The Mid-South Flyer

Fall 2016

A Quarterly Publication of the Mid-South Chapter of the Railway & Locomotive Historical Society, Inc

Fall Meeting Highlight

Historic sign project taps in to depot find

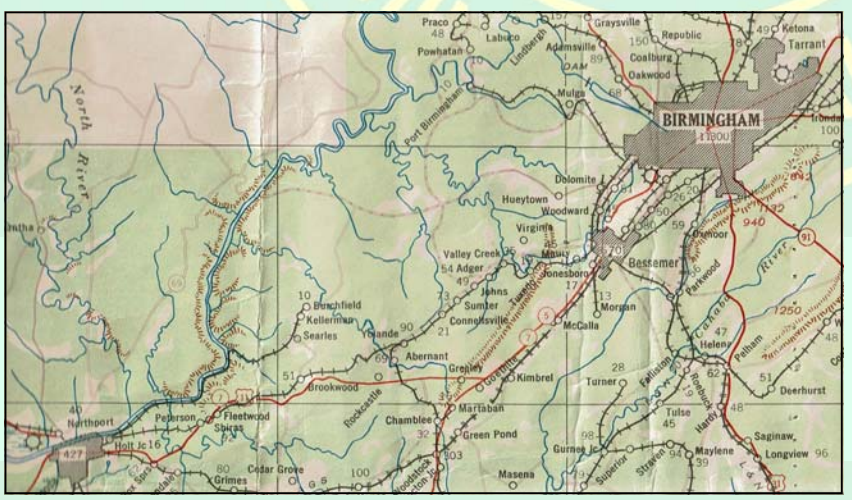
by Marvin Clemons

By now, most everyone has heard or read about MidSouth Chapter member James Lowery's ever-expanding Birmingham Mineral Railroad ("BMRR") Historic Signs project. If by chance you haven't picked up on it, James is single-handedly erecting signs marking the various locations of the former L&N "Mineral Lines" in and around the Birmingham District.

Former L&N Depot restaurant owner Bill Lloyd stands beside the newly erected Birmingham Mineral Railroad historical marker *(James Lowery)*

As James will tell you, the great majority of signs mark locations where the BMRR once ran, with a handful marking the few remaining rail lines or structures. In fact, until recently only two remaining BMRR depots out of the dozens that once existed had been identified for signage—the former Woodlawn depot from the Gate City Branch, relocated to the Heart of Dixie Railroad Museum in Calera for use as the Bill Boone Memorial Library, and the Oneonta depot from the Alabama Mineral Railroad, relocated to the Oneonta recreational facility as a community center. This past summer, while reconnoitering along the BMRR's Blue Creek extension towards Tuscaloosa, James made a surprising discovery. We'll let him tell it.

"During the process of researching the Blue Creek Extension (still active freight tracks) beginning in Bessemer and running west from there," James related, "I found that, toward the end of that branch, it turned south at which point the Dudley Branch started near the Jefferson/Tuscaloosa County line. The Dudley Branch continued west from there until it ended at Brookwood, where the Birmingham and Tuscaloosa Railroad (branch) began and continued west all the way to the north end of the yard in downtown Tuscaloosa.



"Part of my research had indicated that there was an L&N train station east of the yard in downtown Tuscaloosa. After locating the crossties and ballast rock still in place beside Helen Keller Boulevard east of the University of Alabama campus, I found the former roadbed still visible going west and then following Campus Drive through the midst of the campus! Imagine my surprise when I arrived downtown where the former tracks crossed Greensboro Avenue, and there was a beautiful, restored L&N BMRR depot built in 1912 and now used as a restaurant!"

Meeting Reminder! The quarterly meeting of the MidSouth Chapter, R&LHS, will be held Saturday, October 29 beginning at 2PM at the Historic Leeds Depot. Ya'll come!

Beautifully restored L&N depot at Tuscaloosa, AL. The freight house is seen at left. ***(James Lowery)***

James introduced himself to the depot restaurant owners Bill and Bebe Lloyd, who gladly gave him a tour of the building, pointing out the many original structures and construction still in place. As James learned, Bill has been in the restaurant and bar business in Nashville and Tuscaloosa for more than 30 years. In 2005, he obtained a long-term lease on the historic L&N passenger station after it had housed a series of restaurants and bars for more than two decades. He operated it as a catering business and private event space for ten years, and decided during the spring of 2015 that the time was right to transform it into a restaurant.

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The Mid-South Flyer is published bi-monthly by the Mid-South Chapter of the Railway & Locomotive Historical Society (R&LHS), Inc. The R&LHS is a non-profit educational organization dedicated to the study and preservation of railroad history. National and chapter dues are $50 and include subscriptions to the Society's twice-yearly magazine Railroad History and quarterly newsletter, and the chapter's e-newsletter, The Mid-South Flyer. Membership applications for R&LHS and the Mid-South Chapter are available on the Internet at www.rlhs.org. Article ideas and reader comments are invited and may be emailed to:

Marvin Clemons, Editor
Email: mclemonsjr@gmail.com

David Lester, Contributing Editor
Email: davidclester@comcast.net

John Stewart, Contributing Editor
Email: bhamrails@gmail.com

He and Bebe then undertook a seven-month renovation, the first major facelift of the building since 1978. A true labor of love, this renovation pays homage to the building's history, and they were careful to preserve its architectural integrity. The decor includes historic photos and other items that showcase its railroad roots. Tuscaloosa residents who remember its many incarnations enjoy reminiscing over good meals and drinks at 301 Bistro, Bar, and Beer Garden.

The Lloyds were happy to grant James permission to install a BMRR sign on the site, and later when asked, Bebe accepted James' invitation to speak to the Chapter on their efforts to preserve and restore the depot into a successful restaurant and local attraction.

An Alabama native, Mrs. Lloyd has lived in Tuscaloosa since 1998. She is a freelance writer, teaches writing and literature courses at the University of Alabama and at the University of Montevallo, and also sells handmade items and homemade baked goods as Madwoman in the Attic and Madwoman in the Kitchen. She holds a PhD in English from the University of Alabama.

Join your fellow MidSouth members on Saturday, October 29, at the Leeds Depot and learn more about the Tuscaloosa depot's history and restoration. The meeting begins at 2PM, and all are welcome to browse the Chapter's exhibits and enjoy the mainline action from the viewing platform. Come and bring a friend!

Mid-South Chapter Update

by James Lowery, Chapter President

UPCOMING ELECTION OF MID-SOUTH CHAPTER BOARD MEMBERS AND OFFICERS

In November, the Mid-South Chapter Board of Directors will be creating a slate of nominations for Board and Officer positions to be presented, and voted on, at the January Chapter meeting. If you would like to serve on the Board of Directors, or if you would like to nominate a person to serve on the Board, please let James Lowery know at JLowery2@gmail.com or JLowery@uab.edu.

CURRENT PROJECT PROGRESS UPDATE

Sample baggage room mural

- Large format photographs with explanatory captions have been installed on the Baggage Room walls of the Leeds Historic Depot.

- Room in the Depot featuring the Frank Ardrey Photograph Collection is being completed with the hanging of framed photographs from the collection as a complement to the video that shows many of his wonderful, significant photographs.

Sample Ardrey print

- Frank Ardrey Photograph Collection has been scanned and has been added to the Mid-South Chapter website.

- Work is continuing on creating an Alabama Railroad Archives in conjunction with the Heart of Dixie Railroad Museum. This will make available in digital format photographs of historic railroads in Alabama and will include collections or individual photographs that are donated or loaned for this purpose and which will make such photographs available online. This is a significant photograph preservation effort that will benefit researchers and casual viewers for years to come.

- The **100th sign** has been installed in the Historic Birmingham Mineral Railroad Signs Project. This significant milestone was reached with the installation of a BMRR sign in the former Village Springs community on Old Highway 75 just south of the Blount County/Jefferson County line. That installation was sponsored by the Trussville Daybreak Rotary Club, and the installation was attended by local citizens, historians, Board members of the Mid-South Chapter of the Railway & Locomotive Historical Society, an industrialist, the President of the Trussville Daybreak Rotary Club, and dignitaries including Jefferson County Commissioner Joe Knight who also is a member of the Trussville Daybreak Rotary Club.

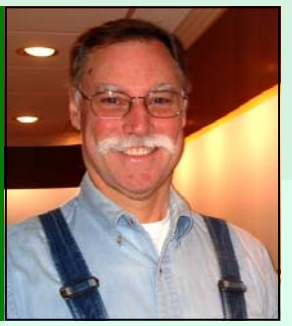
With installation of the 100th sign, a new **"100 for 100"** fundraising campaign has been initiated that is seeking "**100 donations for the next 100 signs.**" Please help us reach that goal of 100 more signs by donating ONLINE any amount or at any of the suggested levels listed at https://igg.me/at/jejzfhE7mT8. Or you may donate using a check by clicking HERE to go to http://bham-mrr.com/?page_id=94 and mailing the check and form to the address on the donation form. And THANK YOU for making possible installation of the next 100 signs!

Let the Mid-South Chapter Board of Directors know of any other items or projects you would like for the Chapter to become involved in or to undertake.

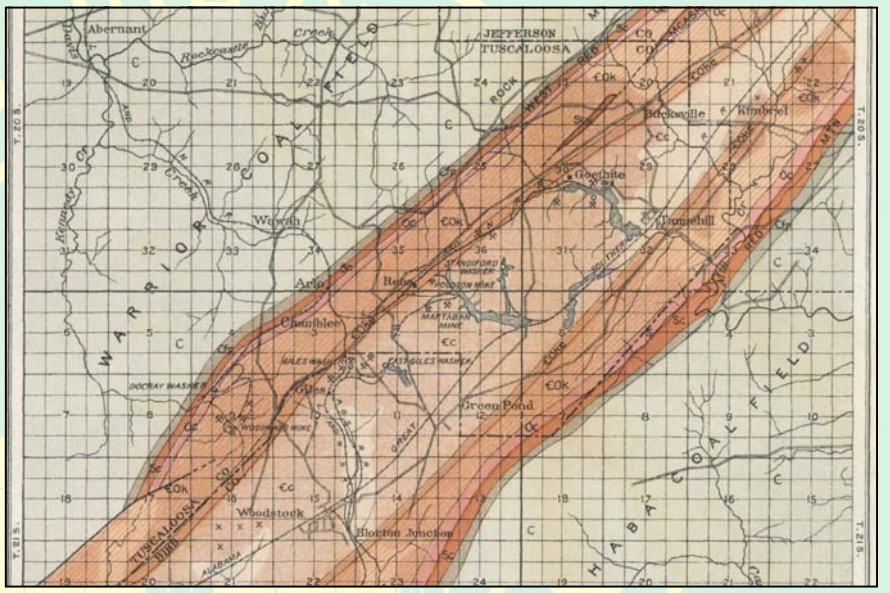
Railroad History

Brown Ore for Birmingham

By John Stewart, Contributing Editor



Brown ore was an important component used to make iron, although not noted as often as are red ore, coke and limestone (dolomite). Brown ore was important in making certain types of iron and in general it was mixed with red ore due to chemistry of other elements found in each type of ore. In many locales, brown ore was the only readily available iron ore and it could be used to make pig iron. This was true in Alabama's early iron making days at Tannehill Furnace as well as Edwards Furnace at Woodstock.



There were a number of brown [iron] ore sites around the Birmingham District as well as across the northern half of Alabama. Transportation costs figure heavily into the cost of making iron, so each of the major iron makers in the Birmingham District tended to favor brown ore sites as close to their blast furnaces as possible. The proximity of key ingredients to make iron was unique to Birmingham.

A key difference between "red ore" hematite, and "brown ore" limonite (and other types) is that brown ores are chemically bonded with water. The basic iron component, Fe_2O_3, is the same in both types of ore. Since red ore is more homogeneous it was typically only crushed before use in a blast furnace. Brown ore is found containing clays, and other minerals (rocks) and must be washed (sometimes crushed) before being used. Both red and brown ores may be processed further to concentrate the iron content of the material being sent to the blast furnace – all these processes are called "beneficiation".

BROWN ORE. (ALABAMA CONSOLIDATED COAL AND IRON CO.)

This story is aimed at showcasing pictures to explain the brown ore operations of the "Woodstock" district southwest of Birmingham located along the Alabama Great Southern RR (AGS) in Tuscaloosa and Bibb Counties. Some of these pictures have become more readily available after having been posted on the University of Alabama Library's online archives. It should be noted that the "Champion" district for brown ore production (located northeast of Birmingham) has been well documented in a recent book by Van Gunter and Aulden Woodard, *"Champion Mines, Our Father's Mines"*.

Like all of Birmingham's bulk raw materials, brown ore depended upon the railroads for cost effective transportation to the blast

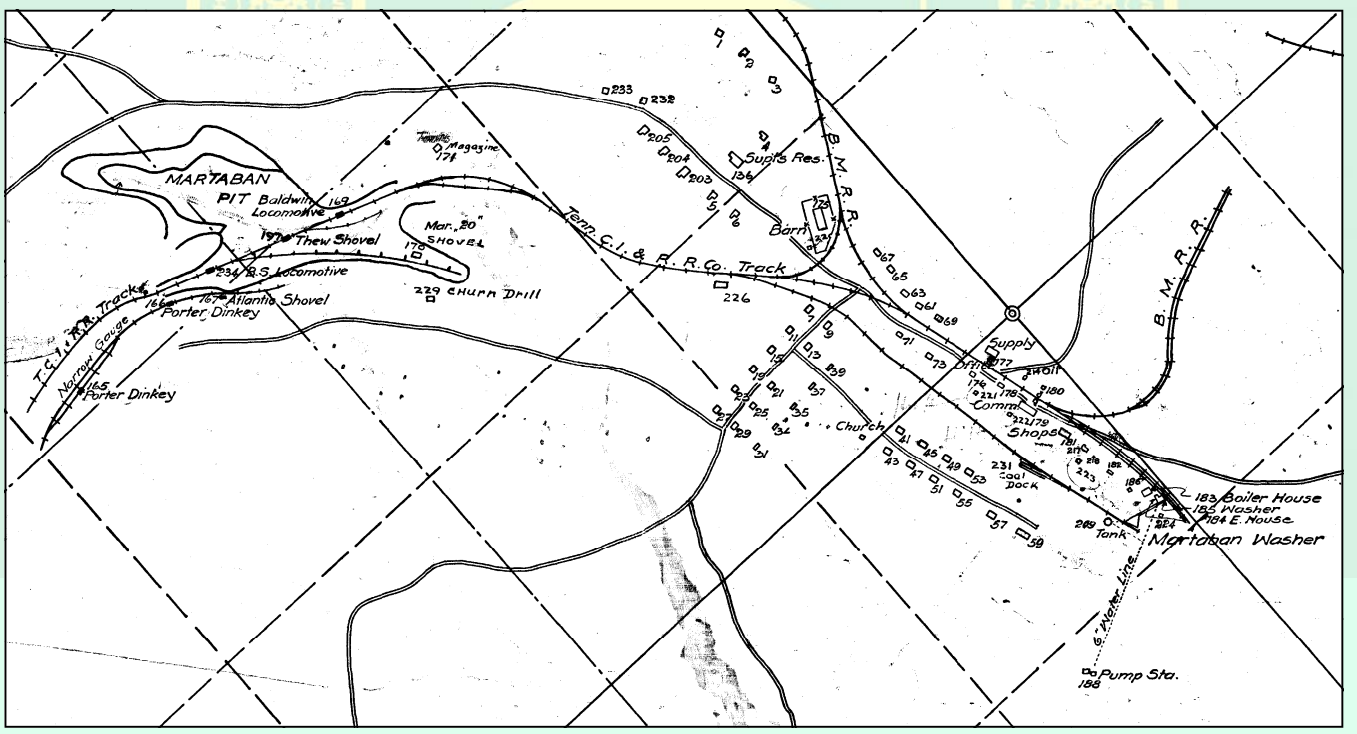
furnaces. The Woodstock District originally was served by the AGS RR which opened in 1872, passing right through the district between Bessemer and Tuscaloosa, AL.

Serious development of the post-Civil War iron industry didn't take off in Birmingham until the mid- 1880's. The L&N RR extended lines from Bessemer toward Tuscaloosa starting in 1887, with a line from Bessemer to Blocton Jct, called the Blue Creek Extension, a distance of 27 miles. Blocton Jct was located along the AGS. A second 4 mile branch from this line, Chamblee to Goethite, near Tannehill, was extended the same year. These lines effectively put the L&N in a position to capture a good part of the brown ore traffic from the Woodstock District. (The Blue Creek Extension would capture significant coal traffic for more years than it did brown ore, ultimately extending to Tuscaloosa, AL).

Brown ore mining was almost exclusively open pit mining. The basic operation involved mining an exposed face of brown ore, loading onto tram cars, moving the ore to a crusher/washer and then loading into rail cars for a trip to the blast furnace. Early mining involved pick and shovel work although by the early 1900's steam powered railroad shovels were used. Likewise, man or mule powered trams were soon pulled by steam locomotives, often narrow gauge, to move from the pit to the washer.

By about 1905 all of the major companies in the Birmingham District were mining brown ore at (or planning to move into) the Woodstock District. These included Tennessee Coal and Iron (TCI), Republic Iron & Steel, Central Coal & Iron (Holt, AL) and eventually Woodward Iron (1908). (Sloss would jointly pursue brown ore in the Champion District with TCI, and would have extensive brown ore operations in the Russellville District in northwest Alabama.)

The TCI operations were known as the "Greeley District" based on a local place name. Among the sites were Giles, Martaban (L&N) and Standiford (AGS). Each site had its own ore washer. The TCI map below from the author's collection shows the railroads and labels the type of equipment, apparently for insurance purposes. Equipment included Marion, Thew and Atlantic brand steam shovels, as well as Porter, Baldwin and "BS" [Birmingham Southern?] locomotives. TCI standard gauge track was used along with narrow gauge to move material to the standard gauge "trunk" railroad spurs.



The images appearing on the following pages are from a collection of TCI images posted on the UA Library's online archive. Additional images are available from the USGS online archives. A good source of information on brown ore mining in this time period is *"Iron Ores, Fuels and Fluxes of the Birmingham District"*, Bulletin 400, USGS, 1910 (Google Books). The TCI images generally date from about 1905 to about 1913. Many of the UA TCI images are not labeled and the collection is not sorted by any obvious system. The images are themselves numbered, and further study is needed to sort them by location and type of operation. The brown ore operation images represent a great new resource of this interesting area.

The brown ore mining operations in the Woodstock District are a less well documented but interesting activity in the Birmingham District's iron making. Many of these locations were operating until the 1940's if not later, although subsequent operations were often performed on a contract basis for the iron companies. The wonderful photographs in the University of Alabama's online archive are a very good way to study and learn more about these interesting operations. More work needs to be done.

Typical brown ore operation on two levels at Martaban pit mine. The upper level requires removal of 25 feet or more of overburden. The lower level is the actual mining of the brown ore. This appears to use standard gauge track to the washer while the upper level stripping appears to be narrow gauge. *(Hoole Special collection U of A)*

One of the brown ore washers served by the L&N. This view shows the "dinkey" bringing ore from the pit on a raised embankment. The dump would incorporate a "grizzly" bar screen with a manual labor "pick man" to break the large lumps. The wooden chute carried the rough screened ore to the washer, here using a trommel screen and "logs". A trommel is a sloping cylindical screen with holes which rotates. The mined material is fed from one end, and bounces through the rotating cylinder. Smaller material falls through the holes for further processing and large material falls out the end. A log washer uses two parallel sloping steel cylinders with steel paddles which help break up the clay which tends to float with the wash water while the iron ore settles to the bottom. Washers were steam powered. *(Hoole Special collection, U of A)*

The washers operated by gravity and utilized a great deal of water. This shows a steam powered pump station and well source. As shown in the pictures, it was necessary to get the mined material up on a hill or trestle so that gravity would carry the material through the washer. As the discharge end there were waste chutes for large stones and sluice boxes to take the wash water and fines (mud) to the settling ponds. *(U of A, Hoole collection)*

A view of the settling ponds from one of the washer sites showing sluice boxes carrying water. The ponds created system of ponds with water flowing from one to another before eventually leaving the property. These required the construction of levees which had to be maintained and might break causing downstream damage. *(U of A, Hoole collection)*

Trip Report

A Visit to Cass

by Warren T. Jones, Sr.

Because I was driving, one of the stops on a family trip up the east coast in early August 2016 had to include a place I had read and heard about for many years. Fortunately my family indulges my passion for trains and voted with me for a visit to Cass, West Virginia on the trip.

In addition to my great interest in seeing my first Shay steam locomotive in action, I have been interested in the similarity between the origins of Cass and Helen, Georgia, since I am a native of North Georgia. Both began as "company towns" in support of giant saw mills, operating railroads that extended into the mountains, bringing out logs and connecting to high iron for lumber export to the world. Artifacts of the Helen sawmill and associated mountain rails are almost nonexistent, so I was looking forward to the well-preserved Cass company town, railroad and locomotives as an imagined surrogate of what the Helen operation might have looked like. The operating time frame for Cass was 1900 -1960 and for Helen 1913- 1931.

The location that became Cass in the Allegheny Mountains of the eastern edge of the state, was selected as a site for the sawmill and tracks into the mountains for the gear-driven logging locomotives to haul the coveted red spruce logs to the mill. A location along the Greenbriar River was important since the Chesapeake and Ohio Railroad was building a branch line north along its banks from the mainline, thus providing the high iron connection for the lumber export.

One of the most famous orders for this high quality spruce was received from the Wright Cycle Company, 1127 West Third Street, Dayton, Ohio, dated March 5, 1904, for about 500 feet of the finest possible spruce for use in constructing flying machines. This order was filled November 29, 1905 and a check for fifty dollars was written by the Wright Cycle Company. It is believed that this order was used to build the "Wright Flyer No. 3" that logged the largest number of flight hours of any of the Wright aircraft.

During the 60 year operation, gear-driven locomotives (17 Shays and one Climax) served the Cass logging railroad. Shay number No. 5 and No. 4 (2nd) are operating today as survivors of over a century. A total of about 250 miles of track was built into the mountains, much of which was temporary, steep, twisting and frail. Locomotives like the Shay with direct gearing to all wheels provided the slow but powerful traction needed to pull very heavy loads. Today only 11 miles of the original track remain as part of the Cass Scenic Railroad State Park. Since the railroad closed down and the Park opened, two additional Shays have been added (called alien power), one of which is the last Shay ever built and the largest still in existence. It was a special order by the Western Maryland Railroad and still carries the UMR name and No. 6. It is on a 50 year lease from the B & O Museum. A total of 2,767 Shays were built by Lima over a 67 year period ending in 1945. (A Birmingham connection: Shay No. 10 was sold to the Birmingham Rail and Locomotive Company in the late 1920s)

On our visit we were treated to a ride in the middle open coach (old logging flat cars that have been refurbished) of three that were pushed up into the mountains by the famed Shay No. 5, celebrating its 111th anniversary on the Cass rails in 2016. When No. 5 was first acquired, it was assigned for seven years to George "Piney" Williams, who has been cited as "by far the most famous of Cass engineers". (Source: Philip V. Bagdon book below) It was a time when locomotive engineers could be community heroes. We experienced a switchback for the first time and along the way saw the shops where all locomotives are maintained, beautiful views and got to see a Shay taking on water at the tank. Our instructions before arriving included "wear black" because of the smoke.

The grade on the trip can be up to 11 percent. On the way down the mountain the brakeman (actually brakelady) on our coach was tightening the brake wheel but was periodically swinging over the side and looking at the wheels. I asked her why. She said they had to make sure that the brakes were not locking on the wheels and causing them to slide on the rails.

The restored company houses are now rented as vacation cottages and a stroll through town should include a visit to the Cass Depot, company store, museum and visitor center. The surrounding beautiful Pocahontas County is the birthplace of 8 rivers and filled with family outdoor recreation opportunities (See website below) including the 78 mile multiuse Greenbriar River Trail, which is the road bed of the C&O railroad that once passed through Cass. After leaving Cass, we stopped at the famous Greenbriar Hotel to take the Bunker tour. It turns out that the Greenbriar Hotel is a train story. While the Bunker was being built, the hotel was owned by the C & O. It faces the C & O mainline.

My frequent visits to Helen, Georgia will never be the same. I have seen her past through the lens of Cass.

(Postscript: Ephraim Shay died on April 19, 1916. This is the centennial year of his passing).

Some Helpful References

Bagdon, Philip V., *Shay Logging Locomotives at Cass, West Virginia, 1900-1960: Service Profiles and Incidents-The Men Who Ran the Engines, 2001*

Clarkson, Roy B., *On Beyond Leatherbark: The Cass Saga*, 1990. (The story of Cass – the hometown of the author)

The Mountain State Railroad "http://www.msrlha.org/"&HYPERLINK "http://www.msrlha.org/" Logging Historical Association – Founded in 1982 and based in Cass, the Association is dedicated to the research, collection, preservation and restoration of equipment and structures related to West Virginia lumbering and railroad operations. Membership numbers over 500 throughout the U.S. and several foreign countries. Great photographs.

Cass Scenic Railroad State Park – Great photographs and information on schedules and activities at the Park, located in Pocahontas County, WV.

A Cass Centennial (The year 2000) Celebration song on YouTube entitled **The Shay** , complete with photographs sequenced throughout the song. The reference to "Old Barney" is the name given to the first Shay (No. 1) to operate in Cass.

"http://www.msrlha.org/geared-info.html"ComparisionHYPERLINK "http://www.msrlha.org/geared-info.html" of Geared Locomotive Types – Diagrams and descriptions of the Shay, Climax and Heisler locomotive types.

Shay Locomotives – This site is dedicated to researching, recording and sharing information about Shay Locomotives invented by Ephraim Shay and manufactured by Lima.

Alabama Logging Railroads – Short historical descriptions of logging railroad operations in Alabama.

A Remembrance

Remembering Jim McClellan

By David Lester, Contributing Editor

One of the advantages of reporting on the railroad industry is the opportunity to meet and talk with industry leaders that you would otherwise never know. Such is the case with Jim McClellan, who died recently, and who had one of the most influential and storied careers in modern railroading. I cannot say that Jim and I were friends, because we didn't know each other that well. However, I can say that he was an acquaintance, and one who I admired tremendously. And, when I learned of his death, I felt that I had lost a friend.

I sought his advice on several stories I wrote for Trains magazine, spent a couple of days with him at a rail conference a few years ago, and enjoyed dinner with him and some colleagues at least once. Indeed, I had just spoken with him two weeks before he died about a new project, and, as usual, he was very gracious and helpful.

From my experience, Jim's manner was straightforward and refreshing, laced with a wry sense of humor. His knowledge of the North American railroad industry seemed to know no bounds, and I can only imagine what it would have been like to work with him on a daily basis. I suspect that he kept everyone on their toes, and demanded as much from those who worked with or for him as he did himself.

Chances are, most readers of the ***Mid-South Flyer*** are familiar with Jim and know the monumental roles he played in shaping the modern railroad industry. His rail career spanned forty years, and included stints at Southern Railway (2), New York Central, Penn Central, the Federal Railroad Administration (2), Amtrak, the U.S. Railway Administration, the Association of American Railroads, and Norfolk Southern, from which he retired as the Senior Vice President for Planning. Two of his key achievements were being part of the group that created Amtrak and Conrail, then, later, playing a leadership role in the group that created Norfolk Southern, along with managing the split of Conrail between CSX and Norfolk Southern.

Journalist and former associate editor of Fortune Magazine Rush Loving, Jr. nicely chronicles Jim's involvement in these key events in a book entitled The Men Who Loved Trains. This book is highly recommended for those who want to learn more about Jim's career, as well as the intrigue of big time railroad wars.

I am very glad to have had the opportunity to interview Jim for the May 2015 of Trains Magazine. The interview provides his insight into railroad mergers in the 21st century, reflections on the service problems that plagued the industry in 2014, the use of LNG as a fuel for locomotives, and a review of the accomplishments of which he was most proud, in the CEO's chair as well as in other parts of the companies. Many are fondly remembered and many are forgotten. My bet is that Jim McClellan is one who will not be forgotten.

Golden Era Classics

Our summer newsletter featured a first-person article by David Lester on the Bicentennial tour of the American Freedom Train. As sometimes happens, a perfect photo illustration will only appear *after* the article is printed. Such was the case with this recently discovered shot of the *Southern Crescent* pulling into Birmingham alongside Freedom Train locomotive SP 4449 during the engine's layover. *(Don Sharp)*

Here's a classic for our many Central of Georgia fans. The year is 1906, and a snazzy little 4-6-0 locomotive with caboose and train prepare to head up the Margaret Branch from Leeds, but not before the crew and a few locals pose for the photographer. Just what the event, we don't know, but we're glad to have a record of it. *(Central of Georgia Historical Society collection)*