Railroad in the Wilderness: The East Branch & Lincoln Railroad, 1892-1948

by William L. Taylor

To conceive of a logging railroad in what is today a designated wilderness may be difficult for most to imagine. Yet, between 1892 and 1948 the East Branch & Lincoln Railroad operated throughout much of what today may seem untouched forest. Only along the trails, at river and stream crossings, and at certain old camps does one become aware of the earlier presence of extensive human activity. These include the existence of railroad ties along many of the trails, huge bridge abutments that are far too large for the existing foot bridges, and rusting and decaying artifacts at former logging camps along the old right of way. For over half a century this region served as the resource base of an industrial complex that epitomized the attitudes and techniques of industrial America. The heart of the operation was Lincoln, New Hampshire, where J.E. Henry transformed what had been primarily a resort community catering to hotels like the Flume House in the Franconia Notch area.

Lincoln provides an excellent example of a "company town" that emerged in the early 1890s in order to tap the huge timber resources in the valley of the East Branch of the Pemigewasset River. In late summer of 1892, J.E. Henry, his sons, and many of his workers arrived at a site in Lincoln about a mile east of the junction of the East Branch and the

Pemigewasset rivers to begin construction of a mill, railroad, homes, stores, and other structures to create a new industrial town that George H. Moses labeled "Pullman, New Hampshire." They transformed what had been forest into a community that would become one of the largest industrial complexes in northern New Hampshire. It continued as an industrial community in the 1970s. Today the former mill complex and railroad yards are once again part of a resort community centered around Loon Mountain ski area.¹

The East Branch & Lincoln served as the sinewy life line of the Henry and Parker Young operations. In a time before modern internal combustion engines were powerful enough to reach far back into the rough, mountainous terrain east of Lincoln, only steam locomotives could furnish the power needed to haul timber economically many miles from the yarding areas to the mill. Henry's men did an impressive job conquering the rugged country.

As one hikes along the old main line, the work of its builders remains impressive. The extensive stretches of tangent main line and the massive abutments and piers at the Franconia Brook crossing remain lasting monuments to their skills. Much of the original construction occurred under the supervision of Levi ("Pork Barrel") Dumas, a self-taught construction foreman.² A photograph in the January, 1923, issue of *The Pycolog* shows vividly the nicely groomed track running straight as an arrow toward the horizon.³

The Parker Young Company, which purchased the entire J.E. Henry & Sons properties in 1917, recognized the essential role of the early issues of *The Pycolog*:

The train crews of the woods engines must be

mentioned here for one cannot overrate the importance of our own railroad system. It is the pivot on which swings the great Lincoln operation and plants of the Parker-Young Company. We must remember the crew of No. 5, our old stand-by, with Louis Boyle at the throttle, Billy Magee fireman, and Joe Landry the conductor.⁴

Although it began as a timber and sawmill operation in 1892, the potential for manufacturing pulp and paper was soon recognized. J.E. Henry's land contained a massive amount of excellent spruce, an ideal tree for making pulp. The area also had ample water resources for processing the spruce and enabling the construction of dams on the East Branch of the Pemigewasset River for the generation of electric power. The Henrys built a pulp and paper mill in 1902 which made groundwood and unbleached sulphite pulp, newspaper stock, and ground specialties. Before the sale of the property to Parker Young in 1917, the Henrys added a third paper machine, a bleaching plant, and a third sulphite digester. This enabled the plant to increase production and to include bleached sulphite papers to its product mix.⁵

In 1917 the Henrys sold the entire complex of plant, housing, store railroad, timberland, and all the rest to Parker Young Company. Thus began nearly four decades of operation in Lincoln by this corporation. Parker Young in early 1920 was a large firm with its headquarters in Boston employing over 2500 people at mill and logging sites in New Hampshire, Vermont, and Maine. For a few years in the 1920s it also owned a sawmill in Florida.⁶ The two largest operations of the company were in New Hampshire: the complex at Lincoln was the largest; Beebe River, in

Campton, second in size. Both had company housing, stores, mills, railroad, and extensive tracts of timber. Begun in early 1917, the complex at Beebe River was ready to saw its first log on 17 November, 1917. Large quantities of spruce frames for airplanes were manufactured there. One estimate states that Beebe River furnished more than one-fourth of all the airplane spruce produced in New England during World War 1.7 The East Branch & Lincoln and the Beebe River railroads seem to have shared equipment during the years of common ownership. Beebe River produced dimension lumber, laths, and pulpwood during the Parker-Young years. By early 1925 most of the spruce and pine had been cut and the company sold the entire Beebe River operation to the Draper Corporation, which converted the mill to the manufacture of bobbins. The hardwood on the property had hardly been touched, thereby leaving adequate material for the Draper operation.8

With the sale of Beebe River, Parker Young focused on the Lincoln operations and the pulp plant at Livermore Falls (in Campton, N.H.) that supplied ground wood pulp for the Lincoln mill. In December, 1922, the paper mill set a production record of 104.74 tons of paper in one day with a daily average that month of eighty-seven tons per day.⁹ To supply the mill with pulp the East Branch & Lincoln operated twelve to fifteen miles of standard gauge railroad between the yard around the mill and the landings in the woods.¹⁰

References in the company publication *The Pycolog* indicate that by the 1920s the large scale operation centered at Lincoln was unusual in the Northeast. In October, 1922, the mill superintendents who met at

the company-owned Lincoln Hotel had "a new experience." They traveled by train into the woods (crossing over Black Brook trestle) to visit Camp 23 which was then at the end of the line. There they did what any interested group of mill superintendents would do: they inspected the camp, looked at the timber stands at Camp 23 and along the right of way, and talked with the foremen and the men. Also, they enjoyed a full logging camp meal. The writer of the article indicated how large the scope of operations was:

Woods operations on the scale of our Lincoln Woods were a new experience for our guests, familiar though most of them are with the logging of pulp wood; and moreover, seldom is such a virgin growth of spruce seen within a day's trip of civilization. We ourselves may have got used to thinking of bringing logs out of the woods on a railroad but that is such a rare method of doing it that very few of our guests had imagined such large operations were carried on without a river to drive in. . . . 11

The East Branch & Lincoln used standard side-rod steam locomotives as well as geared locomotives (several Shays and one Climax). The railroad operated year round, but the most intense activity took place in the winter months when most of the cutting was done. To carry the logs the road employed "logging trucks" which were nothing more than two-axle trucks with hand brakes and link and pin couplers. When empty, the logging trucks were connected drawbar to drawbar and pushed up to the loading areas ahead of the locomotive. Often, on very steep grades, such as on the Cedar Brook branch, the engineer had to break the empty train into one or more shorter trains so that

the locomotive could climb the grade to the loading After being adjusted for log length with "reachers" (bars of differing lengths which connected two trucks), a pair of trucks formed a "car" which was coupled by the link and pin system into a train. This system made it impossible to employ any kind of air braking system on the train in contrast to common carrier roads like the Boston & Maine. The Interstate Commerce Commission had required air brakes on all trains in the early 1900s. Logging railroads did not have to meet such I.C.C. regulations. In essence, the East Branch rail workers were using railroad technology that had been standard in the nineteenth century. Such equipment placed train crews in a much more hazardous work environment than similar crews on the Boston & Maine. 12

Log trains had to rely on the brakes of the locomotive and hand brakes turned down by the brakemen. Since loaded trains were descending from the mountains to the mills, braking trains could be challenging to engineers and train crew. The steepest grade in later years of operation was found in the Cedar Brook Valley where Camp 24 was located. The grade averaged seven percent and made operations very difficult and potentially dangerous. Louis Boyle, an engineer of many years on the East Branch, described how he handled trains on those incredibly steep grades. With the engine at the head of the train (downgrade from the log cars), the crew set the hand brakes on the last few cars of the train, the engineer ran the engine slowly in reverse, and everyone prayed that a coupling did not give way. The engineer also sanded the rails for additional braking and traction. Boyle stated that the longest train he ever hauled on the line

totaled twenty-six cars, which was "quite a feat considering the sharp curves and steep grades of the road bed." Whether this was on the Cedar Brook branch is unclear, for it may have occurred on the branch into either the Franconia Brook or Lincoln Brook valleys. Wherever it took place, the handling of such trains tested to the utmost the skills and mettle of crews and equipment. During the 1940s typical train length was eight or nine cars of logs. Perhaps these much shorter trains reflected deteriorating conditions of equipment, track, roadbed, bridges, and an effort to operate in a safer manner. 13

Railroading has always been, and still remains, a dangerous occupation. Adding to these inherent dangers were other conditions considered normal in the early and latter years of East Branch history. In the early days of the railroad, crews often worked as long as fifteen or sixteen hours a day. This forced them to leave before daybreak and finish after dark during times of the year when the days were short. For this they earned an average wage of \$1.75 a day. Such long hours certainly increased the likelihood of accidents. Another safety issue related to coupling cars. Brakemen had to step between the cars to drop the pin into the socket to retain the link. In contrast, the automatic coupler used on common carrier railroads did not require such a dangerous procedure. issue of The Pycolog reported the accidents during the year ending June 1919. The article noted that high accident rates had occurred in the woods operations (cutting and hauling timber) at Lincoln and Beebe River as well as on the two logging railroads. These accidents included one fatality in the Lincoln operation.14

The scale of rail operations in the early years of Parker Young can be perceived by the efforts of the company to increase its haulage capacity over its railroads. In 1920 the company purchased twenty-three and a half sets of logging trucks from Mine Central Railroad for use on the East Branch and the Beebe River railroads. These supplemented trucks already in use on both railroads. This purchase indicates the large number of cars of logs required to sustain operations at the saw and pulp mills and suggests that the capacity of the railroads was being expanded.

Not only did the East Branch & Lincoln operate log trains, it also ran "excursion" or "tourist" extras on Sundays at various seasons of the year. In summer these trips were referred to as "blueberry specials." Such trains brought tourists to old, cut-over areas where blueberries had established themselves as one of the earliest species of new vegetation after clear cutting. The railroad equipped several old "coal cars" (what were often called gondola cars by railroads) with benches, lined them with canvas, and sometimes erected an awning which protected riders from sun, sparks, and cinders emitted by the locomotive. Passengers riding such trains included guests staying at the Lincoln Hotel, local townspeople, and tourists who might be in the vicinity. Management normally scheduled these trips on Saturday afternoons or Sundays so as not to interfere with regular operations. Always a highlight for passengers was a meal at one of the logging camps. During the 1920s Parker Young scheduled winter excursions as well as specials throughout the year for conventions, meetings, and the like. Such specials continued until at least 1946.

Another kind of special train brought a local minister or priest into the camps every other Sunday to celebrate mass or preach a sermon.¹⁶

In the late 1930s and early 1940s several important changes occurred that would affect the decades-old railroad logging operations east of Lincoln. Of major consequence was the sale in 1936 of more than 68,000 Parker Young land to the United States acres of Forest Service. The company had cutting rights on 8,700 acres of this land for twenty years. Correspondence between the Forest Service and Parker-Young indicates that the former seemed anxious to have railroad operations cease on government land. becomes apparent that the company also wanted to conclude timer cutting and rail operations long before the deadline in 1956.¹⁷ Since the East Branch & Lincoln served this tract, its sale doomed any longterm rail operations. A second change was the increased use of trucks to haul logs. Although as late as the mid-1940s Parker Young continued to employ traditional transport methods (horses, sleds, and tractors) for getting logs from the cutting areas to the landings, in 1941 management announced a consequential decision regarding transportation from the landings to the mill. The November 1941 The Pycolog contained an article which conveyed the extraordinary nature of the decision: "EXTRA Trucks to invade the Lincoln Line after more than fifty years. This winter pulp and logs will be taken down the line by truck."18

Bill Boyle, who had worked in Lincoln for both the Henrys and Parker Young, laid out the new truck road which began near "the new bridge at Camp Four" and went up the east side of the river to a point

across from Camp Eight. This route placed the truck road on the opposite bank of the East Branch from the railroad. While spotting the road Boyle remarked: "Forty-eight years ago, when I was firing one of the old wood burners, I never thought that I would be spotting a truckroad into this valley; I thought that all the timber would be taken in by train."19 From then until the company removed the tracks in 1948, The Pycolog contained more and more references to the hauling of pulp and logs by truck.²⁰

The trestle over Black Brook remained in use until the very last years of the East Branch & Lincoln as a logging railroad. The grand finale occurred during the winter of 1945-1946. Cutting in the Cedar Brook area had begun in 1927 and had continued intermittently from then to the 1945-1946 winter cutting sea-The amount of wood available in the Cedar Brook area can be understood by the cordage cut in the years from 1927 through 1938. In those years 125,000 cords of pulp were cut and transported by rail to Lincoln. The crews lived in Camps 24, 24A, and 24B during the years of operation. At the end of the winter of 1946 the company picked up the rails from Camp 24 back to Trestle 16 about a mile east of Black Brook. The truncated East Branch & Lincoln now only went a short distance beyond camp 16.21

By November, 1946, rails had been removed to Camp 16, which likely means that Black Brook trestle no longer had any tracks crossing it. From this evidence, it seems safe to conclude that the last railroad use of the trestle occurred in the summer or fall of 1946 as part of the process of hauling the rails removed from the right of way between Cedar Brook and Camp 16. The truncation of the East Branch continued in rapid fashion. During the summer of 1946, the company reopened Camp 16 for the last time. That summer 1,200 cords of peeled pulp had been cut by mid-July.²² In the winter of 1946-1947 trucks hauled wood out of the Camp 16 area, but no mention is made in *The Pycolog* regarding rail haulage that winter. Perhaps some wood did come down by rail, but clearly the use of trucks was becoming the standard way of wood haulage. Another important change during the postwar period was the increasing use of wood cut by contractors rather than relying solely on wood cut by company crews on company land.²³

What also becomes clear was the desire of the company to conclude rail operations as soon as feasible. On 9 October, 1946, Parker Young sold its pulp and paper mills in Lincoln and Livermore Falls to Marcalus Manufacturing Company of East Paterson, New Jersey. Parker Young retained ownership of its other "public and private village property" in Lincoln. Marcalus came under increasing pressure from the Forest Service to discontinue the logging railroad. By the summer of 1947, the active railroad reached only to the vicinity of Camp 8, located about halfway between the Hancock Branch of the Pemigewasset River and Franconia Brook. By December, 1947, crews were removing rails back to Camp 3 which was only a short distance east of Lincoln. Effectively the East Branch & Lincoln had ceased to exist as a logging railroad.24

Black Brook trestle, the focus of this project, furnishes some excellent insight into construction techniques on logging railroads in New Hampshire. As the preceding narrative suggests, this line remained

in operation far longer than most such railroads in the state. According to C. Francis Belcher, "Most of the trestles and bridges along the East Branch & Lincoln were the work of a self-taught construction foreman, Levi ("Pork Barrel") Dumas." Dumas came to work for J.E. Henry in the early 1900s and would in all likelihood have supervised the building of Black Brook trestle which had to have been completed sometime between 1903 and 1917. Dumas also had responsibilities for dams, roadbeds, and the portable logging camp buildings used by the Henrys and Parker Young.²⁵

Our recording of Black Brook trestle demonstrates clearly that some of the original pier foundations (and perhaps the abutments as well) were log cribs. existing drawings and photographs indicate, the extant stone and mortar piers have openings that are in proper alignment to indicate the mortared stone piers were built around existing cribbing. In some of the holes we found iron pins used to fasten the logs together. We are assuming that as the cribbing began to settle or decay, the stone piers were constructed around the wood cribbing to stabilize the foundation and to provide adequate support for the superstructure and the truss. Despite the extensive damage done to the railroad by the flood of November, 1927, the Franconia Brook trestle, Trestle No. 16, and the Black Brook trestle survived the high water. Henry C. Waldo, a forester employed by Parker Young at the time of the flood, noted that the flood had a devastating impact on the railroad and the mill facilities, but stated that these bridges sustained no consequential damage.26

In addition to the stone and mortar piers, other

strengthening became necessary to maintain safe operation of trains. A pier (No. 11) placed in the middle of Black Brook supported posts that buttressed the center part of the truss. Because the truss is asymmetrical, it has, over the years, sagged down and partially moved off the foundation of Pier 12. The support in the center appears to have been an improvised measure to avoid major reconstruction.²⁷

Henry Waldo, who worked for Parker Young in 1945 and 1946, does not remember any major repairs to the bridges of the East Branch when preparations were being made to finish cutting the virgin timber in the Cedar Brook area. He also stated that the trestles and bridges were covered with sheet metal on the top (below the ties) so that water would not penetrate the timbers. This practice, at least in part, accounts for the longevity of the trestles and why the untreated lumber did not decay. Black Brook trestle substantiates this, since the upper members of the structure are in remarkably good condition. Most of the decay evident today (1991) has occurred at ground level, where the timbers and sills are in contact with the earth or where water can accumulate as on the stone abutments. Waldo believes that the additional piers were likely put in place by the Forest Service after the abandonment of the railroad. Almost all of these repairs and reinforcements remain in place and are noted in the drawings. We have concluded that piers 1, 3, 5, 8, 10, 12, 13, and 14 are original. Other piers were added either because of the need to strengthen the trestle during those final years of railroad operation in the 1940s or by the U.S. Forest Service to make the trestle safe for use as a footbridge.²⁸

Such an approach made sense for a company not

contemplating any long term use of this structure. The future belonged to truck transport, so why should the company waste funds to repair the bridge beyond the barest necessities. Also, Parker Young had only twenty years of cutting rights in what today is the Pemigewasset Wilderness, further undermining any rationale beyond short-term repairs.

As one contemplates how many logging railroad bridges and trestles once existed in New Hampshire, it is remarkable that only this one survives. Far from being the longest or highest, it, nevertheless, furnishes a fine example of vernacular bridge construction by men who likely had little or no professional engineering training, but who did know what was required to carry a railroad across a river or brook. What we have is a trestle, despite its flawed design, which served as an active bridge for many years for a company chronically short of adequate resources to make proper repairs. The depression years of the 1930s taxed even the most affluent of firms. Parker-Young could hardly be placed in that category and did file for bankruptcy in 1933.²⁹

Despite all the glamour and romance associated with railroads of all types, we must always remember that they have been and remain businesses. Once they are no longer profitable or, in this instance, their resource base becomes exhausted, or a new technology comes along that can do the job more efficiently, their reason for being ceases to exist. Such was the situation for the East Branch & Lincoln. served as the most efficient way to transport pulp and logs from the Henry and Parker Young holdings in the East Branch watershed. By the 1940s virtually all of the old growth accessible to the railroad had been cut and trucks could haul the wood from the new cutting areas more cheaply. Furthermore, the Forest Service sought to end all logging in the area and would, in time, seek to have the valley designated as a wilderness tract. All of these circumstances combined to bring to an end an era of logging activity that commenced in New Hampshire in the 1870s.

Perhaps an article that appeared in the January 1948 issue of *The Marcalog* gives the most fitting and appropriate epitaph for the East Branch & Lincoln:

The East Branch Logging Railroad now consists of only the yard trackage and the main line along the river as far as the Company's line [boundary?] above Camp 3. Fred Charron and his crew succeeded in spite of the snow in salvaging all steel from Camp 16 to that point.³⁰

This very matter-of-fact statement is a fitting reminder that the origins, expansion, and ultimate demise of this railroad and the way of life it represented must be understood as the culmination of a series of business decisions by owners and managers beginning with J.E. Henry and concluding with Marcalus Manufacturing Company.

Endnotes

1 C. Francis Belcher, Logging Railroads of the White Mountains, (Boston: Appalachian Mountain Club, 1980), 108-110; George H. Moses, "Pullman, New Hampshire: A Lumber Camp, "Granite Monthly" 18 (May 1895): 320-327. For a description of Lincoln in the 1870s see, Alonzo J. Fogg, compiler, The Statistics and Gazetteer of New-Hampshire (Concord, N.H.: D.L. Guernsey, 1874), 225-226.

Belcher, Logging Railroads, 118.

- ³ *Pycolog*, January 1923, 5.
- 4 Pycolog, "Lincoln Woods," October 1920, 5.
- 5 Pycolog, "History of the Town of Lincoln," January 1944, 11.
- Pycolog, "History of Lincoln," January 1944, 11;
 "What is the Parker Young Company?" April 1920, 1.
- Pycolog, "Beebe River Past, Present and Future," May-June 1925, 5-6. For the location of the Beebe River operations see map in Appendix B, "Map of Pemigewasset Valley."
- Ibid., 5. Henry C. Waldo stated that "extra flat cars were used in the daily run, nights only, hauling slabs, hopper cars for hogged sawmill and rosser waste for the boilers at Lincoln." Letter of Henry C. Waldo, Lincoln, NH to William L. Taylor, Plymouth State College, 14 September 1991.
- Pycolog, "Lincoln Mills Hang up Some New Records," January 1923, 3.
- 10 Pycolog, "Transporting Logs," February-March 1926, 1.
- 11 Pycolog, "Superintendents' Convention," October November 1922, 5. For location of Camp 23 see Appendix B. Henry C. Waldo states that in his experience each rider was requested to sign "a waiver of liability." Waldo Letter, 14 September 1991.
- Much of the information on rail operations in this paragraph was supplied by Henry C. Waldo. Waldo stated that the Boyles (Billy and Louis) preferred the rod locomotives to the geared locomotives (Shays and one Climax). Waldo also stated that the railroad hauled only logs which were cut into fourfoot pulp length at the mill in Lincoln. Interview with Henry C. Waldo, Lincoln, N.H., 20 June 1991. Waldo worked for Parker-Young from 1927 into the early

1930s and for Parker-Young and Marcalus again beginning in 1945. See Ari and Olive Hoggenboom, *A History of the ICC: From Panacea to Palliative* (New York: W.W. Norton & Co., 1976), 33-34, for a brief overview of safety legislation by the Congress and the enforcement role of the ICC. Congress passed the Safety Appliance Act in 1893.

Pycolog, "The E. B. & L.," July 1942, 2-3. The article noted that Louis Boyle had thirty-six years on the East Branch. Ibid. C. Francis Belcher states that the longest train over the line was twenty-eight cars behind Baldwin No. 5. This occurred in 1912 from operations centered around Camps 19 and 20 in the Stillwater region. Belcher, Logging Railroads, 116. Pycolog, "Pycologgers," February 1946, 9. Additional information on train operations from Henry C. Waldo. Waldo interview, 20 June 1991. For location of Camp 24 see map in Appendix B. Waldo stated in a letter that few trains had more than 12 or 13 log cars (two log trucks) during his tenure, and never on down grades such as Cedar Brook. Waldo Letter, 14 September 1991.

Pycolog, "The E. B. & L.," July 1942, 2-3; "Accident Department," June 1919, 3. A set of logging trucks is on display near the entrance to Loon Mountain resort. These trucks have link and pin couplers. See maps in Appendix B for locations of woods operations and the routes of the two railroads.

15 Pycolog, "Beebe River," January 1920, 4.

Pycolog. "The E. B. & L., "July 1942, 2-3; "Winter Parties," March 1923, 6-7; October 1946, 16. Belcher, Logging Railroads, 116-117, 119. Henry Waldo stated that sometimes Pullman cars would ride the rails of the East Branch & Lincoln when visitors would arrive

to view and inspect Parker Young operations. The ability of Pullmans to use East Branch rails indicates the high quality of the roadbed and the lack of sharp curves on the line. Waldo interview, 20 June 1991.

Memo from H.G. Waldo, Associate Forester, to A.H. Anderson, Acting Forest Supervisor, 20 September 1943 in U.S. Forest Service, White Mountain National Forest, Supervisor's Office Land Records, File: "Parker Young Company Tract #50a, n" in White Mountain National Forest office, Laconia, N.H. See also correspondence in January and February 1948 between C.L. Graham, Forest Supervisor, and Henry C. Waldo, Marcalus Manufacturing Co., in ibid. Tract 50a totaled 68,785 acres and was purchased by the U.S. Forest Service on 13 March 1936. See land records, File: "Parker Young Company Tract #50a, n." Waldo Letter, 14 September 1991.

- Pycolog, "The Pycologgers," November 1941, 5.
- 19 Ibid.
- See *Pycolog*, "Pycologgers," November 1941, 5.
- Pycolog, "Cedar Brook Finale," May 1946, 8.See also map in Appendix B.
- Pycolog, "Camp 16," November 1946, 13; "Pycologgers," August 1946, 8. Camp 16 was located just west of Trestle 16. Its reuse would not have required crossing the trestle.
- See *Pycolog*, November 1946; *The Marcalog*, February 1947, September 1947; Waldo interview, 20 June 1991.
- Pycolog, "Announcement," November 1946, 6;
 The Marcalog, "Marcaloggers," December 1947, 7; ibid.,
 January 1948, 6. The Pycolog became The Marcalog in December 1946. In July 1947 Parker-Young began selling its remaining real estate holdings in Lincoln.

The company offered 135 houses for sale. The Laconia Evening Citizen, 2 July 1947, 1, 5. See also copy of letter to Henry C. Waldo, Manager of Wood Department, Marcalus Manufacturing Company, Lincoln, N.H., from C.L. Graham, Forest Supervisor, White Mountain National Forest, no date. In this letter Henry Waldo suggested wording regarding cessation of railroad operations: "In our opinion [Forest Service] this logging railroad is no longer necessary for efficient and proper operation of the mills of Marcalus Manufacturing Co., Inc. at Lincoln, N.H." See also letter from Waldo to Graham, 9 January 1948. Both in U.S. Forest Service, White Mountain National Forest, Supervisor's Office Land Records, File: "Parker-Young Company Tract #50a, n."

Belcher, Logging Railroads, 118-119. The date of construction of Black Brook trestle has been determined by two maps of the region. In Scarborough's Topographic Map of the White Mountains and Central New Hampshire (Boston: The Scarborough Company, 1903) no railroad appears in the vicinity of Bear (Black) Brook. The line is shown only as far as Franconia Brook. In 1917 the U.S. Forest Service published a map of the White Mountain National Forest showing the rail line reaching up the Shoal Pond Brook valley and into the Carrigan Brook area. Some of the Park Young maps refer to this area as Stillwater and Belcher also uses this term. See map U.S. Department of Agriculture, Forest Service, White Mountain National Forest, New Hampshire-Maine (Washington 1917.)

See drawings "Earliest Reconstruction," "Stone/Mortar Reconstruction," and "Present Trestle" by Duncan Wilkie, Institute for New Hampshire Studies, Plymouth State College. Waldo interview, 20 June 1991.

- ²⁷ See Wilkie drawings, "South View of Trestle" and "Main Truss South Face" and Below View."
- 28 See Wilkie drawings, "Main Truss South Face," "Below View," and "Present Trestle."
- ²⁹ Belcher, Logging Railroads, 142.
- 30 *Marcalog*, "Marcaloggers," January 1948,6.