Mountain Springs (1890-1948)

The Early Years

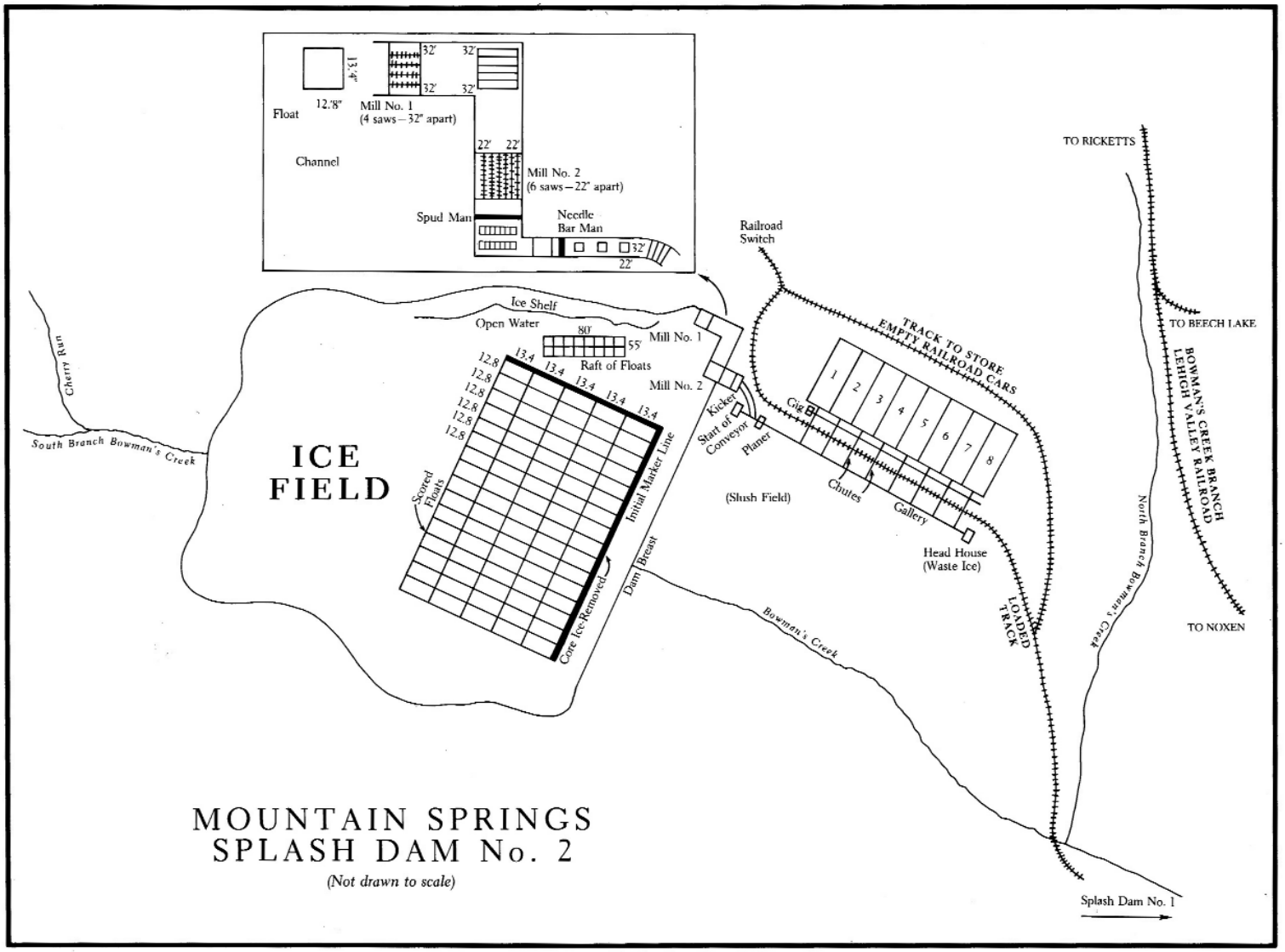
The ice industry at Mountain Springs may not have been intentionally designed. Harvey's Lake would have been the natural site for a major ice industry, but the Wright and Barnum patents to the lake discouraged its development. Indeed, Splash Dam No. 1 at Bean Run was developed by Albert Lewis, not for the ice industry, but as an extension of his lumber industry at Stull downstream on Bowman's Creek.

In October 1890, the Albert Lewis Lumber and Manufacturing Company began construction of a log and timber dam on Bowman's Creek, near Bean Run, a small stream which runs into the creek. The initial dam site was a failure; the creek bed was too soft to support a dam. In October 1891, a second dam site just above Bean Run was selected and Splash Dam No. 1 was constructed. A stream, Meadow Run, runs into Bowman's Creek above the site, which helped to feed the small lake.

The original purpose of Splash Dam No. 1 was to create a forty-acre log pond into which felled timber was dumped from the railroad. Water released from the dam through a log chute could carry the timber on an artificial flood downstream to the mill pond 7.7 miles below in Stull. A successful splash dam would have lessened Lewis's dependence on, and charges for, the use of the railroad that he was constructing along Bowman's Creek for the Lehigh Valley Railroad. Apparently, Splash Dam No. 1 was used as a splash dam at least through 1895, but it was not successful. The fall in the creek was too steep and the twisting creek bed caused the released water to rush ahead of the logs, and too often the logs became stranded along the shore instead of being carried downstream to the mill.

With the completion and sale by Lewis to the Lehigh Valley of the railroad along the creek in 1893, a splash dam was not critical to carry the logs to mill. His company ran log railroad lines into the forest lands to haul timber to the Lehigh Valley line and then down to Stull. Lewis then converted Splash Dam No. 1 to icecutting in the mid-1890s, an industry he also formed at Bear Creek in 1895, particularly since Harvey's Lake was closed to him in 1893 for formation of a major ice industry.

The Bowman's Creek ice plant was originally called Bean Run. There are no statistics available regarding its early years nor is the date of its first ice-cutting certain, but probably it was the early months of 1896. Clearly the business was very successful. In August 1909, Splash Dam No. 2, just under one mile above the first dam, was constructed, also another forty-acre lake. The No. 1 pond was longer than No. 2, but No. 2 was wider than No. 1. The Lewis firm also harvested ice at Beech Lake, a natural twenty-acre pond above Splash Dam No. 2. In January 1914, a post office was created for the community. The postal designation was Mountain


Float
12'8"
13'4"
Mill No. 1
(4 saws – 32" apart)
32'
Channel
22'
Mill No. 2
(6 saws – 22" apart)
Spud Man
Needle Bar Man
Railroad Switch
TO RICKETTS
TO BEECH LAKE
BOWMAN'S CREEK BRANCH LEHIGH VALLEY RAILROAD
TRACK TO STORE EMPTY RAILROAD CARS
Ice Shelf
Open Water
80'
55'
Raft of Floats
Mill No. 1
Mill No. 2
Kicker
Gig
Start of Conveyor
Planer
(Slush Field)
Chutes
Gallery
Head House (Waste Ice)
LOADED TRACK
Cherry Run
South Branch Bowman's Creek
ICE FIELD
Scored Floats
Initial Marker Line
Core Ice Removed
Dam Breast
Bowman's Creek
North Branch Bowman's Creek
TO NOXEN
Splash Dam No. 1
MOUNTAIN SPRINGS
SPLASH DAM No. 2
(Not drawn to scale)

Springs and thereafter the ice-cutting community at the two dams was known by its post office name.

Harvesting the Ice

In its simplest form, ice-cutting consisted of several phases of work. Snow was cleared off the surface of the lake to reach the ice. The ice field was then scored by horse or mule drawn ice plows in a pattern of large blocks called floats. Mechanical saws then cut nearly through the floats. Large sections of the ice field containing several floats were cut loose and pulled by men through an opened channel of water to a corner of the lake where the ice plant was located. There, the rafts of ice were broken into the floats which were nearly thirteen-feet square. The floats were pushed through a mill with a series of circular gang saws and cut nearly through every 32 inches. The floats were passed through a second set of gang saws which cut nearly through the strips every 22 inches. The floats were broken into connected strips of ice cakes and the strips broken again into individual 32 by 22-inch ice cakes. The ice cakes were picked up by a conveyor belt (gallery) which ran alongside a huge warehouse or ice plant. From the conveyor belt, the ice was loaded into railroad cars for immediate shipment, or into the warehouse for storage. From the warehouse the ice cakes could be unloaded all year around into railroad cars for shipment.

The details of ice-harvesting represent a fascinating glimpse into a once thriving industry which died a half-century ago. The icecutting season was generally in January, February, and March, and lasted only a few weeks, depending on weather and ice conditions. During the cutting season, 125 men would be employed cutting ice on the field, at the mills, on the gallery, and inside the rooms of the ice plant. It was seasonal work, providing employment for area farmers, laborers, and other workmen in the slow winter months. The men earned between 32 cents and 35 cents an hour in the 1930s. Usually, a steady crew appeared each year for many seasons. After the ice-cutting season was over, only about twenty men were employed the remaining months to maintain the operations and to load railroad cars with ice from the plants.

In earlier days, there was not a road to Mountain Springs. The working men either walked to the site or took the train. But during the working season, many boarded at the few homes at Splash Dam No. 1 or they stayed at the boarding house there, perhaps only going home Saturday night and returning on Sunday or Monday morning. At times, too, railroad cars along sidings were converted into simple bunk houses. In the early 1920s, a dirt road was made up the mountainside from Route 118, which followed an older switch-back logging road which made travel to the site easier.

The workday was typically 7:00 a.m. to 5:30 p.m., with a half hour lunch break, but it could vary depending on circumstances. The men worked six days a week. If there was a short season due to poor ice conditions, the men would have to crowd the usual ten to twelve weeks of work into four to five weeks. There were no electric lights; sometimes night work occurred using lanterns.

Prior to the early 1930s, the Mountain Springs Ice Company first cut ice at Beech Lake, where there was not an ice plant. At Beech Lake, however, there would have been two sawing mills at the water's edge to cut

blocks of ice into ice cakes, and a small conveyor system to load the cakes into railroad cars. Once Beech Lake was cut, the company moved to Splash Dam No. 1 to cut ice to load into railroad cars for shipment. Once the major consignment to the railroad company was met in two or three weeks, ice was cut at Dam No. 1 and at Dam No. 2 to fill the ice houses there. In a good season, 40,000 tons of ice were shipped from Beech Lake and Splash Dam No. 1 even before the two plants were filled. As many as 2,400 tons could be shipped out in railroad cars daily during the height of the cutting season. The ice house at Dam No. 1 was 300-feet long, 100-feet wide and 32-feet high. The ice house at Dam No. 2 was larger, 400-feet long, 150-feet wide, and 32-feet high. Plant No. 1 had six rooms, each nearly 5o-feet wide and loofeet long. Plant No. 2 had eight rooms nearly 50-feet wide and 150 feet long. All rooms were 32-feet high. Each plant had a storage capacity of 60,000 to 65,000 tons of ice.

The men dressed in whatever clothes they chose. Most always, however, on their feet they wore rubber arctic boots with triangular-shaped heel plates, tipped with metal points, like a cleat. Otherwise, the men wore long underwear, heavy coats, and wool trousers. Some wore overalls; others wore coveralls; many wore stocking caps. Frostbite was uncommon as men working on the ice and around the ice plant itself were active. Men slowly tugging rafts through the channel to the ice mills, however, had the coldest work, especially if the wind was driving and holding back the rafts from moving. The easiest work was probably in the "head house," an inside job where the conveyor was controlled. The switchers' work loading ice into railroad cars was cramped and difficult.

Ice ten-inches thick could be cut, but thirteen to fourteen inches was preferred. An ice auger was used to drill test holes. Ice thickness was measured with a gauge dropped through a hole drilled through the ice. The gauge had a hook at the end which would catch on the lip of the ice at the bottom of the hole. Harvesting was best when the temperature was 25 to 35 degrees. From 15 degrees to temperatures below zero, the ice was brittle and chipped or broke easily. In extremely cold weather, snow was left to accumulate on the ice to raise the temperature of the ice before the snow was cleared in sections and cut.

The ice along the shore had to bear the weight of the work animals, men, and equipment to reach the solid ice of the lake. If ice along the shoreline was thin, snow would be shoveled out fifteen feet from the shoreline. This snow cover slowed the natural freezing process along the shoreline and solid ice would form. If this trick failed, a wooden bridge to the thick ice beyond the shore was built. In the early years, horse-teams pulling scoops guided by a workman cleared the ice-covered lake of snow, which was shoveled off the lake and onto the shore. In later years, trucks with snow plows replaced the horse teams to clear snow. But the trucks were always two-wheel drive vehicles.

Work on the ice field began just above the dam. Using a plank board as a straight edge, and perhaps a nail keg as a sighting point, the workers scored the ice about one inch alongside the plank with a small marking saw" a plow-like saw with a handle to push it along. This process continued until a straight line was made across the lake roughly parallel to the dam. Once the initial line was cut, a field marker (a roughly square-metal frame with a series of graduated cutting teeth on each end) drawn by a team of horses or mules had one sawing end set into the initial marker line. The float marker was pulled along the marker line down the ice field which sawed the ice down nearly two inches deep in the marker line, while

the opposite saw similarly scored the ice down at a parallel 13.4-foot interval. The process was continued up and down the field until a large field of ice had been scored in one direction with 13.4-foot parallel lines.

Another team starting with another marker line cross-scored the field at a right angle up the lake with another float marker, but at 12.8-foot intervals. The ice field eventually had a rectangular pattern of 13.4 by 12.8-foot scoring marks about two-inches deep. These scorings formed a series of quilt-like patterns on the ice field called floats; each float potentially held 35 cakes, each 32 by 22 inches when later cut from the float at the mills.

A gasoline driven rotary saw cut partly through the scorings of each 12.8 by 13.4 float. In earlier years horse or mule drawn iron ice plows were used for this work. On twelve-inch ice, the rotary plow cut down about eight or ten inches. Men with tamping bars would tamp ice chips around the floats where the corners met to prevent them from freezing solid again in the ice field.

In the next stage, a gasoline-powered saw called a grasshopper was used to make the final cut of the floats from the ice field. But to move the initial floats to the mills at the head of the lake, sections of ice called "cores" had to be cut away at certain places, and a channel to the mills opened up. This excess core ice was pushed out of the way under the unused edges of ice. In time, a pond of open water to the dam and mills was created.

Once a large open-water area to the mills was open, 55 by 80-foot rafts containing several floats could be cut away by the grasshopper saw from the main ice field. Standing along the edge of the ice field and channel, men would pull the rafts away from the ice field and into the open water down to the mill. The men pulled or pushed ice rafts and floats with field hooks, long bars 14 to 16-feet long with a hook and a spike on the end. A horse, or later a truck, could be used to pull a float, but a skilled workman was best to prevent the raft or float corners from colliding with the rest of the ice field, breaking its corners, or getting caught under the ice field.

Once the ice was drawn near the mills, men using spudding bars would break away the 13.4 by 12.8-foot floats from each raft. A spud bar was a double-bladed (two-pronged) round bar about five-feet long. The larger rafts had already been plowed partly through by the rotary saw and they broke easily into the nearly thirteen-foot square floats.

The 13.4 by 12.8-foot float was initially passed through a mill where a series of four circular gang saws cut nearly through the float at 32-inch intervals. At the end of the first channel, the float passed at a right angle through a second mill where a series of six gang saws nearly cut through the float at 22-inch intervals. After passing through the second mill, a man on a plank over the channel with a spud bar could break off five strips of ice from the float. Each strip was 12.8-feet long and 32-inches wide and contained seven ice cakes.

The strips of ice were picked up by a conveyor chain at the "kicker house." Before passing up the conveyor, a man with a needle bar spud off each individual 32 by 22-inch ice cake from the strip of ice. A needle bar was a five foot pole with a small blade at the end.

Although individual ice cakes were a uniform 32 by 22 inches, their thickness varied according to ice conditions on the lake. Typical thickness was 14 to 16 inches. Ten to twelve-inch ice occurred in a warm winter but was considered poor ice, but 17 to 18-inch ice could occur in severe winters, although it was very heavy and undesirable. Once the ice cakes were separated, they fell into individual buckets and up into the conveyor. They

passed through an overhead planing mill which was a series of graduated knives which planed or scraped off the top of each cake to a uniform thickness. The cakes then passed under a heavy bristled brush which slightly scored or corrugated the top of the ice cakes which helped prevent their sticking together while in storage. There was a considerable amount of slush ice on the cakes from the planing and brushing process. Slush fell into a water-driven channel to the ground below. Two men continually worked to clear away the slush pile into a field.

The conveyor was powered by old belt-driven sawmill engines which burned soft coal in boilers. A flywheel and pulley arrangement connected the engines to the conveyor system. In the head house, forty feet above the boiler and engine room, the gallery operator engaged the conveyor with a simple clutch lever. He had a whistle to signal the men outside on the conveyor. Each of the chutes into the rooms had an electric bell to ring the head house if a problem occurred, one bell to stop the conveyor, two bells to restart the conveyor.

Eight men worked on the gallery at Plant No. 2 which they called the "hump." There was one man for each of the eight rooms in the ice house. At Plant No. 1, there were six rooms for six gallery men to service. Each man was responsible to push the ice cakes from the conveyor down a wooden chute into his assigned room. At Plant No. 2, for example, the first man took every eighth cake into the first room; the second man took every seventh cake; each man continued in turn down to the eighth room. At the end of the conveyor, any broken or unusable cakes passed up by the previous eight men fell to the ground. Broken cakes or cakes with broken corners could not be sold and were discarded. Broken corners left holes in the ice rooms and were treacherous to the men who worked there.

The chute from the gallery to the ice house had a slight downward pitch. The ice cakes from the gallery ran down a wooden chute to the ice house door. Near the door, the chute had a series of nails called scratchers driven upward through its bottom to catch and slow the cake's descent into the room. It was 150 feet from the door opening to the rear of the room.

In the beginning of the season, the gallery, which was manually raised and lowered by winches, was at the bottom of the ice house. The ice plant rooms were filled evenly during the conveying process. At the end of day, all eight rooms would usually have the same layers of ice. One layer or flat of ice in a room was about 1,070 cakes at Plant No. 2. The conveyor was winched upward as the rooms were filled during the season.

Inside the door to each of the eight rooms were two men called switchers who alternated in catching the ice cakes with switching hooks from the conveyor, shooting them across the ice floor to three other men who lined up the cakes inside the room until a full level of ice or flat was filled. The ice cakes were lined up in rows, filling the house from rear to front. A fourth "barman" separated the parallel rows of cakes with four inches of space to prevent their freezing into a solid mass. This process continued until all the rooms were filled. Originally, the filled ice house was topped with straw to insulate the ice, but straw made the cakes dirty. A black paper was later substituted for the straw to cover the top flat of ice.

For the balance of the year, when ice was not directly loaded from the lowered conveyor into railroad cars early in the season, the ice was unloaded from the filled ice houses, from the top downward, into railroad cars for shipment. Originally, the ice cakes were simply pushed down a wood chute to men inside the door of a railroad car for loading. But heavy cakes at times gained too much momentum and if not caught they

could crash into, and sometimes through, the opposite side of the wooden railroad cars. A bucket-like machine called a gig was then devised to unload the ice. There was one gig to each ice house. The gig operated on a track which ran along the exterior of the ice house. It had a double chain and buckets which the gig operator could raise and lower above himself as the ice house was unloaded. Ice cakes were pushed from inside the room into the buckets which were lowered down to where the ice cakes fell into a wooden chute and then into the railroad cars.

Ice was usually loaded into 34 to 36-foot wooden, insulated railroad cars, which were originally built to haul potatoes, vegetables, and milk cans. But they had wooden end sills and underframing. When ice cars were hauled in long trains, they had a tendency to pull apart the sill and gearing at one end. If larger engines pushed against a train of these cars, the wooden underframing could also give way. When these filled cars were hauled on the main lines of the railroad system, the ice cars were usually at the end of the regular cars to minimize strain on them. If damage to the frame or sills still occurred, they had to be hauled behind the caboose. When the ice was removed, the damaged cars were refitted with steel underframes and gearing, or in later years the old cars were scrapped.

Plant No. 1 was usually unloaded before Plant No. 2. The men worked one room at a time beginning with room one. At the plants, there was a siding along the mountain where the railroad deposited empty cars. The men would open the railroad car brakes and a string of six to eight empties would descend by gravity to the plants. When filled they could be gravity-fed to the other side of the creek at Bean Run, where a locomotive would take them down the line.

Six men were used to unload a room. A bar man loosened the ice cakes. Two men with ice hooks moved the cakes and two others helped load it. A sixth man operated the gig. In a single day, one or two courses, or flats of ice, were unloaded from one room. In the railroad cars, there were two switchers to catch the ice and four placers in each car to place it properly from the ends of each car to the center.

Accidents at the ice-cutting plants were not as serious or common as in the adjoining lumbering operations, although work cutting ice with the sharp implements and saws caused cuts. From time to time, a man would fall through the ice and would be pulled out and sent to the boiler room to dry out. There were no known deaths or drownings among the men who worked on the ice or in the ice houses. Only two serious injuries are recalled. In January 1917, Russell Steele was hit on the head at the gallery by a falling piece of ice while he was climbing a ladder. He fell unconscious into the waste pile. He was taken by train to Wilkes-Barre General Hospital where he recovered consciousness four days later. Thirty years later, in February 1947, Albert Ferrey fell 32 feet from the gallery into a waste pile and broke his hip. He was taken by automobile to a Wilkes-Barre hospital.

Horse and mule teams did fall through the ice, and one team reportedly drowned in one of the lakes when they could not be unhitched in time. Each horse and mule had a choke rope around its neck. If an animal fell through the ice, the men first unhitched the animal from the ice plow or field marker. Planks were kept on the ice for these emergencies. A plank was slid under the chest of the animal who was pulled out by the ropes around him. The animal was covered with blankets and walked until he dried. The animals were not deterred after a fall, but would resume work on the ice. If equipment fell to the bottom of the lakes, which were only 15 to 20-feet deep, it could be retrieved.

Marketing the Ice

Seasonal variations affected the profits of the ice industry. A mild winter yielded a smaller harvest which would increase customer prices. Mild temperatures produced soft ice which could not be cut, or eight to ten-inch ice which was considered "thin" and subject to quicker melting in the transit and delivery phases of the business. The ice producer had to choose between cutting or waiting for a later freeze. There was a warm winter in 1912-1913, and the regional ice fields were only six to eight-inches deep. When a cold snap came in the first week of February, ice was quickly cut, with ten-inch ice at Mountain Springs and Lake Canoga. Continuing winter snows also required additional labor costs to clear the ice fields, which could exceed the cost paid to cut the ice. This happened at Lake Canoga in the early months of 1904. In the same cold winter, the ice was 16 to 24-inches thick, and while of good quality, it was very difficult to handle and added to the producer's costs.

The Lehigh Valley Railroad annually purchased hundreds of carloads of ice—perhaps 1,000 to 1,200 was average—for storage in railroad ice houses in Pennsylvania, New York, and New Jersey. Typically, an engine, several empty railroad cars, and a freight crew left the Lehigh Valley's Coxton Yards, above Pittston, early in the morning to arrive at Beech Lake or Mountain Springs when the employees started work at 7:30 a.m. A second train and crew could follow several hours later depending on the railroad's ice requirements.

Five engines were usually available during the ice loading season, with a couple laying over at Alderson where coal, fuel, and water were available. There was also a permanent standpipe to water engines at Beth Run, below Mountain Springs. The run to Mountain Springs from Alderson was single-track and operated on a "block system." Only one train could run in a block at a time; other traffic was sidelined and waited until clearance was received to operate on the track.

A couple of locomotives handled empty cars at train yards and assisted in assembling loaded cars into trains. At the end of the day, the extra engines were coupled to the last return train to Coxton. The entire operation was supervised by a railroad trainmaster to watch expenses because the cost of wages, particularly overtime, water, and fuel, could be substantial.

The return had relatively easy grade. Beech Lake has an elevation of 2,158 feet; Splash Dam No. 2, 1,853 feet; Splash Dam No. 1, 1,817 feet; and Harvey's Lake, 1,255 feet. There was a rise to Chesnut Ridge beyond the lake near Kunkle of 1,300 feet, after which the trains descended into the Wyoming Valley.

The railroads used immense quantities of ice in both passenger cars and, more importantly, in refrigerator cars carrying meats and perishables. These cars had four built-in bunkers for ice at the top of the car with a trap door for loading bunkers at the roof.

The Lehigh Valley Railroad shipped rail cars of ice to various storage stations along its line. In the early 1920s, for example, the Stull company supplied Wilkes-Barre, Coxton, Tunkhannock, and Sayre for the railroad. The Bear Creek Ice Company served the Lehigh Valley Railroad east of Wilkes-Barre at White Haven, Mauch Chunk, Mahoning, Hazleton, Easton, Phillipsburg, and Jersey City. West of Sayre, the railroad had its own ice lake at Camden, New York, near Groton, on its Auburn rail line.

In addition to the Lehigh Valley Railroad, there was a substantial market for Mountain Springs ice in the Wyoming Valley. Individual ice dealers purchased carloads of ice along the Lehigh Valley's side tracks, and some-

times at private sidings, where dealers sold ice to retail and household customers directly from the rail car. Ice cars were usually open at 7:00 a.m. and the dealers had to sell the contents within 48 hours before the railroad moved the cars out again. If the dealer wanted to retain a car any longer, he paid the railroad an extra fee. But most dealers had small warehouses to store leftover ice so the rail cars could be released.

A mild winter producing a smaller ice crop would drive up retail prices; this happened in May 1913. A consumers committee met with Arthur Stull at the Wilkes-Barre Chamber of Commerce offices to discuss the pricing situation, particularly since poor people were unable to readily afford ice and a distribution system of free ice appeared necessary.

Stull said his 1913 price to dealers was $2.80 per ton free-of-freight charges, compared to $1.40 in 1912 when ice was sold for 7 cents per hundred weight to dealers. Retailers in 1913 were selling it at 15 cents to heavy commercial users and it appeared there was a loo percent mark-up. Ordinary customers and households paid more. But because of the mild winter, Stull explained he could only harvest 30,000 tons in 1913, compared to 60,000 tons in igiz. Only 8,000 tons were unsold in 1912 and were carried over into the 1913 season. The ice, too, was only 6.5 inches in 1913, compared to the usual 15 inches. Usually, the shrinkage rate was 10 to 20 percent, but the ice of 1913 would shrink 25 percent by the time it reached consumers homes, a loss the dealers assumed in the natural course of business. The ice also easily broke and he lost 100 railroad cars of ice due to breakage and discarded the ice. According to Stull, given the low harvest and high shrinkage, the retailers pricing structure would not produce for the retailers a profit in 1913 any different than the profit picture a year earlier. His own costs to harvest 30,000 tons in 1913 were the same costs he incurred in 1914 to harvest 60,000 tons, because he had to install a temporary electrical lighting system at his plants to get whatever harvest he could at night the first week of February, a very late season.

At least in the earlier years, ice dealers minimized their business annually combining to fix wholesale prices to retail deflect local competition among the local produc ers, and perhaps partly to protect against in-roads by the huge national ice company combinations, like the American Ice Company, who controlled major mid-Atlantic markets. The major producers in the region were the Pocono Ice Company, Bear Creek Ice Company, and Arthur Stull s Mountain Springs Company. Occasionally a price war did erupt among the local producers, as happened from mid-April to May 15, 1915. Prices in 1914 were 25 cents per hundred weight to heavy customers, 30 cents to ordinary business customers, and 40 cents for family users. The Pocono company, however, cut heavy users costs to 15 cents. The Pocono firm had been a buyer of ice from Arthur Stull, but recently it opened its own ice field at a pond near Nuangola, near present-day Mountaintop, in the Wyoming Valley, and it planned to cut into Stull s retail market in the valley. But Stull supplied ice to five major valley retail companies and he cut his prices, too. Shortly, price cuts across the board were in place at 15, 20, and 25 cents, which delighted the ordinary homeowner, but were ruining the ice dealers. Companies not affiliated with the Pocono firm or Stull Heart Lake, Canoga Lake, Peoples Ice, Spring Lake, and Mountain Lake were trapped in the war and struggled to maintain competitive prices. Finally, on May 14, 1915, the companies again combined to set a uniform scale of 20, 25, and 35 cents five cents below 1914 prices for the three levels of customers which settled the local market. To discourage the purchase of smaller pieces, less than one hun-

dred pounds, common in many homes, which was unprofitable to retail dealers, the price was raised to 50 cents per hundred weight, or five cents for a ten-pound piece.

There were also individual delivery men who purchased ice daily from a dealer and operated their own horse-teams and wagons, delivering ice throughout the valley. Households had a square card marked "none" on one corner, with each of three other corners marked with a common ice size and current price. The card was placed in a window with the desired corner top-most to tell the traveling "ice-man" if the household wanted ice and the size block. The ice-man had a scale in the wagon, chopped off a block and carried it with tongs to the house. Young boys liked to follow the ice-wagon in the summer to salvage the dropped ice scraps.

There were a variety of ice-boxes for home use. The least expensive was a double chest with insulated double-layers of wood. The top chest was a sheet metal box with a hinged double-wood top and the ice was dumped inside it. The bottom chest was also sheet metal lined; it contained shelves and had a hinged door. The melting ice cooled the metal lining which kept food cold. The melting ice drained to a pan underneath the ice chest, or through a pipe to the outside of the house.

Other important commercial users of ice included meat processing and packing plants, conveniently located along railroad lines in downtown Wilkes-Barre, large stores, hotels, and restaurants. They had walk-in cooling rooms where ice was placed on racks.

In February 1933, Arthur L. Stull formed Arthur L. Stull and Company, a partnership to operate the Mountain Springs Ice Company. He transferred a one-eighth interest in the lands to his son, Robert A. Stull (1895-1980), and a two-eighths interest to his brother, Albert A. Stull. These two transferred their interests to the new company, as did Arthur L. Stull with his five-eighths interest. The lands and ice interests transferred to the new company were the interests Arthur L. Stull obtained when he broke with Albert Lewis in 1912.

The Village of Mountain Springs

There was a small village at Plant No. 1 with a few homes, boarding house, and school. The foreman and long-term laborers lived in the village. Noah McCloskey was the earliest foreman. He was born in Lehigh Tannery and previously worked at Bear Creek and Stull. Noah's wife, Emma McCloskey, became the first postmistress at Mountain Springs on January 20, 1914. Her daughter, Emily McCloskey Kitchen, married Art Kitchen, who began working at Mountain Springs after World War I. Emily McCloskey Kitchen became the postmistress in 1929.

Noah McCloskey was followed by Harry Majors and Joe Maransky as foreman at the ice plants. Finally, Art Kitchen was the last foreman under White and Davis from the early 1940s until the plants closed.

On the hill above the ice dam, Art Kitchen had his home. The Kitchen home kept candy, tobacco, and a few supplies for sale. A company store was not available, and the train was the source of food and other supplies. In the next home lived Paul Maransky, the field foreman and "bar man" in the plant rooms in the summer. His three sons also worked at Mountain Springs. There was also the two-story boarding house which could serve 75 to 100 men. A couple or family was hired by the ice company to operate it. A third house was generally associated with John Micklo, who had many children. There was also a barn where the horses

and mules were kept during the ice-cutting season. They were brought on the train from the Stull farm in Alderson.

At the bottom of the hill nearer the dam, there were three other homes, which, in the 1930s, were occupied by John Yellitz, Mike Markovitz, and John Pocono. They, too, had families, and their sons usually also worked on the ice. The homes also kept boarders. For example, Rube Downing worked season after season on the ice and stayed with the Kitchen family. He formerly worked at Ricketts. George "Tonto" Belicci regularly boarded with Markovicz.

The community was small because less than two dozen people were employed on a year-round basis. Nevertheless, there was also a one-room school which taught grades one through eight. The first school was at Bean Run. The Mountain Springs school followed the Bean Run school. Teachers at these schools were Delbert Hines, Velma Kocher Whitesell, Maria Harrison, Winifred Holmes, Andrew Keller, Mary McCloskey Driesbach, and Celia Hortop O'Leary. At the end, the Mountain Springs school only had three pupils: Mary Louise Buckalew, Marian Maransky, and Robert H. Lasko. When Mary Louis Buckalew completed eighth grade in 1938, the school was closed, and the other two pupils were transferred to Mooretown.

When ice-cutting ceased, only Art and Emily Kitchen stayed in the town. Art Kitchen traveled down the mountain to meet the mail carrier three times each week on Route 118. Mountain Springs, with a population of two people, was considered the second smallest post office in the United States. Needles, California, had a population of one. When the post office at Mountain Springs closed on January 20, 1953, Art and Emily Kitchen moved to Pleasant Hill.

Decline and End

By the late 1930s, the ice industry was in decline. In May 1937, the Bear Creek Ice Company only stored 76,000 tons of ice. Ten years earlier the harvest was nearly five times greater. Similarly, the Pocono Lake ice plant only stored 46,000 tons. The last ice was cut at Bear Creek in 1938, after which the Lehigh Valley Railroad removed the tracks to the company plants.

During the winter of 1935-1936, the first two or three rooms in the old Ice Plant No. 1 at Mountain Springs collapsed after heavy snows. The plant was not used for storage any longer, but was used to load railroad cars. One or two rooms at Ice Plant No. 2 collapsed during the early 1940s, but loading continued in the other rooms during the ice-cutting season.

In April 1942, Arthur L. Stull died, followed by his brother Albert A. Stull in September 1946. In August 1945, the estate of Arthur L. Stull, along with Albert A. Stull and Robert A. Stull, sold the Mountain Springs Ice Company lands to Ralph A. Davis, who, in December 1945, joined with John W. White in a partnership to continue the ice business.

Passenger service on the Bowman's Creek railroad ended in 1936, except for special excursions to Harvey's Lake. The Lehigh Valley Railroad sought the abandonment of freight service on the Bowman's Creek line in 1938, but the Interstate Commerce Commission denied the application. The ice trains and the Noxen tannery were its only significant freight. In late January 1942, for example, forty cars of ice were shipped daily over the line from Mountain Springs. But such shipments lasted only a couple

of weeks in the ice-cutting season. During the balance of the year, only a few ice cars were shipped weekly from the ice plants. Undoubtedly, the line was very unprofitable to the railroad.

In late 1948, the Lehigh Valley Railroad closed traffic above Noxen on the Bowmans Creek Branch. The ice industry was dying and provided too little traffic on the railroad. Mechanical refrigeration techniques readily produced artificial ice for industry. The railroads were increasingly using dry ice or mechanically refrigerated cars. After World War II, homeowners routinely were using refrigerators and freezers. The public, too, no longer had to contend with periodic fears regarding the safety of natural ice. With the loss of the railroad in 1948, the ice industry in Mountain Springs closed after the 1948 season. Plant No. 2 was destroyed by a fire in the summer of 1948.