting over it, as the tree fell. The warning cry "Timber-r-r" was yelled so anyone in the area would be clear of the falling tree. Once the tree had crashed to the ground, sawyers cut off the branches, called limbing or swamping, with their axe. The razor sharp axe was swung with a rhythm unknown today. An old jack with his axe was faster than the chainsaw, but when he stopped to sharpen his axe the chainsaw would surpass him. Once the tree was swamped, then the crosscut was used for bucking the tree into 12 foot lengths. The next step was to drag the log over crude skid paths from where they were fell to a loading point.

Horses were utilized almost exclusively after 1910, but earlier, there were many ox teams. Mules were never utilized because they were too small. A two yoke team of oxen, both weighing 1700 pounds, could out pull four horses and only needed a simple tap on the horn or head with a stick by their driver for directions. For most loggers a colorful language was part of the job. A bull skinner working near a school would turn the schoolteacher's face red anytime he opened his mouth. During the winter, oxen were shod for added traction and when horses were stuck they called in the bulls. Oxen were easy keepers, suffered fewer injuries than horses, could pull more from a dead stop and they eased into a pull



*Ox team*

more gently than horses so they were easier on equipment. So why did they fall out of favor? They were stubborn! Sometimes they just refused to work or cooperate in any way.

Only strong, quick and agile prize draft horses, such as Belgians and Percherons could work profitably in the woods. Teams were matched in terms of temperament, speed, and pulling ability so only a little adjustment needed to be made with the reins to equalize team members. A good team needed very little direction; many were trained to voice commands. They were cared for better than men because horses cost money, but "you always could get a lumberjack." Horse handlers preferred to be called teamsters, as opposed to skimmers, those men who moved dirt for railroads or road building and whose name came from the ability to remove a strip of skin with the pop of a whip. Teamsters, on the other hand, were notoriously good caretakers of their animals, often thinking more of them than some of their fellow loggers. Teamsters worked longer hours for what they called "moonlight pay" because they went to work with a lantern and came back with a lantern. The teams were fed hay and grain, curried, and harnessed before daylight. After the workday, the

complex heavy leather harnesses were removed, then the teams were fed, curried and hooves inspected before their handlers ate at night.

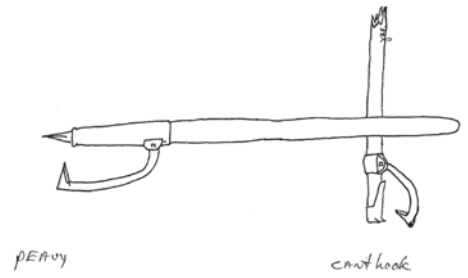
Individual logs were dragged to an opening, where men loaded the sleigh by using peaveys to roll logs down a high bank or rise onto the load. Peaveys are a stout handle lever, five to seven foot long, with a pike (point) on the bottom and curved steel hook bolted to the handle. The man who placed the log on the load was the top loader. He was usually the most skilled worker with a cant hook, a tool similar to a peavey without a point on the bottom. The top loader position took time and experience to learn, but was made easier when the logs came up the skids in a straight line. Then with a flip of his cant hook, he could place the log in the correct position, which was important because an unbalanced load pulled harder and was more difficult to unload. Any mistake could result in broken legs or worse, a man or horse could be killed. Top loaders were the best-paid workers in camp as they had the most dangerous job in logging except for river drivers.

When the sleigh was loaded, teams of horses would pull the load to a central landing. In the fall before logging started, men cleared paths for sleigh roads. The routes were always level or downhill. Small streams were bridged, curves shored up, stones rolled out of the way and roots and stumps grubbed out. The number of teams varied from one to three per load, but often a booster team was needed to help get started. The teamster sat on top of the 15-foot high load, almost always on the right (just as car drivers are always on the left) because the brake was on that side for wagons and buggies. The sleigh would be stacked 8 or 9 logs high in side bunks up to 20 feet across. There would be about 10,000 feet of timber on the sleigh, about two modern logging truck loads.

During freezing weather ruts were “iced” or sprinkled at night with water which would quickly freeze. Ice made the sleighs pull easier. On the other hand, icy ruts down steep hills were extremely dangerous. Loads could quickly overtake a team with tragic results. To prevent accidents, men, called sand monkeys, were stationed on each side of the skid road with buckets of sands to sprinkle in the ruts to slow the heavy sleighs. Sand monkeys were low men in the logging labor hierarchy, but even they had to learn specific techniques. Too little sand and the sleds would be out of control. Too much sand would stall the sled. They built fires to thaw the sand and keep it warm. “Give her sand, kid, or get the hell out of the way” roared the drivers. Sand monkeys were also responsible for sweeping horse manure off the road.

The sleigh haul was both thrilling and dangerous. It took skill for drivers to keep the sleigh in the ruts as it swayed and slid down the skid road. If a horse slipped and fell he was dead and, usually, the other three with him. The driver would gallop his team down a hill, if they were being overtaken. At the river bank landing sleighs were unloaded and logs decked on rollways, scaled and branded. The process was repeated load after load, day after day until the warming of spring weather.

When spring runoff swelled the rivers, it was time for the drive to Flathead Lake and the Somers sawmill. Wood floats, and lumbermen realized that floating logs was the fastest and most economical way of transporting them to a mill. It was common for a river to have more than 40 million feet of logs on its banks. A million feet is roughly comparable to 200 modern logging truck loads. Men ‘broke the decks’ by rolling, pushing, prying or pulling logs into the water. The men enjoyed breaking the decks because they “never got their feet wet.”



*Peavy & canthook*



*Loaded sleigh pulled by 4 horses*



*Decked logs waiting for spring run off*

Once a man was driving, he hopped on a log and went bobbing down the creek. A driver would stand on a log, balance himself, and ride the log any place. He could stick the peavey hook in a log, lean on the handle and if water turned rough could use it to balance himself. If a log bunted his log and rolled it he simply hopped on the new log. If river drivers hesitated to experience the cold water they were aided by the boss who would shout “Jump in there, she won’t burn Ya!” Of course, the spring runoff had the temperature of ice water. These tough men, whose average workday was 16 hours, were “river pigs.” While the name sounds derogatory in our day, then it was a complement to be a pig.



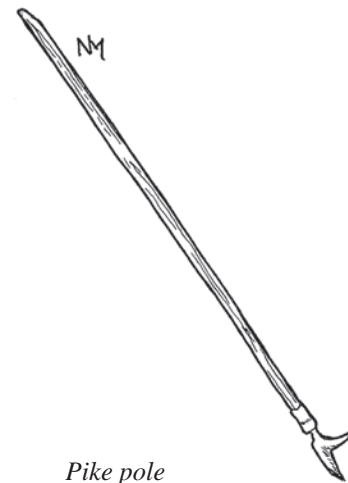
*Breaking the decks*

With spiked boots called caulks, the men could jump from log to log doing whatever work was required. River pigs could ride a log through rapids as easily as a surfer can ride a wave, but amazingly, many couldn’t swim. Most tended to be young and agile, characteristics needed because they risked their lives daily as they dealt with slippery, unstable logs. While some rode logs, others stood in a boat with a 12 to 20 foot pole tipped with a metal point and hook on the end called a pike pole. Using pike poles the pigs kept the logs out of sloughs, off rocks, and away from the shore. Still other river pigs walked along the bank rolling stranded logs back into the current. Some were stationed downriver at strategic locations that had the potential to jam.



*Caulked boots*

During a drive, logs were so thick one could walk across a river. Swift water or tumbling logs banging against each other were dangerous. But, the greatest fear was a jam. When hitting an obstacle, logs would heap up into massive piles that might take weeks or even months to clear. Smaller jams were carefully picked apart. The pigs heaved on peaveys as they stood in the cold spring runoff water two, four, or even six feet deep. Some jams required more than a peavey, they were dynamited, but it splintered logs beyond use and was a last resort. When a jam broke free, all at once the solid surface would begin to creak and settle. Men hurriedly zigzagged to shore, because a sudden and mighty crash would follow the release. The crash could be heard for miles and then the river would burst into a forest of motion. Many men died while working on log jams or by being caught in the sudden release of logs when the jam broke.



*Pike pole*



*Log drive*



*Using dynamite to break log jam*

There was a pride in being a river pig! River drives were the most dangerous job in all of logging with drownings and broken legs a regular occurrence. Despite an accident or death, the drive was uninterrupted. What did it take to be a river pig? Quickness, endurance, equilibrium, instant decision making and physical judgment could all be answers, but there is more. He needed to read the current and the effect of different volumes of water moving at different speeds. He must recognize when jams might form and ways to avoid them. The legacy of the log drives is not easy to assess, but two popular phrases came directly from the drives—‘come hell or high water’ and ‘as easy as falling off a log.’ Their language was special.



*River pigs working*

After months of work, the drive ended at the mouth of the Flathead River near Bigfork where logs were sorted by each company’s brand. The Somers’ mill logs were stamped with the Great Northern brand, which was the parent company of the Somers Lumber Company. [Click on products above to see slices of logs called cookies with the Great Northern brand] When more than one company’s logs were together on a drive, the logs were stamped three or four times so no matter which way it turned in the water the brand was visible.

To keep the logs from escaping a boom was connected around the logs. A boom was made by drilling a hole into the end of two logs and connecting them with a chain. Boom logs were added until the boom was long enough to completely surround the loose logs. Logs were placed in each individual company’s boom. During the sorting operation at the mouth of the Flathead River some logs were forced to the bottom of the lake by the river current. Workers for the Somers Lumber Company said they could hear logs, some five feet in diameter, snap under the force of the current. From this storage boom tugboats towed the logs to the Somers sawmill.



*Log boom*

The logs were kept in the boom close to the mill in a storage area known as a millpond. Sawmills only ran during the warmer months because water was needed for moving logs in the millponds. A man with a pike pole would feed logs to a moving chain that caught the logs and carried them into the sawmill. Floating logs were relatively easy to move in any direction with pike-poles. On cold nights two men took turns keeping warm, while the other shifted logs around to keep the millpond from freezing solid ending the sawmilling season. As the number of logs decrease the boom was shortened by removing a boom log. Even after the advent of logging trucks logs were still dumped into the lake and boomed up as a way of storing them before they were sawed in the mill. The boom system ended in the 1950s when modern machinery and electricity made it unnecessary for mills to have water to easily move logs. At almost the same time the sawmill at Somers burnt down in 1957 and sawmilling ended.



*Mill pond ~ decks logs are rolled into pond as needed*



*Logs in boom at the Somers Lumber Company Mill*

It was while in a boom that logs became waterlogged and sank to the bottom of Flathead Lake. Companies figured on a five to fifteen percent loss from sinking. These waterlogged logs became perfectly preserved in the cold waters isolated from light and oxygen. Amazingly, the lake also preserved the quality of the wood and increased its beauty. The lumber from these logs has a polished look of new flooring, but with a slightly different coloration because of exposure to minerals in the lake water. These absorbed minerals give the wood hues of yellow, green, blue, gray, and pink creating a unique richness and texture. Also adding to the beauty of the wood is the fact that dead ponderosa pine attracts beetles, which carry a fungus that quickly stains the wood blue. Since logs were decked for months before the water was high enough for the spring drive, the ponderosa pine became stained. In Flathead Lake 80 percent of retrieved logs are ponderosa pine and 20 percent western larch. Another factor which adds to the value of these logs is that they are old growth, and thus much larger than others on the market today. Part of the attraction is that this timber is not on a national forest, which decreased tremendously the time and expense of getting permission to salvage these decades-old trees.

Please click on recovery process to see the environmentally friendly care taken to release these fine specimens of logs from the bottom of Flathead Lake and click on products to see the beautiful colors of the wood.