Chapter 2. Site History

Historical Overview

- 1 Rush Historic District (study area) is a former 2 zinc mining district and remnant industrial
- 3 landscape. It contains the remains of open-pit
- 4 and underground zinc mines, concentrating
- 5 mills, and a community of housing and retail
- 6 establishments. The study area is listed in the
- 7 National Register of Historic Places (NRHP),
- 8 with a period of significance covering the
- 9 area's productive zinc mining period of 1885 10 to 1931.

11

- 12 Before its establishment as a zinc mining
- 13 district, the landscape was inhabited by
- 14 American Indians. The lush natural setting of
- 15 the Buffalo River Valley drew people to the
- 16 area as early as the Dalton period (10500
- 17 to 9500 BP). They established temporary
- 18 settlements at the confluence of Rush Creek
- 19 and Buffalo River. By 800 AD, they had
- 20 permanent dwellings and practiced small
- 21 scale horticulture, growing squash and maize
- 22 along the banks of the river were established.

23

- 24 Beginning in the early 19th century, French
- 25 settlers prospected for minerals in the Ozark
- 26 Highlands. Zinc ore was discovered on Rush
- 27 Mountain around 1880 near the site of the
- 28 future Morning Star Mine. Prospectors were
- 29 hopeful that the ore contained silver and
- 30 built a smelter to process it. No silver was
- 31 found. The smelter was abandoned, and
- 32 remains today. However, the ores of Rush
- 33 Mountain were very rich in zinc content (40
- 34 to nearly 70% zinc) containing possibly the
- 35 highest grade zinc ever discovered in North
- 36 America.^{2.1}

37

44

38 In 1885 Morning Star Mine (M1) was

Service, 2006), II-5.

- 39 founded, formally kicking off the mining
- 40 industry and subsequent boom. Over time
- 42 2.1 Suzanne Rogers, et al. Historic Resource Documentation, Morning Star Mines Interpretive Area, Rush Historic 43 District. (U.S. Department of the Interior, National Park
- 41

- 45 mines opened along Rush and Clabber creeks,
- 46 creating the community first called Buffalo
- 47 Mining District and later known as Rush
- 48 Mining District.^{2,2} Mines were established
- 49 in the district, including White Eagle Mine
- 50 (M2), Red Cloud Mine (M3), McIntosh Mine
- 51 (M5), Ben Carney Mine (M6), and Yellow Rose
- 52 Mine (M7). This contributed to the broader
- 53 zinc industry in the Midwest, shipping ore
- 54 for smelting to Van Buren, Fort Smith, and St.
- 55 Louis.^{2.3}

56

- 57 Zinc is a component of the alloys brass
- 58 and bronze. The zinc extracted at Rush
- 59 Historic District was used in weapons and
- 60 ammunition, and for common materials such
- 61 as roofing, water tanks, paints, and rubber.
- 62 Many of the first zinc deposits extracted were
- 63 of relatively pure composition that did not
- 64 require further processing before smelting.
- 65 As demand for zinc grew, the purest deposits
- 66 were mined out and mine owners invested
- 67 in concentration mills with equipment that
- 68 could roll, crush, and extract the zinc from the
- 69 surrounding rock.

- 71 The demand for zinc ebbed and flowed
- 72 through the early 20th century. Mines
- 73 would open, close, and reopen based on
- 74 market prices. The start of World War I
- 75 brought new demand for zinc, as munitions
- 76 manufacturers sought out the material. As
- 77 market pricing increased, mining operations
- 78 accelerated resulting in a mining boom. 79 This led to ten different mining companies
- 80 operating fourteen separate mines within
- 81 the mining district.^{2,4} As thousands of miners
- 82 arrived, the community expanded to include
- 83 hotels, stores, a post office, courthouse, and

84

^{85 2.2} Rogers et al., Morning Star Mines Interpretive Area, III-7.

Rogers et al., Morning Star Mines Interpretive Area, II-2. 86 2.3

^{87 2.4} Eleven mines are located in the study area. Three mines, Philadelphia Mine (M4), Leader Mine, and Beulah Mine, 88 are outside NPS property and the NRHP boundary.

1 permanent residences. The influx of residents 2 outpaced available housing, and many miners 3 lived in tents. 5 The mining boom became a bust towards the 6 end of the war. National stockpiling of zinc led 7 to a dramatic drop in prices. The majority of 8 American zinc mines closed in the postwar 9 recession. The closing of Morning Star Mine 10 (M1) in 1931 marked the true end of the 11 mining boom.^{2.5} Efforts continued sporadically 12 to reignite the mining industry but the arrival 13 of the Great Depression kept investment low, 14 and World War II failed to bring new business 15 to the community. Gradually the residents of 16 Rush left the town, and the post office closed 17 in 1953. In the late 1950s investors made 18 another attempt to revive the mining industry, 19 while the remaining residents advertised the 20 'Rush Ghost Town' in an attempt to generate 21 tourism dollars. The last industrial mining 22 ended when the New White Eagle Mine closed 23 in 1962. With the closure of that mine the 24 final residents relocated. 25 26 The 1970s conservation movement brought 27 changes to the region. The U.S. Army Corps 28 of Engineers proposed two dams, Lone Rock 29 on the lower river and Gilbert on the middle 30 river. This served as a rallying point for 31 environmentalists who advocated the river's 32 continued conservation and recreational 33 use. In 1972, Public Law 92-237 established 34 Buffalo National River to preserve the river 35 as a free-flowing stream, and the area which 36 eventually became Rush Historic District 37 came under jurisdiction of the NPS. 38 39 40 41

Rogers et al., Morning Star Mines Interpretive Area, II-23.

43 2.5

Statement of Significance and Period of Significance

45 resources have been listed in the NRHP under

44 Rush Historic District's contributing

46 Criteria A, C, and D, representing a period 47 of significance covering the productive zinc 48 mining era, 1885 to 1931. 50 The study area is associated with the mining 51 industry of the Ozark Highlands, and its 52 significance is evident in the mines, spoils 53 piles, mill ruins, road and tramway networks, 54 and community of stores, offices, and 55 residences, now largely evidenced as ruins 56 and lesser traces on the landscape. The study 57 area's remnant features express the history of 58 zinc mining and associated community life in 59 the Ozark Highlands. The extant vernacular 60 and industrial building styles express the 61 design of Ozark culture and exemplify the 62 forms of an isolated mining settlement. The 63 built environment encapsulates a range of 64 activities that occurred during the mining era, 65 and reflects the regional economic influence 66 of the mining industry. The successful mines 67 stimulated development throughout northern 68 Arkansas, providing jobs, encouraging 69 settlement, contributing to the arrival of the 70 railroad, and providing national publicity for 71 the value of Arkansas minerals. The size and 72 scale of the mines and mining companies 73 were more than any other mining district in 74 northern Arkansas. 75

76 Rush Historic District contains buildings
77 and features that represent the vernacular
78 construction of the Ozark Highlands.
79 Remaining houses depict common rural styles
80 found in the Ozark Highlands in the early 20th
81 century – simple massing and roof forms,
82 vertical board construction, front porches,
83 and stone pier foundations. Inexpensive
84 materials, such as local stone, metal roofs, and
85 newspaper insulation, indicate vernacular

87

86 building traditions.

Periods of Landscape Development

| 1 The study area's archeological features, | 44 Five periods of landscape change describe the |
|--|--|
| 2 including ruins and artifacts below-grade, | 45 physical evolution of Rush Historic District. |
| 3 have the ability to provide archeological | 46 The beginning and end of each period |
| 4 information concerning the industrial and | 47 corresponds to, and documents, a point of |
| 5 social life during the period of significance. | 48 major physical modifications or significant |
| 6 | 49 change in development patterns. |
| 7 The period of significance, 1885 to 1931, | 50 |
| 8 captures the study area's development from | 51 These periods of development are described |
| 9 a small mining outpost using crude mining | 52 through narrative text and illustrations. One |
| 10 techniques to a thriving commercial center | 53 period falls within the period of significance, |
| 11 utilizing modern methods. The end date | 54 as noted in bold italic text. |
| 12 marks the permanent closing of Morning Star | 55 |
| 13 Mine Complex (M1), the dominant mining | 56 Pre-European American Settlement (pre 1800) |
| 14 operation. | 57 |
| 15 | 58 Early European American Settlement (1800 to |
| 16 | 59 1885) |
| 17 | 60 |
| 18 | 61 The Mining Era (1885 to 1931) |
| 19 | 62 |
| 20 | 63 Post-Mining Era (1932 to 1971) |
| 21 | 64 |
| 22 | 65 Buffalo National River to Present Day (1972 to |
| 23 | 66 Present Day) |
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1 Pre-European American Settlement (pre2 1800)

4 American Indian groups inhabited the Ozark
5 Highlands beginning in the Paleo-Indian
6 period. During the Archaic period (9500
7 BP) the region warmed, bringing forth the
8 deciduous forest and pine uplands that are
9 extant today. By 800 AD, American Indians
10 had established a permanent settlement at
11 the confluence of Rush Creek and Buffalo
12 River. They cleared the forest adjacent to the
13 river and utilized the river terrace for crop

14 production, growing domesticated plants of 15 squash, gourds, and maize.

17 **12000 to 9000 BP**

18

26

28

40

19 The Paleo-Indian period marks the earliest 20 record of people living in the Ozark 21 Highlands. People resided in the valleys and 22 ridgetops, and utilized bluff shelters. These 23 early people employed a variety of stone 24 tools for killing and harvesting big game, and 25 harvested nuts and berries. ^{2.6}

27 **10500 to 9500 BP**

29 The Dalton period represents the expansion 30 of generalized hunting and gathering 31 adaptations to a changing environment in 32 the Ozark Highlands.^{2,7} People utilized a wide 33 variety of tools, indicating familiarity with 34 numerous plant and animal species and how 35 to use them.

37 During the Dalton-Early Archaic period,38 people established a settlement at the39 confluence of Rush Creek and Buffalo

41 2.6 Dwight Pitcaithley, Let the River Be, A History of the Ozarks Buffalo River. (Santa Fe: U.S. Department of the Interior, National Park Service, Southwest Cultural Resources Center, 1989), 5.

45 2.7 Maria Nieves Zedeno. *Cultural Affiliation Statement,*Buffalo National River, Arkansas. Bureau of Applied
Research in Anthropology, Univ. of Arizona: 2008, 17.

47 River.^{2.8} The Dirst Site contains a transitional

48 Dalton-Archaic component, and was likely a

49 temporary seasonal village.^{2.9}

51 **9500 to 5000 BP**

53 The Archaic period was a long span of time

54 that generally marks the time between the 55 end of the Pleistocene to the beginning of

56 farming and pottery in North America. The

57 Archaic period in the Ozark Highlands began

58 a warmer and drier environment, which

59 contributed to the formation of modern

60 deciduous forests and creation of streams,

61 such as Buffalo River.^{2.10} People made seasonal

62 rounds hunting small game, fishing and

63 gathering wild foods. They would typically

64 return to the same camp or seasonal village

65 year after year, as was the case with the Dirst

66 Site.^{2.11}

67

80

68 **3000 BP to 200 AD**

70 The late Archaic and Woodland Transition
71 period marks an expansion of hickory/oak
72 forests with an increase in pine in upland
73 areas. Local domestication of plants began,
74 and settlements began to be used year-round.
75 The Dirst Site was occupied during this time,
76 indicating some locally cultivated plants and
77 stone tool manufacturing.^{2.12}

79 **500 BP to 800 AD**

81 During the Woodland period people in the 82 Ozark Highlands utilized valley floors and 83 stream bottoms to maintain domesticated 84 plants.^{2,13} Farming led to more permanent 85

86 2.8 Theodore Catton. Life, Leisure, and Hardship Along the
 Buffalo, Historic Resources Study, Buffalo National River.
 (Omaha: U.S. Department of the Interior, National Park Service, Midwest Region, 2008), 21.

 89 2.9 Zedeno. Cultural Affiliation Statement, 18.
 90 2.10 Zedeno. Cultural Affiliation Statement, 20.
 2.11 Catton. Life, Leisure, and Hardship along the Buffalo, 12.
 2.12 Zedeno. Cultural Affiliation Statement, 22.

92 2.13 Pitcaithley, Let the River Be, 5.

| | village sites, production of pottery, and | 47 1700s to 1800 |
|----|---|---|
| | expanded trade networks. | 48 |
| 3 | | 49 Around 1700 the Osage pushed into the Ozark |
| | The Early Woodland component of the Dirst | 50 Highlands from the north and east. They |
| | site indicates that squash and gourds were | 51 primarily resided in Missouri but ventured |
| | grown adjacent to Buffalo River. ^{2.14} | 52 into the Buffalo River Valley to hunt. ^{2.18} |
| 7 | | 53 |
| | The Dirst site was occupied during the Middle | 54 |
| | to Late Woodland period. People established | 55 |
| | permanent dwellings, and artifacts show | 56 |
| | evidence of an "Emergent Mississippian" | 57 |
| | cultural presence, indicating cultural | 58 |
| | influence from the Mississippian peoples | 59 |
| | to the east. The village was occupied year- | 60 |
| | round, with a subsistence economy based on | 61 |
| | hunting, gathering, and domesticated plant | 62 |
| 17 | production including maize. ^{2.15} | 63 |
| 18 | | 64 |
| 19 | 800 AD to 1550 | 65 |
| 20 | | 66 |
| | During the Mississippian period, the major | 67 |
| | waterways of the Ozark Highlands were | 68 |
| | permanently occupied. The valleys were | 69 |
| | utilized for farming maize, and uplands were | 70 |
| 25 | used for hunting. ^{2.16} | 71 |
| 26 | | 72 |
| 27 | 1541 to 1700 | 73 |
| 28 | | 74 |
| | The first European presence in the Mississippi | 75 |
| | Valley did not provide much insight into the | 76 |
| 31 | native use of the Ozark Highlands. According | 77 |
| 32 | to early French settlers, the Quapaw had | 78 |
| 33 | tenuous control of the Arkansas Ozarks and | 79 |
| 34 | organized hunting parties into the Ozark | 80 |
| | region from their main settlement area in the | 81 |
| 36 | lower Arkansas river. ^{2.17} | 82 |
| 37 | | 83 |
| 38 | | 84 |
| 39 | | 85 |
| 40 | | 86 |
| 41 | 2.14 Sabo, George, III, et al. Archaeological Investigations at | 87 |
| 42 | 3MR80-Area D in the Rush Development Area, Buffalo | 88 |
| 43 | National River, Arkansas. (Santa Fe: U.S. Department of the Interior, National Park Service, Southwest Region, | 89 |
| 44 | 1990), 333. | 90 |
| 45 | 2.15 Sabo et al. Archaeological Investigations, 333.2.16 Zedeno. Cultural Affiliation Statement, 29. | 91 |
| 46 | 2.17 Catton. Life, Leisure, and Hardship along the Buffalo, 23. | 92 2.18 Zedeno. Cultural Affiliation Statement, 3. |

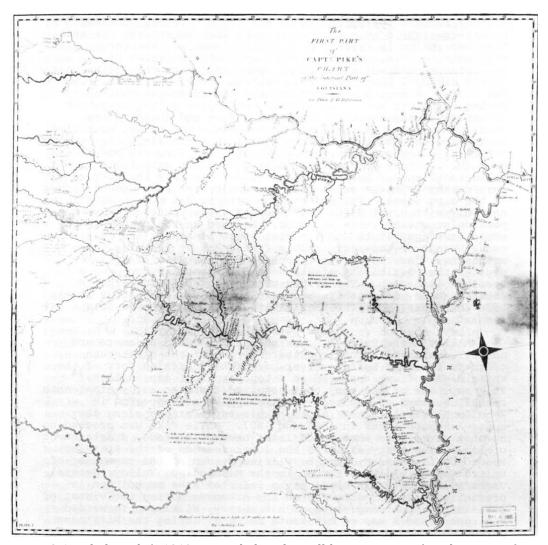


Figure 2-1. Zebulon Pike's 1810 map including the Buffalo River region. (Let the River Be)

1 Early European American Settlement (1800 47 **1820s to 1830s** 2 to 1885) 48 49 Increasingly, European settlers arrived in the 4 The 19th century was a period of transition, 50 Buffalo River region. The area was sparsely 5 as American Indian groups who had settled 51 settled until the 1830s due to the limited 6 and established permanent farms in the 52 roads, rugged terrain, and remoteness of the 53 area.^{2.24} 7 region were displaced by Europeans. To the 8 new settlers, the region was rugged, remote, 54 9 and heavily forested. General Land Office 55 **1828** 10 surveyors noted the predominance of cane 56 11 breaks along the river, which have been linked 57 The Cherokee who had settled in 12 to abandoned American Indian farms (cane 58 Arkansas began to move further west 13 grew up in places where corn had previously 59 after relinquishing rights to their lands in 14 grown).^{2.19} The region remained sparsely 60 Arkansas. 2.25 15 inhabited during the 19th century, but small 61 16 farmsteads were established along the river 62 **1836** 17 bottoms by arriving Europeans, and a grist 63 18 mill was built along Rush Creek. 6 The State of Arkansas was established. 2.26 19 20 **Early 1800s** 65 **1838** 21 66 67 The Trail of Tears, which moved the Cherokee 22 American Indian groups in the eastern United 23 States migrated west during this period. The 68 out of their homeland in the Appalachians 24 Shawnee, Delaware, and Cherokee spent time 69 included a route that passed north of Rush 25 in the Buffalo River region.^{2,20} The Cherokee 70 Historic District through Yellville, AR.^{2.27} 26 established farmsteads in the major river 71 27 valleys and utilized the uplands on seasonal 72 **1845** 28 hunting trips.^{2.21} 73 29 74 Surveyors of the General Land Office recorded 75 the Buffalo River Valley.^{2.28} 30 French settlers from Louisiana migrated 31 north to the Ozark Highlands to extract lead 32 and other minerals from the mountains. 2.22 77 Survey Plats and Notes of townships show 33 78 creeks, roads, and cane breaks along the valley 79 floors.^{2.29} 34 **1819** 80 36 Arkansas Territory was established out of the 81 Settlement of the region increased until the 82 Civil War.^{2.30} 37 Missouri Territory by the United States.^{2.23} 83 38 39 84 40 85 2.24 Theme Identification Context Studies, 6. 41 2.19 Catton. Life, Leisure, and Hardship along the Buffalo, 44. 86 2.25 Theme Identification Context Studies, 11. 87 2.26 Theme Identification Context Studies, 12. 42 2.20 Buffalo National River, Theme Identification Context 2.27 Catton. Life, Leisure, and Hardship along the Buffalo, 39. Studies and Property Evaluations, SOL: N6068030063. 43 88 2.28 Catton. Life, Leisure, and Hardship along the Buffalo, 44. (Nashville: Thomason and Associates and Hawkins General Land Office. Survey of Public Lands in Arkansas, 89 2.29 Partners, 2004), 6. $45 \ \, \overset{2.21}{2.22} \ \, \text{Catton. Life, Leisure, and Hardship along the Buffalo, 23.} \\ 2.22 \ \, \text{CLI, 15.}$ Township 17 N, Range 15 W. U.S. Department of the 90 Interior, Bureau of Land Management, 1845. 91 2.30 Theme Identification Context Studies, 7. 46 2.23 Theme Identification Context Studies, 9.

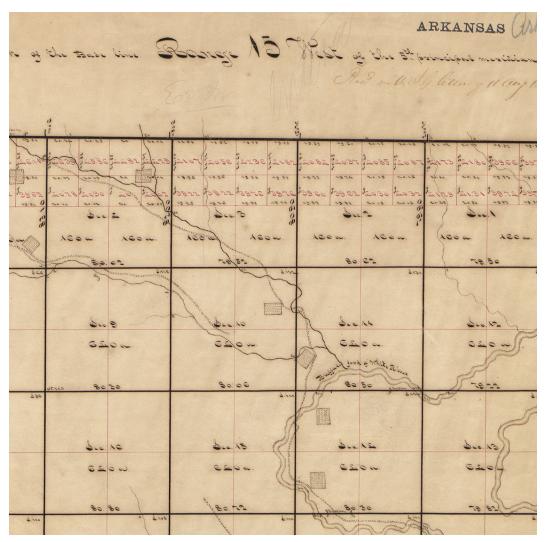


Figure 2-2. 1845 General Land Office Survey Plat of T17N-R15W of Buffalo River. Cane breaks, evidence of former agricultural fields, were noted on the valley floors. (Bureau of Land Management, Records)

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1 1880
2
3 The first zinc deposits were discovered by
4 James McCabe, a local farmer who discovered
5 zinc ore showing in a bluff along a foot trail
6 on Rush Mountain. He thought he had found
  gold.<sup>2.31</sup>
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   2.31 CLI, 26.
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2-9 Public Review Draft

1800

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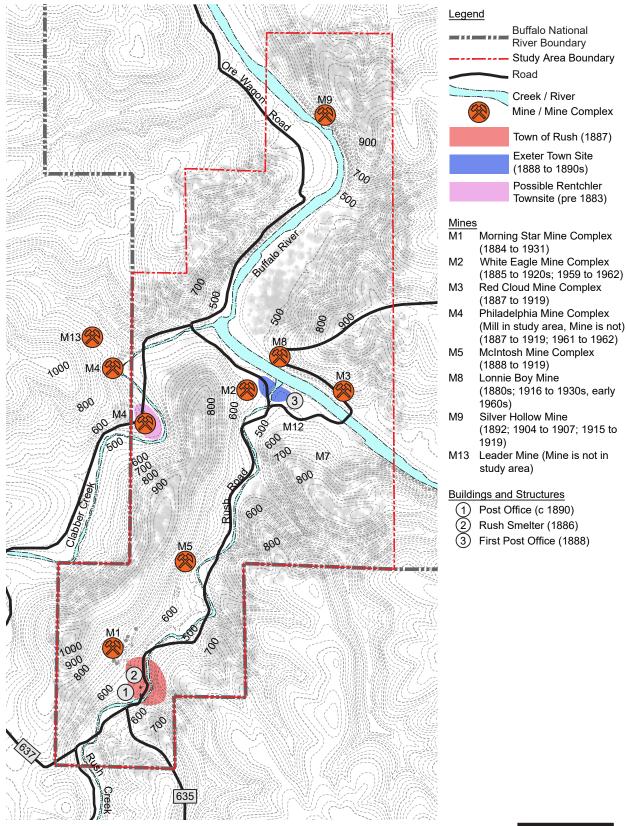


Figure 2-3. Rush Historic District, First Mining - 1893.

1 The Mining Era (1885 to 1931) 47 **1880 to 1885** 2 48 49 Mining began at Morning Star Mine (M1), 3 During this period, Rush Mining District 50 founded by James McCabe, John Wolfer, and 4 included fourteen mines and seven mills. 51 Allen Setzer.^{2.32} 5 The population ranged from 2,000 to 3,000. 6 The study area was a working industrial 52 53 **1886** 7 landscape with few trees, vast spoils piles, 8 elevated tramways, and massive mill 54 9 structures. 55 Rush Smelter, the oldest extant structure at 10 56 Rush Historic District, was built near Morning 11 Mines were developed either as drift mines, 57 Star Mine (M1) by smeltermen brought to 12 shafts driven down into the earth, or as vast 58 Rush by McCabe, Wolfer, and Setzer. The 13 room-and-pillar structures that excavated 59 smelter was built to separate silver from the 14 earth horizontally. Waste rock was discarded 60 zinc ore, however there was no silver in the 61 ore mined at Rush, and smelting was brief.^{2.33} 15 at the entrance of each mine, forming large 16 spoils piles. Ore was transported by elevated 62 17 tramways to zinc concentrating mills. The 63 **1889** 18 mills were massive structures and were 64 19 cooled by water held in large retention 65 George Chase invested in the construction of 66 Morning Star Mill.^{2.34} 20 ponds. Tailings, the unwanted remains of the 21 milling process, were spread at the base of 67 22 the mills. To supply mills with fuel, hillsides 68 **1890** 23 were stripped of available timber. Aside from 24 residential areas, the landscape appeared 70 The first 'lode claim' was filed in Arkansas by 25 tree-less, with prominent mill buildings and 71 George Chase. Morning Star No. 1 claim was 26 waste rock on the hillsides. 72 purchased by Charles A Mulholland. 2.35 2.7 73 28 Support structures and residential areas were 74 By 1890 at least four mining companies had 29 clustered on the lower hillsides and valley 75 developed mines in the study area. Buffalo 30 floors below the mills. The town of Rush 76 Zinc and Copper opened two mines, White 31 began as a cluster of development below the 77 Eagle Mine (M2) and Red Cloud Mine (M3). 32 Morning Star Mill. The town grew to include 78 Other mines included Silver Hollow Mine 33 offices, hotels, barns, stores, and a post office 79 (M9), Monte Cristo Mine (M10), and Capps 34 and courthouse. A row of houses was built at 80 Mine (M11).^{2.36} 35 House Row, and development expanded to 81 36 Hicks Hotel and New Town adjacent to the 82 **1891** 37 river. Additional smaller communities were 83 38 associated with individual mining companies. 84 Morning Star Mine (M1) were purchased by 85 George Chase, and the Morning Star Company 86 was formally organized.^{2.37} 40 Although plans were made to develop a 41 railroad, they were never realized. Zinc ore 87 42 was hauled by wagon or truck along Ore 88 -2.32 CLI, 23. 43 Wagon Road that paralleled Buffalo River. 89 2.33 Rogers et al., Morning Star Mines Interpretive Area, I-15. 44 90 2.34 Rogers et al., Morning Star Mines Interpretive Area, II-7. 91 2.35 *CLI*, 24. 2.36 *CLI*. 45

92 2.37 CLI, 24.

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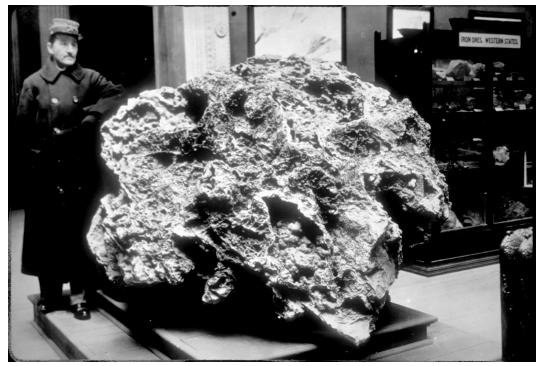


Figure 2-4. Jumbo, a six-ton piece of relatively pure zinc ore from Morning Star Mine (M1), as displayed at the World's Columbian Exposition, 1893. (Field Museum of Natural History)



Figure 2-5. Morning Star miners, 1898. (BUFF Archives, Bessie Kastning Collection)

| 1 | 1893 | 47 1903 |
|----|--|--|
| 2 | | 48 |
| 3 | A six-ton gold medal winning piece of | 49 Hicks Hotel was built by Lee and Alice |
| | relatively pure zinc ore, nicknamed 'Jumbo,' | 50 Hicks. ^{2.44} |
| | from Morning Star Mine (M1), was displayed | 51 |
| | at the 1893 World's Columbian Exposition in | 52 Winter 1904 to 1905 |
| | | 53 |
| 8 | cincago. | 54 Milling operations again ceased. ^{2,45} |
| | 1898 | 55 |
| | 1070 | 56 1905 |
| 10 | Manning Ctan Mill was built to concentrate are | 57 |
| | Morning Star Mill was built to concentrate ore | |
| | as the purest zinc deposits began to run out. | 58 Mining operations resumed again. ^{2,46} |
| | Concentrating mills were later built at some | 59 |
| | other mines in the area. ^{2.39} | 60 1911 to 1918 |
| 15 | | 61 |
| | 1894 | 62 Between 1911 and 1918, mining experienced |
| 17 | | 63 a dramatic boom in operations, labor force, |
| 18 | Ben Carney Mine (M6) began production. ^{2.40} | 64 and zinc sales in response to the demands |
| 19 | | 65 of World War I. Promotional publications |
| 20 | 1900 | 66 announced easy fortunes made in the Ozark |
| 21 | | 67 Highlands, with special attention paid to |
| 22 | Red Cloud Mill was built to serve Red Cloud | 68 Rush. ^{2.47} |
| 23 | Mine (M3). ^{2.41} | 69 |
| 24 | | 70 New Town was platted at the confluence |
| 25 | 1901 | 71 of Rush Creek and Buffalo River to house a |
| 26 | | 72 growing population. ^{2.48} |
| 27 | Zinc prices dropped and due to the high cost | 73 |
| | of shipping ore, mining activity slowed. ^{2.42} | 74 1914 to 1915 |
| 29 | | 75 |
| | 1902 | 76 Zinc prices quadrupled. ^{2,49} |
| 31 | -70- | 77 |
| | The Missouri and North Arkansas railroad | 78 1915 |
| | was completed, connecting regional markets | 79 |
| | to Buffalo River. The railroad did not reach the | 80 A railroad bed was graded between Buffalo |
| | mines at Rush Historic District. ^{2,43} | 81 River and Rush Road, but rails were not laid. |
| 36 | | 82 Before any track was laid the mining boom |
| 37 | | 83 was over. ^{2.50} |
| | | 84 |
| 38 | | |
| 39 | | 85 Capps Mine (M11) began production. ^{2.51} |
| 40 | | 86 |
| 41 | 2.38 <i>CLI</i> , 24. | 87 2.44 <i>CLI</i> , 24. 88 2.45 Rogers, <i>HSR</i> , <i>Working Draft</i> , 6. |
| 42 | 2.39 <i>CLI</i> , 24. | 2.46 Rogers, HSR, Working Draft, 7. |
| | 2.40 <i>CLI</i> , 37. | 89 2.47 Scope of Work. |
| 44 | 2.41 Rogers et al., Morning Star Mines Interpretive Area, I-22. | 90 2.48 <i>CLI</i> , 29. |
| 45 | 2.42 Rogers, Suzanne. Rush Historic Structures Report, Working Draft (1985), 6. | 91 2.49 <i>CLI</i> , 29. 2.50 <i>CLI</i> , 80. |
| 46 | 2.43 Theme Identification Context Studies, 7. | 92 2.51 <i>CLI</i> , 24. |

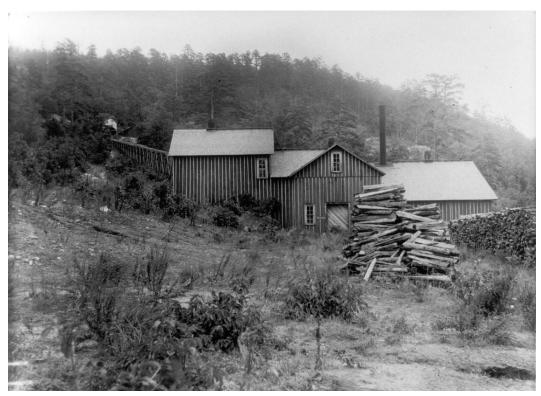
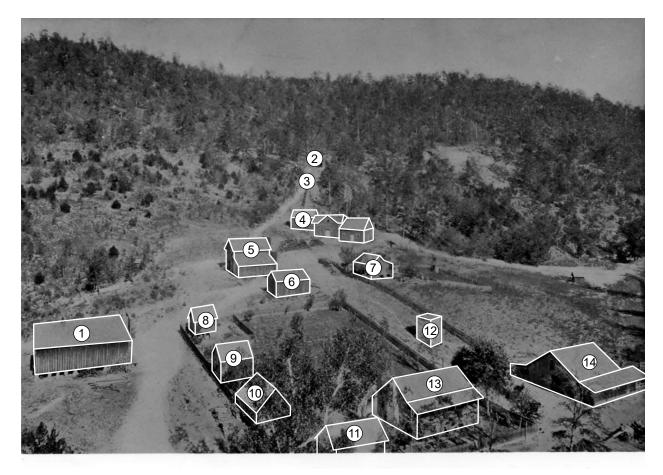


Figure 2-6. Morning Star Mill, c 1904. The huge stack of lumber was used for fueling the mill. Surrounding hillsides were extensively cut during the mining period. (BUFF Archives)

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1 1916
3 Lee and Alice Hicks expanded their business
4 to include a general store near their hotel.<sup>2.52</sup>
5
6 1919
8 Marion County bought Morning Star Mine
9 property as the zinc market collapses.<sup>2.53</sup>
10
11 1920
12
13 The state of Arkansas' production of zinc
14 dropped to 917 tons per year. This was down
15 from more than 18,000 tons per year in
16 1916.2.54
17
18 Jefferson Township, in which Rush was
19 located, dwindled to only 344 residents.<sup>2.55</sup>
20
21 1931
22
23 The last of the operating Morning Star Mines,
24 Capps Mine (M11), closed.<sup>2.56</sup>
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43 2.52 NRHP, 7.
44 2.53 CLI, 24.
45 2.54 (Huggard 2004, 2-6) CLI, 15. 2.55 CLI, 29.
46 2.56 CLI, 4.
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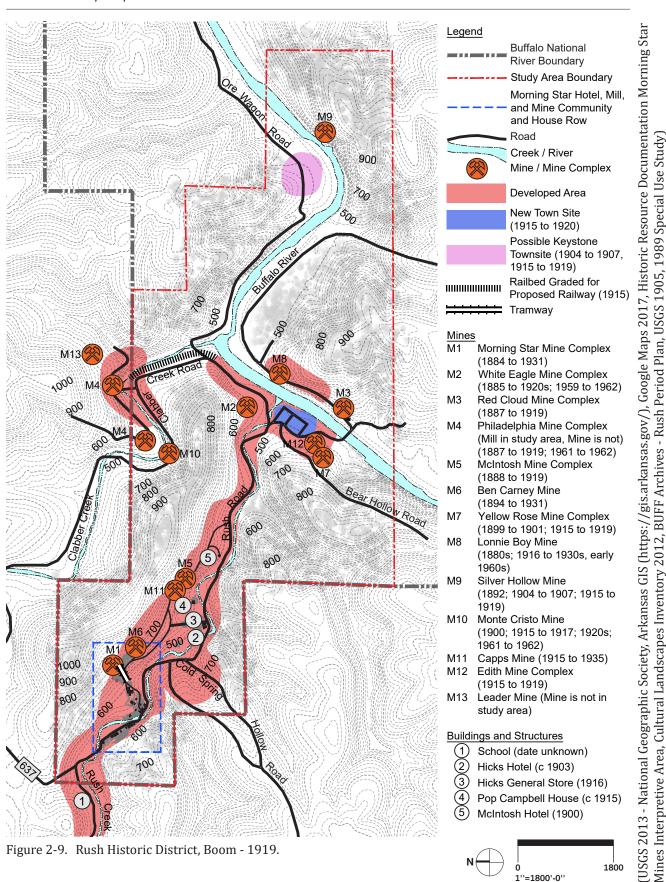
Figure 2-7. Rush Smelter with unknown building and Chase and Mulholland Store at left, 1900. (BUFF Archives, USGS Collection)



<u>Legend</u>

- 1 2 3 4 5 6 7 8 9 10 11 12 Courthouse (c 1916)
- Hopper House (c 1898)
- Tramway (c 1898)
- Morning Star Mill (c 1898)
- Chase and Mullholland Store (c 1898)
- Unknown Building (date unknown)
- Smith House (c 1899)
- Chicken House (date unknown)
- Doctor's / Maxey House (c 1916)
- Barn (1902)
- Post Office (c 1890)
- Rush Smelter (1886)
- **13** Morning Star Hotel (c 1900)
- Morning Star Livery Barn (c 1889)

Figure 2-8. The Morning Star Hotel, Mill, and Mine Community, looking northeast, c 1916. Note the lack of vegetation on hillside, waste rock pile in upper left, and the yard and open pasture around the Morning Star Hotel and Livery Barn. (BUFF Archives)



2-18

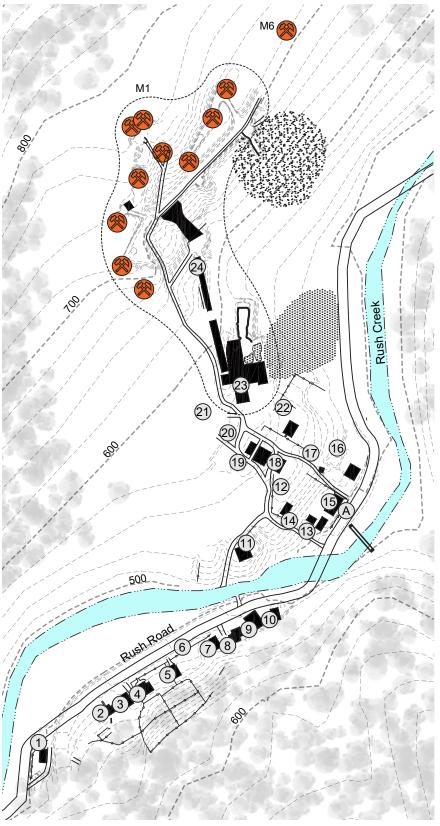


Figure 2-10. Morning Star Hotel, Mill, and Mine Community and House Row, Boom - 1919.

Mines M1 Morning Star Mine Complex (1884 to 1931) M6 Ben Carney Mine (1894 to 1931)

Road

Fence

Spoils Pile Morning Star Mill Tailings Pile

Creek / River

Mine / Mine Complex

Morning Star Mine

Buildings and Structures

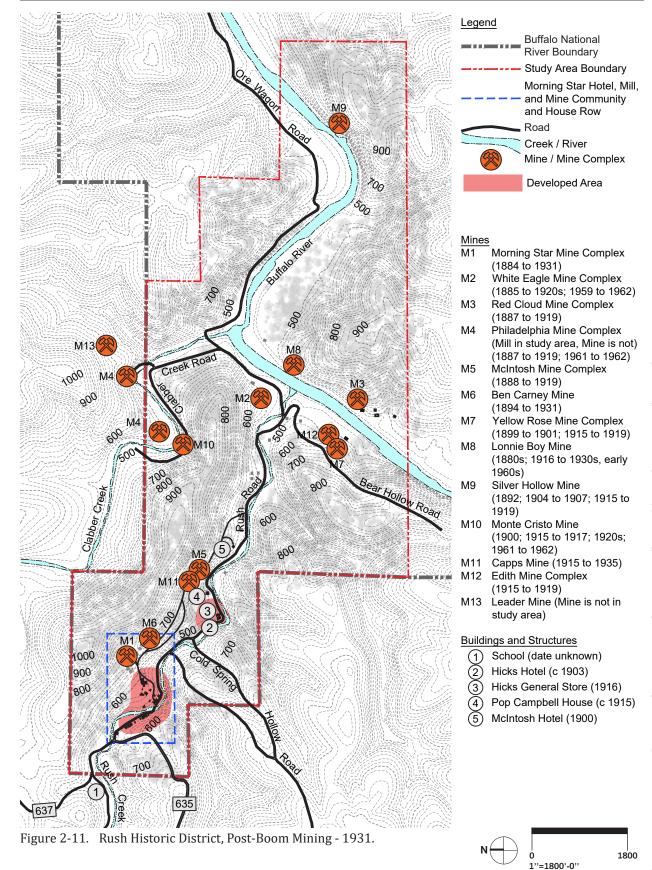
Legend

- 1 Mulholland Building Site (c 1900 to 1920)
- Bundy House (c 1899)
- Wash House (c 1899)
- (4) Kastning House (c 1899)
- 5 Brantley House (c 1899)
- 6 Gotley House Site (c 1899)
- 7 Raby House (c 1899)
- 8 Storekeeper's House (c 1899)
- (9) Taylor-Medley General Store (c 1899)
- 10 Store Site (date unk)
- (1) Courthouse (c. 1916)
- 12 Doctor's / Maxey House (c 1916)
- (13) Post Office (c 1890)
- (14) Barn (1902)
- (15) Morning Star Hotel (c 1900)
- (c 1899)
- (17) Rush Smelter (1886)
- (18) Unknown Building (date unknown)
- (19) Chase and Mulholland Store (c 1899)
- 20 Morning Star Mine Office (c 1911)
- ②1) Oil Storage House (c 1911)
- (22) Smith House (c 1899)
- (23) Morning Star Mill (c 1898)
- (24) Tramway (c 1898)

Circulation

(A) Footbridge (c 1915)





Legend

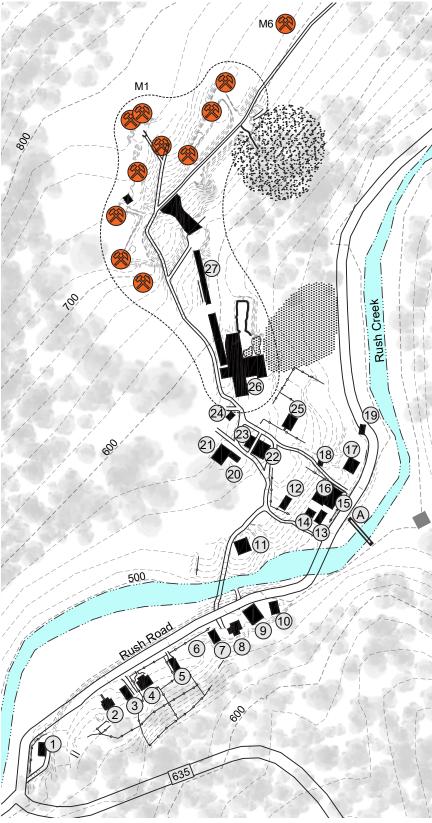


Figure 2-12. Morning Star Hotel, Mill, and Mine Community and House Row, Post-Boom Mining - 1931.

Road Creek / River Mine / Mine Complex Fence Morning Star Mine Spoils Pile Morning Star Mill Tailings Pile Mines Morning Star Mine Complex M1 (1884 to 1931) M6 Ben Carney Mine (1894 to 1931) **Buildings and Structures** Mulholland Buildings Site (c 1900 to 1920) Bundy House (c 1899) Wash House (c 1899) Kastning House (c 1899) Brantley House (c 1899) Gotley House Site (c 1899) Raby House (c 1899) Storekeeper's House (c 1899) Taylor-Medley General Store (c 1899) (10) Store Site (date unk) Courthouse (c 1916) Doctor's / Maxey House (c 1916) (13) Post Office (c 1890) Barn (1902) Morning Star Hotel (c 1900) (16) Lyons House (c 1925) (17) Morning Star Livery Barn (c 1899) (18) Rush Smelter (1886) Morning Star Mill Pump House (1926)Rush Blacksmith Shop (1925) Warehouse (1927) Chase and Mulholland Store (c 1899) (c 1911)

- (23) Morning Star Mine Office
- Oil Storage House (c 1911)
- Smith House (c 1899)
- Morning Star Mill (c 1898)
- Tramway (c 1898)

<u>Circulation</u>

(A) Footbridge (c 1915)



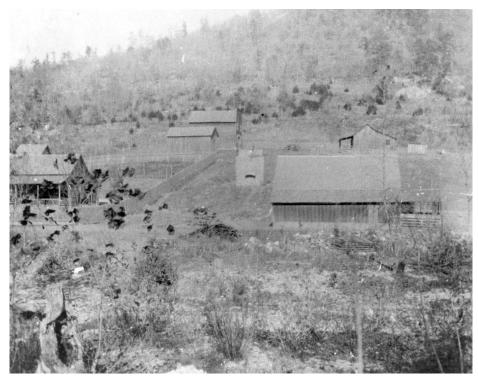


Figure 2-13. Morning Star Hotel, Rush Smelter, and Morning Star Livery Barn in the foreground and unknown building, Chase and Mulholland Store, and Smith House in the background, date unknown. (BUFF Archives, Arkansas History Commission)



Figure 2-14. Chase and Mulholland Store and Morning Star Mine Office, 1915. (BUFF Archives)

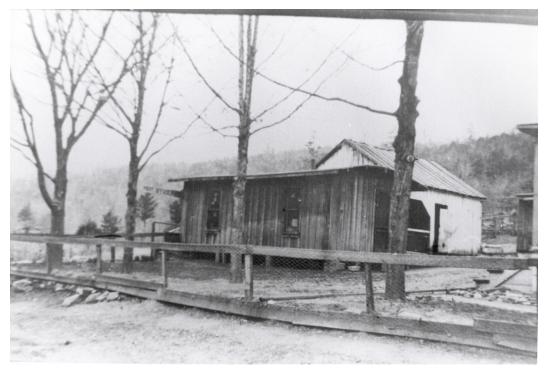


Figure 2-15. Rush Post Office, c 1920s. (BUFF Archives, Bessie Kastning Collection)



Figure 2-16. Morning Star Livery Barn, 1925. (BUFF Archives)



Figure 2-17. Rush Blacksmith Shop, 1925. (BUFF Archives)



Figure 2-18. View across the yard behind the Morning Star Hotel, towards the Chase and Mulholland Store and Morning Star Mill, 1926. (BUFF Archives, Bessie Kastning Collection)



Figure 2-19. Morning Star Mine, open cut, 1900. (BUFF Archives, USGS Collection)

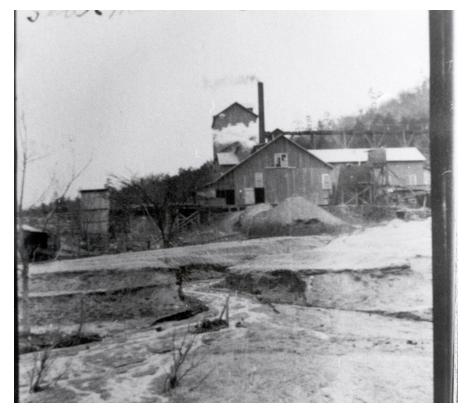


Figure 2-20. Morning Star Mill, 1915. (BUFF Archives)



Figure 2-21. Morning Star Mill and Mine, 1916. (BUFF Archives, USGS Collection)

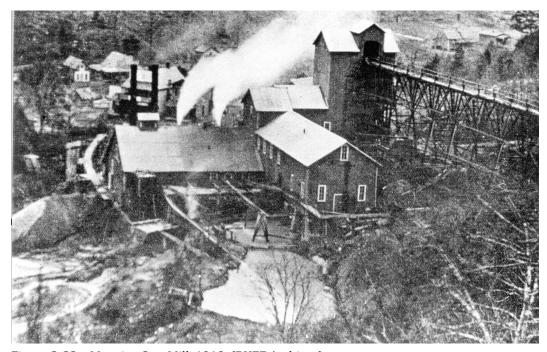


Figure 2-22. Morning Star Mill, 1918. (BUFF Archives)



Figure 2-23. Morning Star Mine, 1925. (BUFF Archives, Bessie Kastning Collection)



Figure 2-24. Morning Star Mill, 1927. (BUFF Archives)

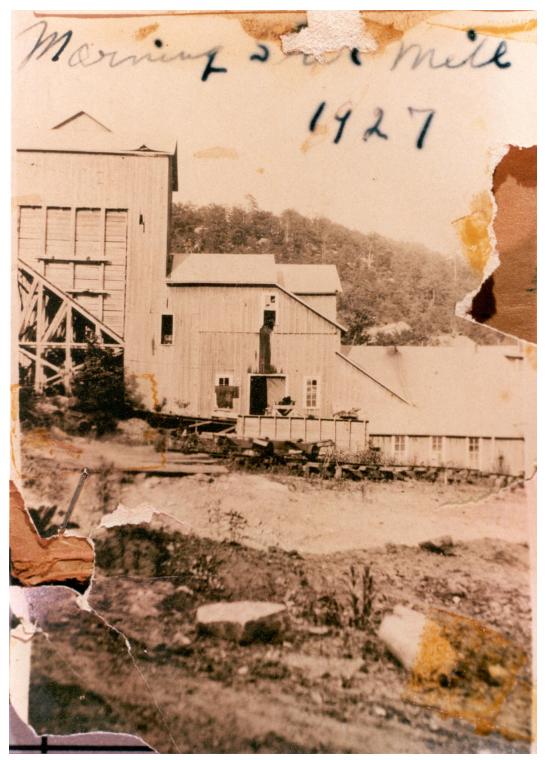


Figure 2-25. Morning Star Mill, 1927. (BUFF Archives, Bessie Kastning Collection)

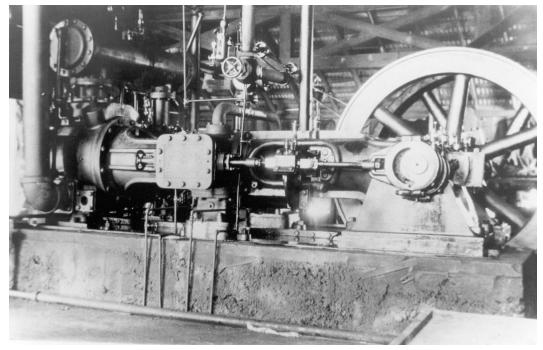


Figure 2-26. Air compressor at Morning Star Mill, 1927. (BUFF Archives, Bessie Kastning Collection)

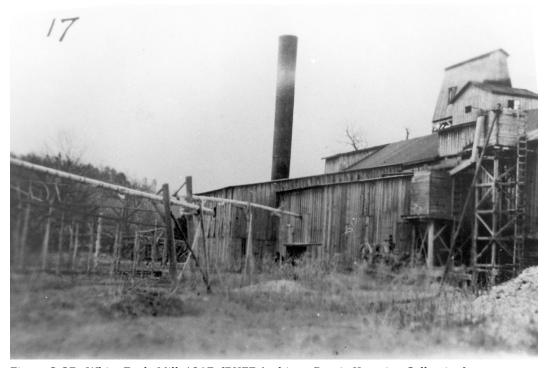


Figure 2-27. White Eagle Mill, 1917. (BUFF Archives, Bessie Kastning Collection)

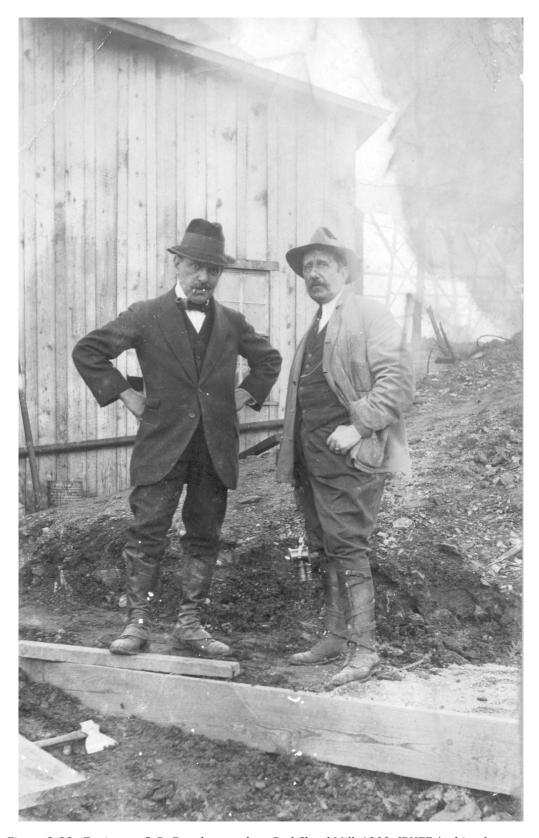


Figure 2-28. Engineers G. DeBeughem and at Red Cloud Mill, 1909. (BUFF Archives)



Figure 2-29. The owners of Red Cloud Mine (M3), 1910. (BUFF Archives)



Figure 2-30. Red Cloud Mine (M3) and Mill from Buffalo River, looking east, 1915. (BUFF Archives)

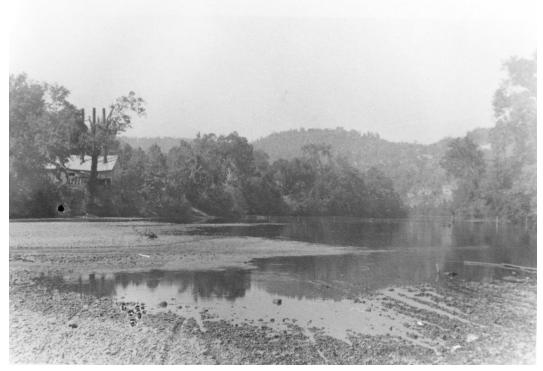


Figure 2-31. Red Cloud Mill, 1915. (BUFF Archives, Bessie Kastning Collection)

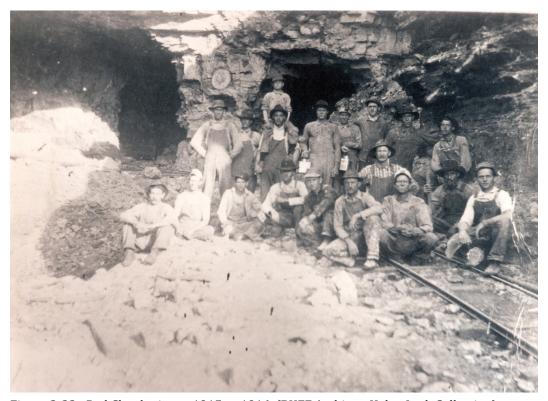


Figure 2-32. Red Cloud miners, 1915 or 1916. (BUFF Archives, Helen Lack Collection)



Figure 2-33. McIntosh Mill, 1900. (BUFF Archives, USGS Collection)



Figure 2-34. McIntosh Hotel and Office, 1916. (BUFF Archives, USGS Collection)



Figure 2-35. McIntosh Mill, 1916. (BUFF Archives, Bessie Kastning Collection)



Figure 2-36. McIntosh Hotel, facing northeast, c 1922. (BUFF Archives)



Figure 2-37. Nettie Medley, infant Bessie Kastning, and boy in front of McIntosh Hotel, 1922. (BUFF Archives, Bessie Kastning Collection)



Figure 2-38. Unknown woman, Nettie Medley, and infant Bessie Kastning in front of McIntosh Hotel, 1922. (BUFF Archives, Bessie Kastning Collection)



Figure 2-39. Yellow Rose Mill, 1917. (BUFF Archives, Bessie Kastning Collection)



Figure 2-40. Edith Mill, 1918. (BUFF Archives, Bessie Kastning Collection)



Figure 2-41. Group in front of Hicks Hotel, 1920. (BUFF Archives, Bessie Kastning Collection)



Figure 2-42. Post mining use of the New Town area. Mine workings associated with Yellow Rose Mine (M7) and Edith Mine (M12) appear in the lower left, 1939. ((USGS 1939:LR383) Rogers et al, Historic Resource Documentation, Morning Star Mines Interpretive Area)

| 1 | Post-Mining Era (1932 to 1971) | 47 | A boat landing and campground on Buffalo |
|----|--|----|---|
| 2 | | 48 | River was established by resident Fred |
| 3 | Mines and businesses closed, and residents | 49 | Dirst. ^{2.61} |
| 4 | left Rush following the mining boom. | 50 | |
| 5 | Buildings were either taken down for salvage | 51 | 1953 |
| 6 | or were left to the elements. The economy | 52 | |
| 7 | shifted to tourism, with the vacant buildings | 53 | The post office discontinued service at the |
| | lending to the promotion of "Rush Ghost | | Taylor-Medley General Store. ^{2.62} |
| | Town" by the remaining residents. In the | 55 | |
| | 1950s and 1960s, locals made improvements | 56 | 1958 |
| 11 | to visitor amenities, including a boat landing, | 57 | |
| | campground, and cabins, in order to attract | 58 | New White Eagle Mill began production, but |
| | tourists. Over time, the forest revegetated | | closed four years later. ^{2.63} |
| | naturally, covering the spoils piles and | 60 | |
| | ruins. Despite the closure of the mines, | 61 | 1960s |
| | locals continued to extract free ore from the | 62 | |
| | mines, selling to nearby mills. Some free | | Rush Road was rerouted to eliminate multiple |
| | ore operations caused mines to physically | | creek crossings and to bypass natural rock |
| | collapse. ^{2.57} | | crossings. Concrete water crossing slabs were |
| 20 | · · · | | added. ^{2.64} |
| | 1930s | 67 | |
| 22 | | 68 | Late 1960s |
| | Tourist cabins were built at Rush Landing. ^{2.58} | 69 | |
| 24 | O . | 70 | Multiple buildings were demolished after the |
| 25 | 1942 | | Morning Star Mining Company sold its land |
| 26 | | | holdings. ^{2.65} |
| 27 | The United States Army Corps of Engineers | 73 | 9 |
| | explored Rush to benefit the national | 74 | |
| | stockpile of zinc. Their exploratory borings | 75 | |
| | confirmed that the remaining zinc deposits | 76 | |
| | were minimal. ^{2.59} | 77 | |
| 32 | | 78 | |
| | 1947 | 79 | |
| 34 | | 80 | |
| 35 | The Morning Star Hotel was destroyed by | 81 | |
| | fire. ^{2.60} | 82 | |
| 37 | | 83 | |
| 38 | 1950s | 84 | |
| 39 | | 85 | |
| 40 | In the late 1950s, Buffalo River became a | 86 | |
| | popular tourist destination. Locals promoted | 87 | |
| | the idea of the "Rush Ghost Town" to attract | 88 | |
| | visitors. | | 2.61 (Stratton and Mansberger 2005, 23), <i>CLI</i> , 29. |
| 44 | | | 2.62 (Stratton and Mansberger 2005, 23), <i>CLI</i> , 29. |
| 45 | 2.57 <i>CLI</i> , 29. | 91 | 2.63 <i>CLI</i> , 25. 2.64 <i>NRHP</i> , 4. |
| | 2.58 NRHP, 9. 2.59 CLI, 29. | | 2.65 NRHP, 8. |
| | 2.60 <i>CLI</i> , 25. | | · |



Figure 2-43. Footbridge below post office, 1948. (BUFF Archives, Bessie Kastning Collection)



Figure 2-44. Rush Post Office and Taylor-Medley General Store, c 1950s. (BUFF Archives, Bessie Kastning Collection)



Figure 2-45. Rush Creek, c 1950s. (BUFF Archives, Bessie Kastning Collection)



Figure 2-46. Tourists at Rush Smelter, 1955. (BUFF Archives, Bessie Kastning Collection)



Figure 2-47. Chase and Mulholland Store and Morning Star Mine Office, 1955. A few residents were still living in Rush at this time, but the majority of the town's buildings were vacant. (BUFF Archives, Bessie Kastning Collection)

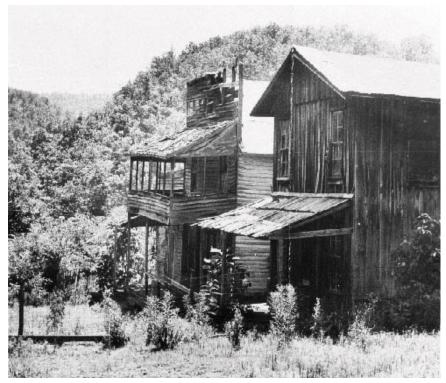


Figure 2-48. Chase and Mulholland Store and Morning Star Mine Office, 1958. (BUFF Archives)

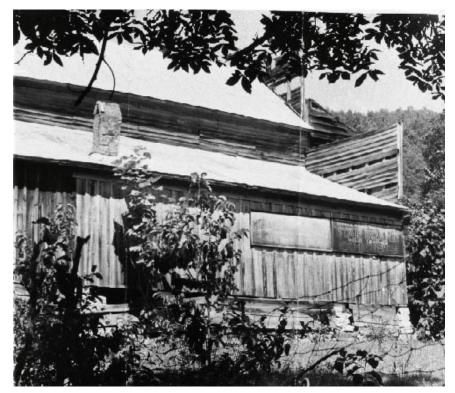


Figure 2-49. Chase and Mulholland Store, 1958. (B. Kastning, BUFF Archives)



Figure 2-50. Rush community members on porch of Taylor-Medley General Store, 1955. (BUFF Archives)



Figure 2-51. New White Eagle Mill, 1960. (BUFF Archives, Bessie Kastning Collection)

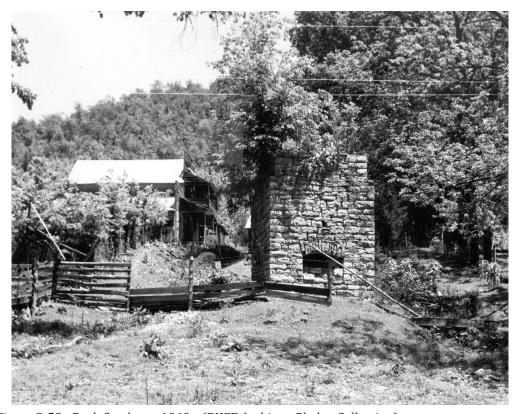


Figure 2-52. Rush Smelter, c 1960s. (BUFF Archives, Phelps Collection)



Figure 2-53. Main Street, c 1960s. (BUFF Archives, Phelps Collection)



Figure 2-54. Taylor-Medley General Store, c 1960s. (BUFF Archives, Phelps Collection)



Figure 2-55. Main Street, c 1960s. (BUFF Archives, Phelps Collection)

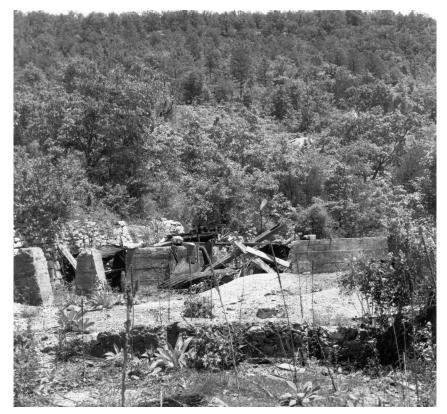


Figure 2-56. Mill foundation, c 1960s. (BUFF Archives, Phelps Collection)



Figure 2-57. Rush Mining Company Mill, New Mill 1969. (BUFF Archives)



Figure 2-58. Taylor-Medley General Store, 1977. (BUFF Archives)

| | Buffalo National River/Present Day | | 980 to 1982 |
|-----|--|-------------|---|
| | (1972 to Present Day) | 48 | |
| 3 | T. III I CD CC I N ID. | | dush Road improvements were completed by |
| | Establishment of Buffalo National River in | | IPS. ^{2.70} |
| | 1972 encompassed Rush Historic District. The | 51 | 000 |
| | NPS documented the cultural landscape and | 52 1 | 982 |
| | improvements were made to visitor access | 53 | |
| | and amenities. Rush Road was widened and | | record high flood (100 and 500 year) on |
| | graveled, and a loop drive provided river | | Suffalo River deposited sand and mud into |
| | access at Rush Landing. Interpretive trails | | he study area. ^{2.71} |
| | were added to provide access to the mines | 57 | 004 |
| | and mill ruins. Structures were stabilized | 58 1 | 984 |
| | and vegetation was cleared from the ruins, | 59 | December 11 Office of Mine |
| | while other areas remained forested. Hicks | | The mines were inspected by Office of Mine |
| | Store was remodeled and converted into NPS | | afety. ^{2.72} |
| | staff housing. Many buildings and structures | 62 62 P | |
| | collapsed over time, while others were | | tush Road was improved, including |
| | subject to arson, leaving only a few standing | | mprovements to the concrete water slab. ^{2.73} |
| | today. | 65 | 005 |
| 20 | 4072 | 66 1 | 985 |
| | 1972 | 67 | The NDC built former to meeting to continue to mine |
| 22 | Duffala National Divonyung astablished by H.C. | | The NPS built fences to restrict entry to mine |
| | Buffalo National River was established by U.S. | | unnels and shafts. ^{2.74} |
| | Congress on March 1,1972. Four families still | 70 | Maniana account a manadath a mantiana a f Dorah |
| | resided in Rush at the time. ^{2.66} | | Marion county paved the portion of Rush |
| 26 | 4072 +- 4002 | | load owned by the county. ^{2.75} |
| | 1972 to 1983 | 73 | the Merchesses adjacent the Duck Dischargith |
| 28 | The NDC against area outs from Daneld | | The Warehouse adjacent the Rush Blacksmith |
| | The NPS acquired property from Donald | | hop collapsed due to heavy snow loads. |
| | Willsey, including House Row. ^{2.67} | 76 | the NDC stabilized the Marning Ctar Livery |
| 31 | 1070 | | The NPS stabilized the Morning Star Livery |
| 33 | 1978 | | arn, Rush Smelter, and Taylor-Medley General Store with emergency support. |
| | Hicks Store was converted into NPS staff | | ome vegetation was thinned around the |
| | | | tructures. ^{2.76} |
| | housing. ^{2.68} | 82 | tructures. |
| 36 | 1979 | 83 | |
| | 1979 | 84 | |
| 38 | Removal of the 1950s New White Eagle | | 70 Rogers, Selected Time Line of NPS Undertakings. |
| | Mill. ^{2.69} | 2. | 71 The Flood of December 1982 and the 100- and 500- Year |
| 40 | 141111. | 86 87 | Flood on the Buffalo River. Arkansas. (U. S. Geological Survey, 1985). |
| 41 | | | 72 Rogers, Selected Time Line of NPS Undertakings. |
| 43 | | 00 2. | 73 Rogers, Selected Time Line of NPS Undertakings. |
| | 2.66 FPM, 4. | | 74 NRHP, 5. 75 NPS Drawing, Stabilize Historic Structures. 1985. Dwg |
| 1.5 | 2.67 <i>CLI</i> , 25. | 91 | Number 173-80018. Also, Rogers, Selected Time Line of |
| 45 | 2.68 Rogers, Selected Time Line of NPS Undertakings. | | NPS Undertakings. |
| TU | 2.69 Rogers, Selected Time Line of NPS Undertakings. | 14 4. | 76 NRHP, 8. |

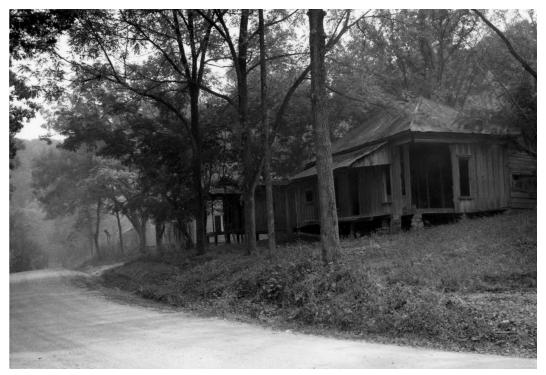


Figure 2-59. House Row, 1985. (S. Rogers, BUFF Archives)

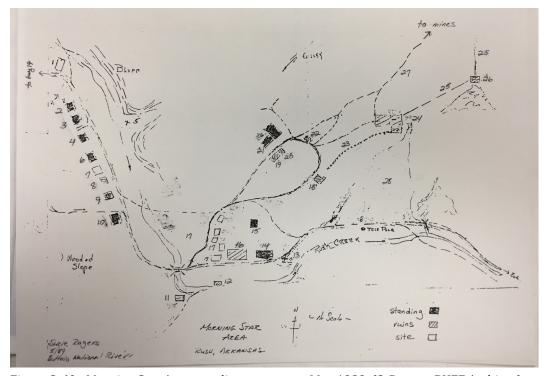


Figure 2-60. Morning Star Area standing structures, May 1989. (S. Rogers, BUFF Archives)

| 1 1986 | 47 Youth Conservation Corps performed trail |
|--|---|
| 2 | 48 improvements. ^{2.85} |
| 3 Fencing around House Row completed. ^{2.77} | 49 |
| 4 | 50 1998 |
| 5 Rush Campground was improved with a roa | d 51 |
| 6 and water crossing from Rush Road to the | 52 Brantley House and Morning Star Livery Barn |
| 7 campground. Other improvements included | |
| 8 loop road (extant) at the end of Rush Road to | |
| 9 Rush Landing. ^{2.78} | 55 2000 |
| 10 | 56 |
| 11 1987 | 57 Hicks Wall, in front of the Hicks Hotel and |
| 12 | 58 Hicks General Store, was repaired. 2.87 |
| | |
| 13 Rush Historic District was listed in the NRHI | |
| 14 on February 27, 1987. ^{2.79} | 60 2001 |
| 15 | 61 |
| 16 Park maintenance staff and Youth | 62 Visitor amenities were added by the NPS, |
| 17 Conservation Corps cleared vegetation | 63 including eleven interpretive exhibits and a |
| 18 around House Row and installed interpretiv | |
| 19 waysides. ^{2.80} | 65 |
| 20 | 66 2004 |
| 21 Morning Star Trail was built through | 67 |
| 22 the Morning Star Community landscape | 68 Hicks General Store was destroyed by |
| 23 character area. Youth Conservation Corps | 69 arson. ^{2.88} |
| 24 and volunteers built the Morning Star Trail | 70 |
| 25 parking and two interpretive waysides. ^{2.81} | 71 2005 |
| 26 | 72 |
| 27 Rush Road was graded, widened and | 73 Laffoon Cemetery (outside study area) and |
| 28 resurfaced. ^{2.82} | 74 White Eagle Mine New Mill Piers received |
| 29 | 75 a Determination of Eligibility for the NRHP |
| 30 1988 | 76 from the Arkansas State Historic Preservation |
| 31 | 77 Office. ^{2.89} |
| 32 Some House Row structures were stabilized | |
| 33 and non-historic additions were removed. ^{2,8} | |
| | |
| 34 | 80 |
| 35 1989 | 81 Emergency stabilization measures for |
| 36 | 82 the Taylor-Medley General Store were |
| 37 Rush Blacksmith Shop was stabilized. ^{2,84} | 83 proposed. ^{2,90} |
| 38 | 84 |
| 39 | — 85 — 305 Pagana Calastad Tima Lina of NDC Hadautakinas |
| 40 2.78 NPS Drawing, <i>Rush Campground</i> . Denver Service Center | 2.85 Rogers, Selected Time Line of NPS Undertakings. 2.86 Suzie Rogers, various emails RE; Arson loss, December, |
| 41 1985-86. Dwg Number 173-41055. | 87 1998. |
| 42 2.79 Theme Identification Context Studies, 8. | 88 2.87 <i>CLI</i> , 30. |
| 2.80 Rogers, Selected Time Line of NPS Undertakings. 43 2.81 Rogers, Selected Time Line of NPS Undertakings. | 2.88 Rogers et al., Morning Star Mines Interpretive Area, III- 299. |
| 44 2.82 NPS Drawing, Rush Landing Comprehensive Design. Dw | rg 90 2.89 <i>CLI</i> , 20. |
| Number 173-41036. | 91 2.90 Draft Project Agreement, PMIS 161446, Emergency |
| 45 2.83 Rogers, Selected Time Line of NPS Undertakings. 46 2.84 Rogers, Selected Time Line of NPS Undertakings. | Stabilization of Historic Taylor-Medley General Store. (U.S. 92 Department of the Interior, National Park Service, 2011). |



Figure 2-61. Morning Star Livery Barn prior to stabilization, 1984. (S. Rogers, BUFF Archives)



Figure 2-62. Morning Star Livery Barn after stabilization, 1985. (S. Rogers, BUFF Archives)



Figure 2-63. Rush Smelter prior to stabilization, 1984. (S. Rogers, BUFF Archives)



Figure 2-64. Stabilization of the Rush Smelter included earthwork around the base of the smelter as part of the overall stabilization effort, c 1985. (BUFF Archives)



Figure 2-65. Rush Smelter after stabilization work, 1985. (S. Rogers, BUFF Archives)

Buffalo National River Rush Historic District Destruction of Historic Buildings

Brantley House LCS 60595



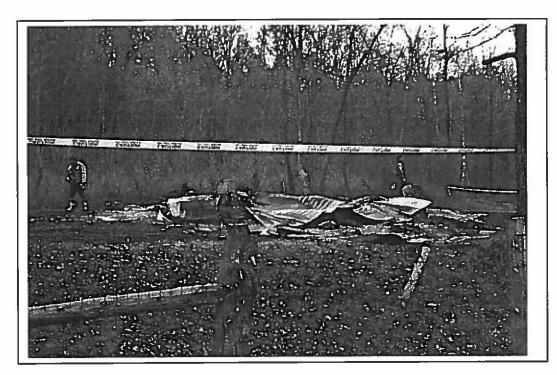


Figure 2-66. Brantly House was destroyed by arson in 1998. (S. Rogers, 1998)

Buffalo National River Rush Historic District Destruction of Historic Buildings

Morning Star Barn LCS# 60598

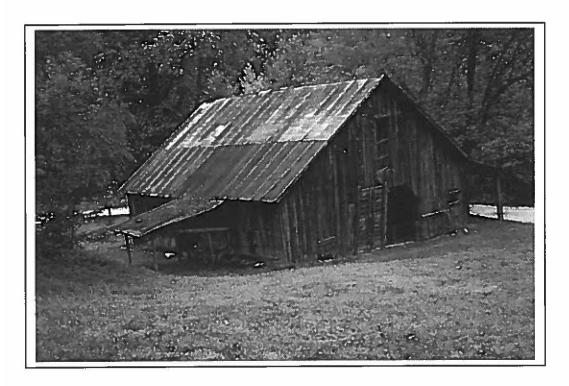




Figure 2-67. Morning Star Livery Barn was destroyed by arson in 1998. (S. Rogers, 1998)