Landscape and History at the Headwaters of the Big Coal River Valley

An Overview

By Mary Hufford

Reading the Landscape: An Introduction

"This whole valley's full of history." -- Elsie Rich, Jarrold's Valley

From the air today, as one flies westward across West Virginia, the mountains appear to crest in long, undulating waves, giving way beyond the Allegheny Front to the deeply crenulated mass of the coal-bearing Allegheny plateaus. The sandstone ridges of Cherry Pond, Kayford, Guyandotte, and Coal River mountains where the headwaters of southern West Virginia's Big Coal River rise are the spectacular effect of millions of years of erosion. Here, water cutting a downward path through shale etched thousands of winding hollows and deep valleys into the unglaciated tablelands of the plateaus. Archeologists have recovered evidence of human activity in the mountains only from the past 12,000 years, a tiny period in the region's ecological development.

Over the eons it took to transform an ancient tableland into today's mountains and valleys, a highly differentiated forest evolved. Known among ecologists as the mixed mesophytic forest, it is the biologically richest temperate-zone hardwood system in the world. And running in ribbons beneath the fertile humus that anchors the mixed mesophytic are seams of coal, the fossilized legacy of an ancient tropical forest, submerged and compressed during the Paleozoic era beneath an inland sea.¹

Many of the world's mythologies explain landforms as the legacies of struggles among giants, time out of mind. Legend accounts for the Giant's Causeway, a geological formation off the coast of Northern Ireland, as the remains of an ancient bridge that giants made between Ireland and Scotland. In Native American mythologies, landforms of the American West cohere as the body parts of vast divinities, whose death precedes the emergence and growth of peoples and cultures. Contemporary Americans of many backgrounds, too, use names for body parts to label geographic forms, naming heads of hollows, gorges of rivers, or mouths of mines. Unwittingly, then, our words suggest that we likewise inhabit landscapes formed from the sundered bodies of giants.

In the Appalachian plateaus, however, the works of a contemporary generation of giants are real. Flying over the plateaus, one sees the emergent formations wrought by the entities often called "corporate giants," gathered up and embodied in West Virginia as "King Coal."

Over the past century, the technology for wresting coal from its subterranean beds has dramatically reshaped the land. The tools have evolved into draglines (excavating machines) the size of 20-storey buildings, many of them bearing names: Big John, Sacagawea, Big Muskie. Devotees of draglines, in fact, refer to them fondly as "giants." This machinery makes it possible to extract multiple seams of coal once they have been exposed by blasting the mountains apart.

In the wake of this process, the giants leave what are known as "landform complexes"; rounded-off mountains, inset with wetlands drainage systems and coal-waste impoundments. Proponents of the transformed landscape argue that it creates the level land that West Virginia needs for future economic development. The emerging landform complexes appear in this perspective as artifacts of a view of history in which industry and technology lead the way along the path of progress.

The landform complexes eradicate most signs of the times they displace. But around their edges, signs of other times and other experiences of the land proliferate, evidence of a history continuing to unfold. And that history is defined, in the insight of West Virginia historian John Williams, by a series of struggles. From the mid-18th through the late 19th century, there was a struggle over land, first between pioneers and Native Americans, then between speculators and pioneer settlers, and then between captains of industry and the pioneers' descendants, many of whom entered the newly formed rural-industrial workforce. As the 20th century approached, then, the struggle over land shifted to a struggle over human resources, specifically labor. And from the mid-1950s into the present, alongside the continuing struggle of labor to maintain its ground, a struggle has intensified over environmental resources--including air, water, the biodiversity of the mountain forests, and other resources that communities need to sustain themselves physically and culturally.

This history of struggle is vividly registered in the landscapes surrounding the headwaters of the Big Coal River Valley, the research area for the Coal River Folklife Project. On the palimpsest of the coalfields, each phase has been overwritten with the thresholds and touchstones of the histories people read in the land and its elements: the rocks, forest species, newgrounds, orchards, gaps, knobs, coves, swags, creeks, branches, rusting tipples, abandoned highwalls, augur holes, log cabins, trailers, company towns, and the emerging landform complexes wrought by mammoth mining machinery. Each stage of the struggle is also inscribed in the terrains of state and federal legislation, in legal landmarks designed to temper the impacts of development on quality of life and the public good in the variety of Coal River's community spaces.

Many of the photographs and sound recordings presented in this online collection are the result of a collaborative effort to make sense of the landscapes taking shape on Coal River. Reading the landscape for signs of the times—signs of what has happened, what it means now, and what may yet be in store--is a vigorous cultural practice on Coal River, a way of understanding how things are faring in the continuing historical project of making Coal River home.

This historical outline is intended to contextualize the photographs and recordings in this online presentation. Readers wishing to explore the collection further may do so by keyword searches on many of the names of people, places, species, practices, and historical events mentioned in the outline. Reading the landscape over the shoulders of its makers and interpreters may yield a better understanding of how things are faring with the national project of nurturing a democratic polity through cultural policy, as well.

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10,000 B.C. - 1700 A.D.: A Native American Commons

Voices in Place

"My grandmother and all her brothers, they lived in Indian Creek. . . . She'd take me up in those mountains and brush the leaves off the cliffs and show me where they made their bread – this hole would be this big, and come down like this [indicates a conical shape]. They'd put their corn in there and take a hickory maul and pound it up to make corn bread. . . . Then they'd build a fire on these big flat rocks till they got real hot and then they'd brush it off and pour their stuff on there and bake it. . . . Then she'd show me trees where they'd hang their beef up to dry. They had grown up into trees, but she said when they used them they were just young branches, had limbs out where they could hang them in the crook and smoke them."

-- Mae Bongalis, Naoma, December 15, 1994

"We had a place we used to call Range Mountain, that was around about a ten- or fifteen-mile hike. Way back up there in the woods. And the old folks' tale handed down was that the Indians, they had that place and they planted all the fruit trees--you had all kinds, pears, apples, even orange trees and grapes. Anything you want you could find up there And we used to get a bunch of us guys, ten or fifteen of us, and hike on up to Range Mountain. . . . There was a lot of fruit up there. You could get just about anything you wanted. They had hickory nuts and walnuts, big walnut trees was up there, paw-paw trees, and all that stuff. We'd bring them down and shell them and lay them out in the sun so they could dry out. We'd save them for holidays, around Christmas you'd crack them and use the walnuts for the holidays. Dried green walnuts."

-- Felix Mollett, Canton, Ohio, formerly of Edwight, May 27, 1996

"The first white man that ever come in on this creek, he found a peach tree growing down the creek about a mile below here, and he called it Peach Tree Creek."

-- Dennis Dickens, Peach Tree Creek, December 13, 1994

The landscapes on Coal River are haunted with a Native American presence that forms a historic and mythological backdrop in historical accounts of life in the region. Just how recent, or even continuing, might that presence be? The answers are varying and ambiguous. Some hold that Indians had left the area by the time pioneers began settling there in the 19th century. Others claim Indian ancestry, specifically Cherokee, and attribute continuing agricultural and gathering practices to Cherokee ways.

Steps in History

For nearly 12,000 years the uplands served as a seasonal hunting and gathering ground for Native American groups, including, most recently, the Shawnee and the Cherokee. Archeologists divide this time span into five periods:

9,500 - 7,000 B.C. – Paleo-Indian period.

7,000 - 1,000 B.C. - Archaic period.

1,000 B.C. - 1,000 A.D. - Woodland period.

1,000 A.D. - 1700 A.D. - Late Prehistoric period.

1700 - 1800 A.D. - Historic contact.

Patterns on the Land

For at least some time before European contact, traditional hostilities were set aside among the tribes who relied on the rich biological diversity of the mountains for survival and regarded the mountains as a sacred place.² And while some argue that Indians and whites never co-existed in the Coal River region, claims to Indian ancestry are common in the area. (In the census for 1880 no one claimed such ancestry, but to do so outright at that time would have jeopardized one's property and right to vote.) Signs of Indian presence in the time of European settlement lurk in names for such features as Indian Gap and Indian Creek, Indian Mounds, Indian Trails, and camp rocks strewn with archeological evidence of Indian encampments.

Various plant species and landscape elements continue to evoke accounts of an Indian presence: "Shawnee lettuce," gathered in spring; the "red mushrooms" that Mary Allen said the Indians liked to gather; the charred rocks that Mae Bongalis's grandmother identified as surfaces for cooking Cherokee cornbread. "Indian Creek was full of Indians," said Mae Bongalis, who was born on Indian Creek, near Racine. Paint Creek is said to have been named for the "painted trees" that marked an Indian trail. One Indian trail proceeded along Marsh Fork from Jarrold's Valley and up Drew's Creek, crossing Cherry Pond Mountain through the Indian Gap.

Artifacts and relics related to every period of Native American occupation are still found at sites scattered throughout the mountains, particularly along Indian trails and around the bedrock overhangs known locally as rock shelters or camp rocks. Newgrounds prompt accounts of Indian practices cultivating beans, corn, and squash and shaping the forest structure through fruit- and nut-tree cultivation. And according to Dennis Dickens, Peach Tree Creek was named by the first white settlers because they encountered peach trees planted near the mouth of the hollow.

1700 - 1800: Early European Exploration, Settlement, and Speculation⁶

Voices in Place

"Over at Bowmans, there's an old piece of the old road on the river, that you can see the old wagon marks in the rocks where the horses pulled the wagons over the rocks and when the wagons went down, they'd hold the brake and let it slide there to keep from running over the horses--old wagon cuts in the soft sand rock."

-- Rocky Turner, Naoma, April 13, 1996

Steps in History

1742 – Traveling in boats made of buffalo hides, John Peter Salley heads an expedition down the New and Kanawha rivers. It comes to a river meandering through mountains where, he writes, "We found plenty of coal, for which we named it Coal River."

1760 – Thomas Farley, an ancestor of the Farleys on Rock Creek, settles at Farley's Fort in Pipestem. Thomas and his son fight in the battle of Point Pleasant in 1770.

1774 – Governor Dunmore of Virginia grants 800 acres to Mitchell Clay Sr.⁸

After 1783 – Virginia's governors continue to issue land grants, some as rewards for Revolutionary War service.

1792 – Virginia permits anyone to acquire "waste and unappropriated land at \$2 for one hundred acres." A burst of land speculation follows.

Patterns on the Land

During the 18th and early 19th centuries Daniel Boone, for whom Boone County is named, traded in ginseng and furs--and in warfare against the Indians. The skirmishes between early settlers and Native Americans included one in which the daughter of Mitchell Clay (an ancestor of many in the region) was abducted through Indian Gap on a trail that crosses Cherry Pond Mountain to Pond Fork.

Following the Revolutionary War, the governor of Virginia continued issuing land grants, some to soldiers in compensation for Revolutionary War service. In 1792 the Virginia General Assembly passed a bill allowing anyone to acquire "waste and unappropriated land at \$2 for one hundred acres." One of the original land grants went to Thomas Dickens, an ancestor of Dennis Dickens.

A frenzy of surveying and speculation in the region ensued often involving men of wealth and power who otherwise had little personal connection to the land. One of the more famous surveyors and speculators was George Washington, who acquired 30,000 acres along the Kanawha River. Another beneficiary was John Beckley, the first clerk of the U.S. Congress, who also functioned as the first Librarian of Congress. Princely parcels also went to William DuVal, a Virginian, and DeWitt Clinton, a congressman from Canandaigua County in New York, whose 270,000 acres stretched from Hazy Creek in present day Raleigh County to Buffalo Creek in Logan County.

As a speculative commodity, too, the land often changed hands in short order. DuVal quickly sold his tract of 367,000 acres to the partnership of Rutter and Etting. In 1796 Clinton sold the 130,000 acres he owned between Coal River and Paint Creek to a fellow lawmaker, Oliver Phelps of Connecticut. Phelps in turn deeded it to a relative, Gideon Granger, from Canandaigua County, New York, who served as U.S. postmaster general under Presidents Jefferson and Madison.

What of the people of far more modest means who actually settled in the area? The deeds for Montgomery County, Virginia—from which some of the counties in the Coal River area were formed--specifically excluded acreage within these vast parcels that had already been deeded to settlers. For instance, the Clinton deed for 130,000 acres alludes to 126,000 acres of prior claims. Engrossed within the large tracts, which often overlapped, these smaller claims became vulnerable in the speculative frenzy of the 1880s and 1890s.

Already, in the late 18th century, some of the names attached to the land are familiar. Jacob Pettry, a patriarch on Hazy Creek, owned 82 acres; John W. Scarbrough, a patriarch on Rock Creek, owned 125 acres on Tony's Fork. An early map of Coal River, which appears in the Montgomery County Deed Book, shows the location of "Farley's Rooting Camp," a reference to an area that was already attractive as a prime source of ginseng. Raleigh County historian James Wood mentions a tree near Coal City inscribed with the initials of Mitchell Clay and an early date.

The properties in the deed books are measured by the numbers of poles between trees, some of which were marked with the initials of early land grant holders: "Beginning at a white oak marked WR a chestnut marked ISIM and a maple marked SP in a hollow eighty poles from the Kanawha River. . . ." Because they name specific trees, the early deeds in fact constitute a remarkable de facto index to the rich variety of forest species found by early settlers and speculators. Today, the ancient "witness trees" are gone, their former locations now marked by large stone obelisks shaped, as a man living on Drew's Creek put it, "like a miniature Washington Monument."

1800 - 1860: A Pre-industrial, Pre-capitalist Frontier of Homesteading, Tenancy, and Forest Farming¹¹

Voices in Place

"When I was young, I think everybody turned their stock outside. That really is what started the Appalachians. People could come in here with cattle, hogs, chickens, turkeys, whatever, turn them loose anywhere. They would eat chestnuts and things of that sort would last them through the winter. You'd turn the hogs out, you wouldn't have to feed them. That's what started this. They could dig seng, get a little money. Sell a hog, get a little money. Things was cheap. Nobody had any money. But then you couldn't sell your corn, so they started making whiskey and they could sell the whiskey. I guess over half the people made whiskey because that was about the only way they could make a go of it. But they'd turn their stock outside. We would drive the cattle across the mountains here in March or April, and go back and get them in October. That's all we done with them, just take them over there and leave them."

-- Howard Miller, Drew's Creek, May 26, 1996

Steps in History

- 1804 A salt furnace is established at the mouth of Lens Creek.
- 1810s Drewry Farley settles on Drew's Creek, which is named for him. (He then moves to Kanawha County.) John W. Scarbrough settles on Toney's Fork.
- 1810 Daniel Shumate settles at the mouth of Shumate's Branch, a hollow named for him. He moves to the Marshes one year later. ¹²
 - 1812 James Ellison settles at the mouth of Hazy Creek. 13
 - 1819 Jacob Stover settles on Clear Fork.
 - 1820s Methodism begins to take hold in the region.
- 1820 Jacob Pettry is raising nine girls and four boys and large crops of wheat, corn, oats, peaches and apple orchards at the mouth of Hazy. He also operates a mill and carding machine. His son Martin will settle at Marfork.
 - 1826 Thomas Dickens settles in the mouth of Dry Creek.
 - 1828 Wilson Abbott settles on Dry Creek.
 - 1830s Alexander Cantley settles on Rock Creek.¹⁴

- 1834 The Virginia legislature declares Big Coal River navigable from St. Alban's to Marsh Fork and appropriates money to construct locks and dams to Peytona.
 - 1836 Coal Marsh Baptist Church is founded.
- 1838 The year is inscribed on one of the original walls of a log cabin on Rock Creek, next to the initials "J. C."
- 1841 Alfred Beckley, John Beckley's son and the commissioner of delinquent lands for what was then Fayette County, auctions off the Rutter and Etting land grant for tax delinquency. Francis Granger, son of Gideon Granger and himself a U.S. Congressman, buys a 47,596-acre parcel and retains Beckley as his agent to collect rents and negotiate the surveys and sales of parcels of his property. Photographs of pages from Alfred Beckley's notebooks now in the Manuscript Division of the Library of Congress record his transactions with the tenants and purchasers of Granger lands in "the Marshes," as the area was then known.
- 1847-84 Described by the historian William Bone as "a period in which farms were being fully established, a new county government was growing, the wilderness was still very pervasive with giant trees and woodsfuls of predators and bears. Mills and schools were established and in the midst of this came the Great Civil War." In 1848, cannel coal companies mine thousands of acres on Drawdy Creek around Peytona. ¹⁵
- 1850s Although coal has been mined commercially in connection with the salt industry and shipped to outside markets on the Kanawha and Coal rivers, large-scale development of the region's coalfield commences at this time with the discovery of cannel coal reserves. In the same decade Raleigh County undertakes a program of building, improving, and maintaining roads throughout the county. On Coal River and Cherry Pond mountains, a well-worn system of mountain crossings, footpaths, and public roads connecting neighbors and relatives living in hollows on opposite sides of the ridges is improved. Reflecting such initiatives, in 1854 William K. Abbott is appointed surveyor of "the public road leading from the top of Horse Creek to a blazed white oak one mile above the mouth of Rock Creek."
- 1850 Raleigh County is formed from Fayette County, incorporating the Marshes. Wilson Abbott, of Dry Creek, becomes the first county assessor and records the landholders in the county's first land book. Landholders owning more than 1,000 acres include Alfred Beckley (35,646), Edward Dillon of Richmond (50,000), Francis Granger of New York (178,846), and Pyrrhus McGinnis (11,628). Jacob Pettry, local patriarch and mill operator, owns 7,118 acres on Hazy Creek, Drew's Creek, and Marsh Fork. Other patriarchs listed include James Jarrell, with 1,070 acres on Horse Creek, and John W. Scarbrough, with 2,100 acres on Tony's Fork.
 - 1851 A flood destroys the system of locks and dams on Coal River.

Patterns on the Land

In the Coal River region between 1800 and the Civil War, an expanding population of settlers engaged in a corn-woodland-pastureland system of husbandry, also known as forest farming, that integrated an open forest into a largely non-monetized, trade-and-barter economy. Teeming with American chestnut and other forest fodder species such as oak, hickory, hazelnuts, chinquapins, white and black walnuts, paw-paws, persimmons, and black and red mulberry, the forests provided an ideal pastureland for hogs and cattle and readily functioned as an open range for surrounding farms.

The forest also provided the materials for houses, outbuildings, fences, and many farm implements. To this day, knowledge persists about the species best suited for various objects: chestnut for fence rails, yellow locust for posts, hickory for axe and broom handles, basswood for heating molasses and for bee gums.

Kitchen gardens around the homes augmented the staples of corn and beans that were grown on fertile "benches" in the mountains called "newground." "Every time you seen a little smoke coming out of a hollow, that was somebody clearing them up a newground," said Joe Jarrell, of Horse Creek. After a number of years the newground was "let go," for a period of forest fallowing.

Pursuing a seasonal round in a biologically diverse forest system, settlers gathered a wide variety of roots, greens, herbs, and animal pelts for food, medicine, and cash (ginseng, especially, for the latter). Other activities made equally abundant use of environmental resources. Near Hazy Gap is a depression in the land known as the "Tanning Trough," where people tanned their animal hides. Coal was also extracted from neighborhood coal banks. Other sources of cash included butter, eggs, and moonshine, a time-honored means of using surplus corn in a way that could easily be transported to market.

The success of the associated patriarchal social system hinged on large families in which even young children shared the burden of making the land productive. Some families owned the land they farmed, while others who were not initially owners were eventually able to purchase it. But for many, ownership of the large tracts of land used for hunting, gathering, and grazing remained out of reach. Indeed, to an extent, it was thought unnecessary to take out a claim on land occupied by the family for generations through what was legally recognized as "open and notorious possession."

Present-day names for some of the hollows are a legacy of this forest-farming economy: Sugar Camp, Sow's Hollow, Poplar Flats, Coal Bank Hollow. A number of project participants emphasized the value the community continues to place on fodder trees. In fact, the complex of farming and husbandry persisted into the 1950s, forming a hedge against starvation and the hard times that came with dependence on the monoeconomy of coal.

1860 - 1880: Civil War, Early Industrialization, and the Growth of Corporations¹⁸

Voices in Place

"Right up that holler over there, I showed you where my great-grandma lived. Back during the war between the North and the South, one of the Northerns hit her across the wrist with a pistol and broke her arm. She was trying to hide her coffee. See, they'd come and take what food you had in your house, and she tied her coffee up in a little bandanna, trying to hide it, and he hit her across the wrist and broke her arm. . . . The old timers knowed then about how to put splints and things on, you know. But her arm had a knot on it, and she would show that to us."

-- Kenny Pettry, Sundial, June 28, 1995

Steps in History

1861-65 – The Civil War.

1863 – West Virginia, comprising the western counties of Virginia that opposed secession from the Union, is formed from Virginia.

1870s – Popular writers describe Appalachia to the rest of the nation as a colorful place inhabited by peculiar people. In the same decade, the nation's increasingly powerful temperance advocates succeed in launching a crackdown on the production of moonshine whiskey.

1870 – The Chesapeake & Ohio Railroad hires a man from Germany to conduct a study of West Virginia, a first step towards regional penetration by railroads and major industrialization. Published in German, the study is eventually deposited in the West Virginia State Archives.¹⁹

1873 – The Chesapeake & Ohio Railroad completes its rail line through the New River Gorge, where coal barons including Josepher Beury, David Ansted, and John Nuttall begin developing mines. In the same year, Robert Angus Smith, a British chemist, discovers a link between the black smoke from coal-fired industrial plants and the acid rain falling on the city of Manchester.²⁰

Patterns on the Land

The Civil War left its traces on the landscapes surrounding the Coal River's headwaters. Raleigh County, where brothers sometimes fought against brothers in the war, was invaded by both Union and Confederate troops with a reputation for helping themselves to whatever they could find. According to the historian William Bone, a Home Guard was organized under the command of William Turner. James Wood records an account of how Confederate soldiers arrested Charles Clay (Mitchell Clay's son) with his sons, including Green Clay of Shumate's Branch. On being questioned

about their loyalties, the Clays pointed out that they'd stayed home during the war to harvest the grain for families of Confederate soldiers and had slept in the mountains to avoid Federal troops.²¹ Green Clay, a noted bear hunter, used a muzzle loader known as "old Snake Horn," and Bone suggests that its barrel was probably made in the blacksmith shop of Absalom Pettry, at the mouth of Hazy.²²

A number of families are said to have moved their households further into the mountains to avoid troops on both sides. When that happened, the farmsteads where several generations came of age now formed places to camp while hunting or digging ginseng or molly mooching (gathering morel mushrooms): the Perry Jarrell farm on Cherry Pond Mountain and those of George Webb and Lige Bradley on Bradley Mountain.

Several large rocks and a cave on Rock Creek are identified with Civil War events. A peach orchard planted during the war on Peach Tree matured and fallowed for decades afterwards, but in the early 20th century one of Dennis Dickens's uncles cleared the land for planting and peach pits from the wartime orchard renewed the orchard again.

The aftermath of the war saw the founding of numerous churches, schools, and grist- and sawmills, the latter developing along with cabinet-making, loom-making, and coffin-making around what was still a farm- and community-based economy. In the forests, where panthers yet roamed, wild game and mast remained abundant, and bounties on fox and wolf pelts provided a source of cash.

Yet the first signs of profound transformation were already appearing. By the time of the Civil War, Appalachia's overall farm wealth and production had begun to decline. The large families needed to make the land productive continued to reduce the availability of new acreage: between 1850 and 1880, as Paul Salstrom points out, the population on Appalachia's central plateaus grew by 156 percent. He describes this period as one of "accelerated agricultural decline and adverse federal policy." Eventually the pressures of a rapidly multiplying population, together with federal banking legislation that inhibited the local capacity to generate credit, ripened into a socioeconomic crisis that left the region vulnerable to exploitation by outside business interests in the decades ahead.

During the postwar years, too, local-color writers began to create a national image of Appalachia as a strange land inhabited by peculiar people. Their work established the popular understanding of the region as an "other" America, a stereotype whose persistence through periodic reinvention has repeatedly helped to legitimize outside interventions by government and industry. Thus in satisfying the emerging urban middle class's appetite for picturesque social fictions in this era, many Appalachian scholars argue, local color writers such as Mary Murfree and John Fox helped to lay the groundwork for the region's social and economic transformation by outside capitalists who could claim to be leading a backward populace along the path of industrial progress. ²⁵

Coincidentally, in the 1870s the nationwide temperance movement launched a crackdown on moonshiners. Moonshining, a technology brought by the early settlers from the British Isles for distilling grain alcohol, formed an economically viable means of transporting surplus corn to market. Despite the dangers of prosecution, the practice persisted in the region throughout the 20th century, drawing on and sustaining a deep environmental awareness.

Moonshining was just one outcropping of a complicated shadow economy built on knowledge of the forest. As John Bowman points out, moonshiners have to know local topography intimately in order to pursue hidden activities, and they have to know such subtleties of the forest as the best tree species for fueling the distillation of moonshine. They also need suppliers and customers who will exercise discretion and can draw on their own local knowledge of the natural world to identify, for example, the species of hollow trees where jars of moonshine are customarily hidden.

On Bailey Mountain, Sarah Boggess's grandmother Margaret Bailey hid the working mash in barrels beneath her cabbage patch. Her husband, Jim Bailey, would be shot and killed by a federal agent while tending his still in the 1920s. Some of his belongings from this era are displayed in a log cabin in Pettry Bottom.

1880 - 1930: Rapid Industrialization, Colonization, Company Towns, Mine Wars, and Union Battles²⁶

Voices in Place

"In those days, when you went on the property, you carried your peacekeeper. . . . Because, when you go on a man's land to tell him 'you don't own it,' he's not going to be too happy."

-- Land company official, October 1995

"My daddy (in-law) had a farm in the head of this creek. And the land company men come up in the mountains where he was working. They went on top of that mountain, and they got up there where he was hoeing corn on top of the mountain, and they said, 'Well,' they set there for a while, and they said, 'Mr. Peters, we come up to make a deal with you.' Said, 'You make us a deed to the mineral rights, and we'll make you a clear deed to the surface.' And right there was a big fight took place."

-- Cody Dickens, Peach Tree Creek, October 3, 1996

Steps in History

- 1881 Presbyterian missionaries come to Clear Fork and begin to be active in the area.
- 1886 W. C. Reynolds, a geologist and prospector, climbs from Acme to the top of Kayford Mountain and looks down the footpath to Clear Fork. There he looks out on the mountains of the Coal River watershed, bulging with seams of the finest bituminous coal. On his advice, the Rowland Land Company (formed from the Bowman Lumber Company and the Big Coal Development Company) resolves at its first board meeting to acquire 60,000 acres of land at the headwaters of the Big Coal River.
- 1889 E. C. Colcord comes from Vermont to serve as manager for the Rowland Land Company.
- 1890 West Virginia becomes District 17 of the United Mine Workers of America (UMWA). In an early stage of mechanization, many mines are electrified, and cutting machines are installed in some mines.
- 1891 William Pettus opens Seng Creek Coal Company. The Bowman Lumber Company buys timber and land in Hazy Creek.
- 1901 Residents of Clear Fork begin walking up to Acme to work in the mines on Cabin Creek. The Coal River Baptist Association forms.

- 1901-10 In this decade the Rowland Land Company opens mines at Colcord (named for E. C. Colcord) and Dorothy (named for Colcord's daughter). In 1890 the population on Clear Fork had been 1,063; by 1910, 1,000 people live in Dorothy alone.
- 1902 The UMWA strikes and organizes 7,000 miners in the Kanawha coalfield. Mother Jones sets up headquarters at Montgomery.
- 1904 The first rail line along Coal River is completed, accelerating extraction from coal reserves on Cabin Creek and Paint Creek. In the next 10 years railroad spur lines are constructed up a number of hollows. Also in 1904, a fungus from Asia strikes chestnut trees in New York City, and thereafter the chestnut blight spreads rapidly through the forests of the eastern United States.
- 1913 Thousands of union and non-union miners walk out over a contract dispute, precipitating the Paint Creek-Cabin Creek Strike, one of the bloodiest labor-management battles in history. The coal operators put down the strike with company thugs, Baldwin-Felts guards. The guards evict miners and their families, destroy their furniture, and pepper the tent camps that the union has set up to shelter them (and where Mother Jones stays) with machine gun fire. Such events form the backdrop to the armed March on Blair Mountain in 1921.
 - 1914 A gas explosion in the mine at Eccles kills 174 miners.
- 1915 Pritchard City is re-incorporated as the town of Whitesville. Two thousand people now live in Dorothy.²⁷
- 1916 Carl Colcord opens a mine on Montcoal Mountain. It is said, William Bone notes, "that Carl Colcord took a train to New York City and got a train load of immigrants to work in his coal mines on the headwaters of Big Coal River."²⁸
 - 1917 Mines open at Colcord and Eunice.
- 1919 Raleigh-Wyoming begins opening mines, including "the Butcher Shop," at Edwight. (Edwight was originally called Launa, after Burwell Pettry's daughter.) C. E. Krebs, author of reports of the West Virginia Geological Survey, forms the Hazy Eagle Collieries Company at the mouth of Irene Hollow on Hazy Creek.
- 1920s Towns for largely African-American communities are built at Edwight (125 houses) and Birchton (50 houses).
- c. 1920 By this time there are schoolhouses in a number of hollows, including Launa/Edwight, Shumate's Branch, Horse Creek, Little Marsh, and Peach Tree.
- 1921 The March on Blair Mountain, which Joe Aliff, a resident of Rock Creek, calls the most recent civil war on American soil. Thousands of armed miners (2,000 of them World War I veterans) assemble at Lens Creek on August 20, planning to march

across Blair Mountain into Logan County in order to liberate it from the mine-guard system that Sheriff Don Chafin uses to keep out the union. The miners from Edwight raid the company store for weapons before joining the march.²⁹ Many marchers wear red bandannas, for which they become known as "rednecks" (though this is not the origin of the term). Violence ensues, in a battle that rages for more than a week before President Harding puts it down with 2,500 troops and 14 bombing planes. The union does not regain strength until the New Deal and the 1933 passage of the National Industrial Recovery Act.

1928 – The Archive of Folk Song, which will evolve into the American Folklife Center is founded at the Library of Congress.

1929 – The greatest economic depression in American history begins.

Late 1920s – Heavy timbering begins on Dry Creek, where Charles Tabor runs a sawmill on Clay's Branch.³⁰

Patterns on the Land

The prospect of transporting West Virginia's timber and mineral wealth from the mountains by rail precipitated a new round of speculation in the region's resources among private business interests from the Eastern seaboard. So aggressive were their methods of appropriating land and minerals that this group of speculators became known as "Robber Barons."

First, surveyors and geologists combed the mountains and pored over courthouse deeds in an effort to buy land. If desirable land was not for sale, they then negotiated "compromises" using the legal instrument known as the Broad Form Deed to effect the transaction called "the severance of ownership from occupancy." Resurrecting the vague and overlapping titles of early land grants, paying back taxes on occupied lands, and filing deeds on "unused portions of ridgeland," agents for newly forming companies persuaded farmers to cede timber and mineral rights. In return, farmers retained "surface rights"—ownership of other above-ground resources--but only insofar as they did not block the company's access to minerals and timber.

Those who tried to fight the process found the legal deck stacked heavily in favor of the mineral and timber companies. Historian John Williams notes that at this time there was one federal judge in the state of West Virginia, a man "noted for his tender concern for the rights of nonresident landowners." Historical narratives about how the land companies acquired land during this period form an elaborate etiology, a means of community accounting for how things came to be the way they are.

Throughout the coalfields, some local landowners with large landholdings invested in capitalist ventures, while others, such as Moses Dameron and Elam Scarbrough, became surveyors and agents for land companies. Articles in industrial publications such as *The Virginian* extolled the value of the land for its capacity to

support a population of workers, even as commentators such as the British geologist D. T. Ansted praised the Cabin Creek Plateau for its moderate winters, delightful climate, excellent water, and deep soil, "well-adapted to the growth of wheat, Indian corn, potatoes and other crop."

Yet the landscape was rapidly transformed during this time. Railway spurs penetrated the hollows. The trees of the virgin forest, cut down with the help of draft animals, were brought from the headwaters of Coal River by rail to the Bowman Lumber Company's mill at St. Albans. Dennis Dickens recalls a felled walnut tree large enough in diameter for a man to walk through without stooping, and the stump of an elm large enough to pen several cows. Logging camps sprang up, leaving remnants of skidways and splash dams and place names such as "Board Tree Hollow" and "Skinned Poplar Hollow." By 1900, half of West Virginia's 10 million acres of virgin forest was gone.

Around the mouths of newly opened mines an industrial landscape sprang up, made up of coal tipples and silos, inclines, and company stores. There were also slate dumps, some of which ignited and smoldered for years. In the wake of combustion, piles of "red dog"--burnt slate--were used to pave the roads.

The population grew dramatically through an infusion of migrants from non-coal regions in Appalachia, sharecropping farms in the American South, and a number of countries in Europe, including Italy, Poland, England, Ireland, and Greece. "They came from the Turkish Isles, they came from everywhere," recalls Mae Bongalis, who in 1928 at the age of 12 married an immigrant from Crete.

Industry's vision of a disciplined work force was registered in the form of the "company town," housing complexes (also known as "coal camps") that companies built close to the mines for miners and their families. On Coal River most of these towns were built in the valleys along the Marsh and Clear Forks.

There were coal camps at Sundial, Edwight, Birchton, Stickney, Nellis, Montcoal, Eunice, and Pettus. Edwight was divided into three parts, one section for Appalachian families, another for European immigrants (sometimes such areas were called "hunky towns"), and the least desirable location reserved for black families, who by some accounts were brought in from Alabama as strikebreakers. John August recalled that while not all of the coal camps were segregated by race and ethnicity, all were segregated by class. Positioned above the camps were the more luxurious quarters of mine superintendents and doctors (such as Cigar Hill, which overlooks Montcoal across Route 3). Cemeteries were also segregated, as black cemeteries at Graveyard Hill (near Edwight) and Birchton Curve attest.

Jobs were also stratified by race and ethnicity: native whites were given jobs operating machinery and supervising other workers, foreign-born whites were made machine helpers. Blacks were tasked with loading, the first job to be eliminated on a large scale with the introduction of the mechanical loader.³²

The coal companies sought to control many aspects of the miners' lives beyond their work and their housing. Payment for work was issued in scrip, redeemable only at company stores, where prices were higher than prevailing market prices. The companies also built churches and parks and formed company ball teams, shaping the world of recreation and faith.

The coal companies also maintained a vigilant watch against union organizers. At this time, West Virginia coal operators undercut their competition in other states by underpaying their workers, which made it essential to keep the UMWA out of the West Virginia coalfields. Nationally, mine workers campaigned to annex West Virginia to the UMWA. Tensions exploded violently in the 1921 March on Blair Mountain, in which armed miners fought for a week against police and company forces until the federal government intervened with troops, crippling the union movement until the New Deal.

Because of its boom and bust cycles, mining was inadequate for supporting families. Children went to work in the mines as well as in the fields to support their families. Mae Bongalis entered Colcord's mine on Montcoal Mountain at the age of eight to help her father, and describes in vivid detail the technology of the pick-and-shovel system. By the mid-1920s, the low-tech era she describes had changed through electrification and the use of compressors to power "cutting machines." In some mines, motor-powered cars had by then begun displacing the mules used to haul out the coal. The first mine safety laws passed in West Virginia were for the benefit of the mules, intended to keep them from going blind by stipulating that for every 12 hours a mule spent underground, it had to be pastured for 12 hours aboveground.

In this time of economic and social upheaval, the traditional knowledge and skills required for forest farming became assets, keeping the mine workers adequately fed and sometimes providing a means of cash. In that sense, traditional farming helped subsidize the mine economy. Dennis Dickens recalls that some miners ploughed by moonlight. Kenneth Pettry remembers harvesting fruits and nuts from the woods on Peach Tree Creek as a boy and peddling them in the coal camps. Mae Bongalis recalls a communal system of tending and harvesting crops and livestock, and the time she initiated a Polish neighbor into the mysteries of winnowing beans.

In affirmation of the bonds of traditional community and place, the 1920s saw the establishment in several families of a celebratory form that would become a regional hallmark: the reunion. In 1925 Ballard Pettry established the Pettry Reunion at "The Flats," renamed Naoma, after a daughter of Burwell Pettry. In 1929 the Hunter family established a reunion on Horse Creek, and Bradford Reunion was held on Dry Creek. And in contrast to the rigid new order of the coalfields, the shadow economy of moonshining expanded during this era. At some point in the 1920s, Jim Bailey was shot and killed by a federal agent while tending his still on Bailey Mountain.

Even the marks of the new industrial order on the land were often impermanent. As mines were fully exploited and abandoned, the housing around them was torn down, and (as William Bone notes) the churches were sometimes abandoned. ³³

1930 - 1950: The Great Depression, the New Deal, and World War II

Voices in Place

"Back in the bad times, I seen people go out, be snow on the ground. Rake that snow and leaves off, you find little sprouts like that and pick it to eat. People didn't even have grease to go on the stuff after they cooked it. They just boiled it and ate it. And we had plenty."

-- Mae Bongalis, Naoma, December 15, 1994

"I seen some huge trees come out of here, buddy. Huge oaks, poplar. That's when they timbe- cut with a cross-cut saw and axe. My uncle made a fortune at it. He bought a new car every year back in the thirties in the Depression. He stayed in the timber works. The coal mines all went down, but timber kept going. . . . Then the coal mines went in, they started buying a lot of headers. . . . Mining timbers to set inside of the mines, eight-by-eight headers, sixteen foot long, eight wide and eight thick. They'd rather have hardwood. Oak, sugar."

-- Kenny Pettry, Sundial, June 28, 1995

Steps in History

- 1930s Workers continue to migrate into the coalfields. The chestnut blight worsens.
 - 1930 The worst drought anyone in the region can remember.
- 1931 John L. Lewis visits Montcoal to organize its workers. According to the recollections of Mae Bongalis, the Colcord Coal Company throws him off the property. In the same year, the DeWitt Brothers, union organizers, hold rallies in Prenter and at Edwight, which has somehow remained, as Richard Bradford put it, "a free town" because of the unusually large number of residents who had held onto their mineral and timber rights.
- 1932 The worst flood anyone in the region can remember. Louis Watson Chapell publishes *John Henry: A Folklore Study*, an account of the song that tells the story of the industrial revolution in microcosm.
- 1933 After many secret meetings in the back of Mike Vergis's bar, Union Local 6815 is chartered at Edwight. Meanwhile, several states away, the Tennessee Valley Authority begins its program of rural electrification and flood control in Tennessee. Federal policies fueling this program will eventually undermine the United Mine Workers' cause.
- 1934 The West Virginia legislature passes the so-called "stock laws" requiring livestock owners to fence their cattle and hogs to prevent them from wandering onto

railroad tracks. Even so, cattle and hogs will continue to range through the mountains grazing on forest fodder well into the 1950s.

- 1935 President Franklin D. Roosevelt's New Deal initiates several programs for which he is still remembered with particular fondness in southern West Virginia: the Social Security Act; the National Industrial Recovery Act, which makes it federal policy to encourage workers to bargain collectively; and the establishment of the Works Progress Administration, which puts many unemployed people back to work improving roads, parks, communities, and homes throughout the region and the nation. More than six decades later, a photograph of the president signing the Social Security Act into law hangs on the wall in Frazer Gill's Barber Shop in Coal City: "There'll never be another Roosevelt," says Mae Bongalis.
- 1941-45 World War II. The federal government takes over the coal mines to ensure continuous production, which sustains a boom era in the Kanawha coalfields. Coal miners become the best-organized and most highly paid blue-collar workforce in the United States.³⁴
- 1942 Armco Steel leases the properties at Montcoal and Stickney from Rowland Land Company. Armco moves the community off of Montcoal Mountain and is remembered in many accounts as a "good corporate citizen."
- 1943 Encouraged by John L. Lewis to collect the music and songs of the bituminous miners, folklorist George Korson publishes his study *Coal Dust on the Fiddle*. The recordings are placed in the Archive of Folk Song at the Library of Congress. Kenny Pettry recalls the wild hoedowns and dancing during this period on Peach Tree Creek with Little Jimmy Dickens, who lived just across Guyandotte Mountain in Bolt.
- 1947 By this time, UMWA miners produce 90 percent of American coal. On Coal River alone, 11 coal companies employ 3,000 men.³⁵ Raleigh County produces some 7,489,575 tons of coal in the first six months.
- 1948 Coal employment in West Virginia reaches an all-time high of 125,669 miners.
- 1949 The first two strip mines open on Marsh Fork, producing 7,895 tons of coal from the Eagle seam.

Patterns on the Land

In a number of the interviews recorded for the project, people such as Denny Christian, Dean Bone, John August, Ed Cantley, Carrie Lou Jarrell, Virgil Jarrell, David Stover, Judy Griffey, Rocky Turner, Daisy Ross, Felix Mollett, and Lucy Cabell remember what it was like growing up during the 1940s and 1950s--roaming the woods, hills, and hollows; hunting, fishing, raising and harvesting gardens, attending school and

church, playing ball, making music, and producing coal. The era emerges in some accounts as a kind of golden age—not a time of luxury, but one rich in community life, nurtured by access to the forest commons on Coal River.

Elements of expressive culture flourished also. In the 1930s the WPA produced guides to the history and folklore of many states, including West Virginia (*West Virginia: A Guide to the Mountain State*). Bluegrass music emerged as a phenomenon of the postwar Appalachian diaspora, and Bea and Everett Lilly, from Clear Fork, performed on the *Wheeling Jamboree*.

World War II was a watershed event, bringing boom times to the coalfields, beginning a post-industrial period in the region, and precipitating a flood of outmigration as people left hollows and coal camps to find work in the factories and assembly lines of midwestern cities such as Dayton, Cleveland, and Chicago. In these years John Flynn and his cohort grew up in the hollows and company towns on the headwaters of the Big Coal River, a generation whose life spans were to include decades of exile in cities to the north. Many people--such as John Flynn himself, John August, Ted Farley, Shorty Bongalis, and Kenny and Martha Pettry--eventually returned, but many did not.

Technological innovations continued to shape the coal industry. By the end of the 1940s, most loading had been mechanized. Coal trucks, operated by individuals and small companies, emerged as an important mode of transporting coal, augmenting rail and pipeline transport for the remainder of the century. The weight and size of the vehicles eventually became a matter of public concern, controversy, and debate. The first two strip mines opened on Marsh Fork in 1949.

Coal River towns bustled during these years. The gristmills disappeared, but sawmills operated continuously. Other signs of cultural and economic vitality included a daily newspaper (*The Whitesville News*), softball teams in two leagues, and the formation of the Coal River Industrial Stores Association. Armco improved the water systems at Montcoal and Stickney; Truax Traer improved Dorothy. Electricity came to some of the hollows. Whitesville was able to ship milk to ravaged counties in Europe, and the Whitesville Bank doubled its capital. 37

During this time, some people began to express concern about the impact of coal mining on human and environmental health. European scientists confirmed what had been suspected for decades: that oxides of sulphur and nitrogen released through fossil fuel combustion are converted to sulphates and nitrates in the atmosphere, mix with moisture, and return to the earth as acid rain. On Coal River, people recall that in addition to washing the coal in the river, companies doused burning slag heaps by shoving them into the river. John Flynn recounts how when he swam in the river as a boy, it left a black circle around his midriff. In 1947 the West Virginia State Conservation biologist declared Coal River unsuitable for bass. In the same year the West Virginia Department of Mines established a Dust Control Division to monitor and control the hazardous dust-ignitions (known as "pop-offs") in the mines.

The mineworkers themselves created a burgeoning body of occupational folklore. They devised nicknames and other naming practices to give meaning to the people, machines, and landscapes of their labor.

1950 - 1980: Strip Mining, Mechanization, Outmigration, and Return

Voices in Place

"It was really just survival. . . . Times here in the fifties and sixties was bad. I grew up here, I know. . . . There was only a few people at that time worked in the mine, and they was working two or three days a week, and everybody else that was able was cutting mine timber. That's all there was."

-- Jack Bonds, Drews Creek, June 28, 1995

"In the mid-1950s the news to the quiet community of Dry Creek and Horse Creek was that there were big machines being brought to the top of the mountains to begin the strip mining of coal; no one knew what to expect but the news created quite a stir and a desire to see what was going to happen. Along with the huge boring machines that came to the mountaintop, the huge shovel that did the strip mining operation was so large that a sixfoot man and several people could easily stand together in the dipper of the big shovel that was operated on the mountaintop of Dry Creek and Horse Creek in the mid-1950s. Soon machines cleared mountaintop areas in some places as large as a ball field; the debris of that effort was pushed over the mountaintops to slide down among the trees and cover up some of the choice hunting places for hunters. When it began to rain, this turned into a flood disaster with high water, creeks out of control, and wall of mud pushed into the private residences along the hollows; some homes had been families for several generations along the tributaries of these hollows that headed up against the top of the mountain range. The result of strip mining operations begun on the head of Dry Creek in the mid-1950s was to produce a massive flood with a wall of water and tons of mud and rock into the upper inhabited area of Sturgeon and Clay's Branch with the result of lost homes and homeplaces. This same scene repeated itself on Horse Creek and then on Peach Tree."

-- William Bone⁴⁰

"When you have a depleting resource and an expanding number of heirs, the only solution is to make it grow."

-- Land company official, October 1995

"I've seen the come and go of all these towns."

-- Elsie Rich, Jarrold's Valley, May 26, 1996

Steps in History

1950s – R. P. Shank strips Shumate's Branch.

1950s-70s – J. P. Hamer operates a lumber company and sawmill at the mouth of Hazy.

1951-61 – Coal production goes into a deep decline.

- 1952 Truax Traer strips 48,045 tons of coal from the Dorothy seam.
- 1953 Mines close at Edwight.
- 1954 Governor William Marland desegregates West Virginia schools.
- 1955 In Edwight, Raleigh Wyoming Coal Company sells miners' houses to be torn down and removed. The black community is evacuated. The Assembly Church of God is relocated to Switzer, where it becomes Belle Wilson's home.
- 1956 Truax Trayer's strip mines at the head of Sturgeon Branch and Clay's Branch exacerbate flooding on Dry Creek. Residents describe the event as a "wall of water" coming down the hollow. 41 Truax Trayer is sued for \$128,000.
- 1956 Raleigh Boone Medical Center begins taking patients. Rowland Land Company modernizes its leases, collecting royalties at a percentage of the selling price rather than on a per-ton basis from Consolidated Coal, spurring the company's growth. 42
- 1958 The only mine running on Coal River is Armco Corporation's mine at Montcoal.
- 1960s Ecologists in New England and Canada correlate acid rain with acidification of lakes and soils. In Europe ecologists relate acid rain to "waldsterben"—the deterioration and death of vast tracts of forest.
- 1960s In 1960 John F. Kennedy brings his presidential campaign to West Virginia, fixing national attention on an impoverished region that has not benefited from America's booming postwar economy. As president, Kennedy initiates the creation of the Appalachian Regional Commission to foster the area's economic development, and Appalachia becomes a centerpiece in his successor Lyndon B. Johnson's plans for a Great Society and a War on Poverty (both 1965). In 1964 Charles Kuralt produces "Christmas in Appalachia," a program depicting the region as a culturally and economically deprived and forgotten part of America. The federal programs and publicity precipitate a flood of volunteer efforts within the region, including Volunteers in Service to America (VISTA). In southern West Virginia, volunteers (many from the region itself) work on problems related to strip-mining, building and maintaining roads, and schools. They build a network of Community Action Groups and develop a program for preschoolers that becomes the national model for Head Start.⁴³ In 1969 this network takes its concerns to Charleston, persuading legislators to pass the 1971 bill regulating strip mining. Before the Mountain Was Moved, a documentary about this effort, is nominated for an Academy Award. Some of the footage is shot in the home of Jenny Bonds on Drews Creek.
- 1962 A UNESCO report recommends developing guidelines to preserve the historic character of whole ecological or historical regions.

- 1962-68 Coal production rises to 1951 levels. Seven hundred thirty-three West Virginians lose their lives in the war in Vietnam.
- 1963 Harry Caudill, a lawyer from Kentucky, publishes *Night Comes to the Cumberlands*, a stark indictment of strip mining.
- 1965 Congress passes the Appalachian Regional Development Act, constituting the Appalachian Regional Commission and charging it to craft and implement a comprehensive economic development plan for the region. Jack Weller, a Presbyterian minister based in Whitesville, publishes *Yesterday's People: Life in Contemporary Appalachia*, a book that locates the source of the region's social and economic inequities in its culture and mores. The book will be used as an introduction to the region by generations of social workers and missionaries.
- 1965-66 The 89th Congress (sometimes called the "Preservation Congress") crafts new national cultural, social, and environmental policy and an infrastructure for implementing it with the National Foundation on the Arts and Humanities Act (1965), the National Historic Preservation Act (1966), and the National Environmental Policy Act (1970), which provides a way of planning for culture and the environment together.
- 1969 Congress passes the Coal Mine Health and Safety Act, making operators responsible for safe working conditions including measures to prevent black lung (*pneumoconiosis*) and to compensate miners who contract it. The West Virginia Coal Association denounces the measure as "galloping socialism."
- 1970s Strip mining escalates; the mineworkers' union unseats corrupt leaders; black-lung victims win compensation; and John Denver writes "Almost Heaven, West Virginia."
- 1970 Congress passes the Clean Air Act. As a result, taller smokestacks disperse pollutants farther away from their source, improving conditions locally but damaging water, forests, and crops further afield and prompting some in the coal industry, such as E. Morgan Massey, to invest in low-sulphur bituminous coal seams. Massey begins cultivating a market for steam coal with utilities companies, signing a contract with Duke Power Company.
- 1971 West Virginia begins regulating strip mining, passing legislation governing the discharge of mine waste into streams and requiring concurrent reclamation and slope stabilization.
- 1972 Consolidation Coal Company strips the head of Workman's Creek; Eagle Coal and Docks strips at Stickney. Armco Steel produces 1 million tons per year. And on Buffalo Creek, a sludge dam collapses in heavy rains, unleashing a wall of water that kills 126 people and levels the community. Pittston Coal Company declares the disaster an act of God.

- 1973 An oil embargo in the Middle East sparks a national energy crisis that reopens the mines, stimulating another coal boom on Coal River and precipitating a return migration as people who have moved north to work in the factories return to work in the mines and related businesses.
- 1974 Factory closings in Dayton, Ohio, lay off 25,000 workers, accelerating return migration to the Coal River region.
- 1975 The West Virginia Department of Culture and History launches its folklore periodical, *Goldenseal*.
- 1976 Congress passes the American Folklife Preservation Act, creating the American Folklife Center at the Library of Congress and directing it to "preserve and present American Folklife."
- 1977 President Jimmy Carter signs the Surface Mining Control and Reclamation Act, creating the Federal Office of Surface Mining "to protect society and the environment from the adverse effects of surface coal mining operations." In addition to regulating the construction of valley fills and sludge ponds, the law requires coal companies to restore surface-mined sites to their "approximate original contour," but grants exceptions in the case of mountaintop removal projects that demonstrate a post-mining need for flat land.⁴⁴ The act is a significant expression of cultural policy, obliging permit seekers to identify properties listed in the state and national registers, and it allows individuals and community organizations to petition the Division of Environmental Protection on behalf of sites of historic, cultural, or religious significance.
- 1977 The Appalachian Studies Association forms. Its specialists in the region's history and culture reconfigure the understanding of Appalachia's relationship to the nation, countering the prevailing theory that the region is poor because of a culture of poverty with the theory that its poverty is a result of Appalachia's economic colonization by outside corporations. In the same year, the town of Vandalia establishes an annual liar's contest, celebrating a genre of storytelling known as "lying"; and UMWA miners produce 50 percent of the nation's coal.
- 1978 The Horse Creek Community Association fights for and wins royalties on coal transported down through Horse Creek. The UMWA "Hundred-and-Eighteen-Day Strike" concludes with compromise on full health coverage and an industry-wide benefits plan. Congress establishes the New River Gorge National River with an act empowering the National Park Service to prohibit uses in the vicinity "which would detract from the esthetic character of the Gorge area," including timbering and surface mining. The national river becomes a centerpiece for tourism as a post-coal economic development strategy.
- 1979 Governor Jay Rockefeller presides over groundbreaking for Walhonde Village, 68 units of affordable housing for miners on Clear Fork. Rowland Land

Company donates 30 acres for the project. "Walhonde" is the Mingo name for Coal River.

Patterns on the Land

The end of World War II set the stage for strip mining and for what is known as the Appalachian diaspora, when the coal industry's traditional markets (home-heating and the railroads) switched from coal to natural gas and oil. Attempting to capture the electric utilities market and to generate capital for mechanization, the Bituminous Coal Operators Association negotiated a high industry standard with the UMWA, ensuring a reliable production schedule by financing a health plan and pension fund for miners. In return for improved standard wages and benefits, miners agreed not to strike over layoffs related to mechanization, an agreement that paved the way for massive outmigration and the intensification of strip mining throughout the second half of the 20th century.

Between 1935 and 1955, the introduction of mechanical loaders revolutionized deep mining. All Nationwide, in the 1950s, some 250,000 miners (60 percent of the workforce) lost their jobs, overwhelming their pension fund. In addition, small operators unable to afford the industry-wide standard were driven out of business. Fifteen mines on Coal River shut down, and between 1951 and 1961 coal production declined dramatically. The roads leading out of Coal River to the factory towns in the north received a new name: Hillbilly Highways. "You had to learn the three r's," said Shorty Bongalis, "Reading, Writing, and Route 21. And if you couldn't swim, you better have help crossing the Ohio River."

Between 1950 and 1980, surface mining in the Kanawha coalfields steadily intensified, as a quick comparison of the topographic quad maps from 1968 and 1988 reveals. The 1968 USDA soil survey classifies the landforms strip mining produced as "strip spoil," "mine dumps," and "made land." Strip mining occurred at the heads of most hollows on Cherry Pond Mountain, Coal River Mountain, and Kayford Mountain. Shank stripped the head of Shumate's Branch; Truax Trayer stripped on Dry Creek; Ranger Fuel stripped on Peach Tree; Consolidated Coal stripped on Workman's Creek. Residents remember the damage to community property from flyrock and the damage to streams from acid mine drainage: "I've seen the golden water running," as John Flynn said.

The heyday of strip mining is a phase of history embedded in the landscape. Wherever one stands on a ridge one can see a ribbon of "pre-law" highwalls girding the ridgelines, created before the enactment of state and federal legislation regulating strip mining in the 1970s. Augur holes, slate dumps, and strip roads used for four-wheeling are another legacy. Abshire Hollow, on Indian Creek, was rechristened Slate Dump Hollow, and a space gouged out by giant earth moving equipment near Rock Creek Knob became known as the Shovel Cut. In the media, reports on sightings of an itinerant geographic form referred to as a wall of water began to appear.

Struggling to hold on to pension and health plans (including compensation for black lung), workers throughout the coalfields also struggled to control the devastating "externalities" of coal mining, both from stripping and from underground mines: flyrock and rock falls from blasting, mud slides in heavy rains, blowouts from water built up in underground mines, sunken wells, broken mountains, acid mine drainage, flooding and blackwater leakages from sludge ponds, and the dislocation of entire communities when the deep mines shut down. Federal support for collective bargaining diminished, as the U.S. government encouraged the production of strip mined, non-union coal through the buying policies of the Tennessee Valley Authority. Eventually the miners succeeded in getting black lung recognized as a disease caused by coal dust, making its victims eligible for government compensation.

Gradually an infrastructure emerged for environmental protection, along with the popularization of an ecological perspective on nature and society. Lucy Braun published *The Eastern Deciduous Forests*, a landmark study identifying the mixed mesophytic forest as a coherent ecosystem; and Russell Smith published *Tree Crops: A Permanent Agriculture*, promoting the value of mixed mesophytic fruit and nut trees as a renewable source of fodder for livestock and food for humans.

The highway building projects of the New Deal and the post-war boom open the mountains to more than the extraction of coal. A national folk revival developed in the early 1950s, as "folknik" college students traveled into the mountains in search of both folk songs to sing in the coffee houses and folk performers to showcase in the festivals that began in this era. Patrick Gainer, a folklorist at West Virginia University, founded what evolved into the West Virginia State Folk Festival. Quentin Barrett, a school principal on Marsh Fork, brought Andrew Burnside and Gilbert Massey from Rock Creek to perform at the festival, and their traditional fiddling and straw-beating was depicted on the cover of *Ford Times*, as Barrett recalled. In 1952, Bea and Everett Lilly left Clear Creek for Boston, Massachusetts, and launched an eighteen-year career playing at the Hillbilly Ranch.

The state of West Virginia began encouraging the documentation and promotion of folk arts, profiled heavily at the state's 1963 centennial celebration. In the 1970s, the Augusta Heritage Workshop was established at Davis and Elkins College, and the state's new Division of Culture and History launched *Goldenseal*, a magazine devoted to the state's folk culture. The proliferation of craft outlets, annual craft fairs and music festivals, and the state's effort to promote public awareness of West Virginia's folk heritage are continuing legacies of the folk revival of the 1950s and 1960s.

With the end of the company towns, new forms of civic life began to emerge, such as the ramp supper. At the head of Drew's Creek, six women from the Delbert Free Will Baptist Church decided to hold a ramp supper to raise funds for the upkeep of the community center. They raised \$35 and before the next ramp season, their community building was destroyed by flyrock from a strip mining project at the head of Drew's Creek. With proceeds from subsequent ramp suppers, the ladies' auxiliary built a new community center.

1980 - 2001: Global Economic Restructuring, Union-busting, and Environmental Battles

Voices in Place

- "Back in the early 1900s, people in the industry said, 'What do we do when the nine-foot seams are gone?' Then it was, 'What do we do when the five- and six-foot seams are gone? Now we're saying, 'What do we do when the four-foot seams are gone?' Mountaintop removal helps get those little seams."
 - -- Land company official, October 1995
- "Edwight was a really beautiful community. And sometimes we pass and say, 'We used to live right up there where all those trees are.'"
 - -- Daisy Ross, Newark, N.J., May 27, 1995
- "We fear the river above more than the river below."
 - -- John August, Stickney, September 27, 1994
- "Who Needs You? I've Got Mexico."
 - -- U.S. Coal Review, July 30, 2001
- "And I weathered the storm."
 - -- Epitaph on the tombstone of Donna Wills (1911-1994), Rock Creek, 1994

Steps in History

- 1980 In response to mounting concerns over the effects of acid rain on U.S. forests, Congress inaugurates the 10-year National Acid Precipitation Assessment Program (NAPAP).
- 1981 A. T. Massey Coal Company opens a non-union mine at Elk Run. Union miners respond with violent demonstrations.
- 1983 The Appalachia Landownership Task Force publishes *Who Owns Appalachia?*, a study of the region's land-ownership and land-use patterns. It shows that nearly 90 percent of the land in southern West Virginia is owned by absentee corporations.
- 1984 A. T. Massey Coal Company breaks an industry-wide agreement with the UMWA, announcing that it will no longer negotiate as A. T. Massey but will instead work through each of its subcontractors: Goals, Performance, Independence, Elk Run, United, Progressive, and Marfork. Massey's insistence that its subsidiaries be treated as independent companies undermines a union "panel" convention, whereby laid-off union miners could be placed on panels to receive preferential hiring as jobs become available. In protest, union miners blow up a bridge and stage a selective strike against A. T.

- Massey. After a 15-month strike, the National Labor Relations Board judges Massey's proposition an unfair labor practice.
- 1985 In December, a forest fire burns Pond Knob, threatening the lives of several local fire volunteers, including Jim Michael Wills.
- 1986 The National Academy of Sciences posits a relationship between airborne sulphur and nitrogen and the acidification of fresh water.
- 1986-87 Armco terminates its lease. Peabody leases Montcoal and closes a number of union mines. To spur economic activity in their area and improve access to distant jobs, communities on Coal River petition the state legislature for connector roads to Interstate 77.⁵⁰
- 1987 The community on Shumate's Branch is evacuated and the Peabody Coal Company moves the Clay family cemetery to the Pine View Cemetery at Orgas, 10 miles away.⁵¹
- 1987 The Citizens Coal Summit meets in Lexington, Kentucky. Out of this meeting emerges the Citizens Coal Council, a national coalition of community organizations from coalfields throughout the country with an office in Washington, D.C.
- 1988 UMWA wins panel rights among Massey subsidiaries. In exchange, Massey is allowed to reduce its royalty payments to the 1950 Pension Fund. Rowland Land Company celebrates its centennial.
- 1989 UMWA strikes against Pittston and the Beckley Mines. The Broad Form Deed is outlawed in Kentucky.
- 1990s State-sponsored heritage projects and areas proliferate, including Coal Heritage Area and Trail in southern West Virginia and the Tamarack arts and crafts emporium at the Beckley interchange. Off the tourist track, people sustain public space and celebrate community through reunions, music making, quilting and other crafts, ridgetop and riverside cookouts, and various other forms of recreation.
- 1990 Congress passes amendments to the Clean Air Act intended to cut sulphur emissions in half by the year 2000, and introduces the practice of pollution trading credits. The act heightens the demand in the United States for West Virginia's low-sulphur bituminous coal, which a number of companies plan to extract through mountaintop-removal mining. The West Virginia Education Association goes on a teacher strike, demanding corporate tax-structure reform and tax increases on absentee landowners holding more than 1,000 acres in order to support education in the state.
- 1991 Clear Fork High School is closed and consolidated with Marsh Fork High School. NAPAP publishes a study claiming that acid rain has no significant effects; it is greeted with torrents of scientific criticism. ⁵²

- 1992 UMWA hires the Institute of the History of Technology and Industrial Archaeology (Morgantown) to document Blair Mountain as a historic landmark. Though the project is originally "to include a Battle of Blair Mountain multiple property National Register of Historic Places nomination for significant areas," the plan to make such a nomination is abandoned because the principal landowners do not grant permission.
- 1993 UMWA wages a selective strike against the National Bituminous Coal Association, and picket shacks are built near entrances to coal company properties. Robert Schenkkan's *Kentucky Cycle* is performed at the Kennedy Center in Washington, D.C. Appalachian scholars take exception to its reliance on the outdated premise that a subculture of poverty is responsible for the region's woes, but it wins a Pulitzer prize. The Lucy Braun Association for the Mixed Mesophytic Forest holds its first meeting in Beckley.
- 1994 Under the direction of ecologist Orie Loucks and science writer John Flynn (from Rock Creek), the Lucy Braun Association's Appalachia Forest Action Project (AFAP) begins documenting the decline of forest species. In tandem with this effort, the American Folklife Center's multi-year Coal River Folklife Project documents the role of forest and landscape in the social life and history of the Coal River Valley. In the same year, Georgia-Pacific opens a chip mill at Mount Hope, on the New River. The community of Packsville is largely evacuated and dismantled. Packsville residents establish picket line in protest.
- 1997 The Coal River Mountain Watch and the Blair Mountain Historical Organization form as community-based organizations, with membership in the Citizens Coal Council. The Lucy Braun Association publishes the AFAP report, which concludes that forest mortality rates have increased by three to five times historic rates, with particular impact on hickories and oaks. In the same year more than 2,000 economists publish a statement on climate change, warning that the carbon dioxide released through fossil fuel combustion contributes to global warming.
- 1998 One hundred seventy million tons of coal are produced by 14,854 West Virginia miners. "The union is like a giant that's had its throat slit," comments Tony Rich, of Jarrold's Valley. Protests mount against mountaintop removal. At rallies, demonstrations, and organizational meetings, "Almost Level, West Virginia," a parody of the John Denver song by Secretary of State Ken Hechler, becomes thematic. Flooding on Clear Fork kills two people.
- 1999 The Mountaintop Removal Summit is held at the Appalachian Folklife Center in Pipestem. Reenactors retrace the route taken in the March on Blair Mountain. The American Rivers Council designates Coal River the ninth most endangered river in the United States. In a ruling on a suit filed by citizens and the West Virginia Highlands Conservancy, Federal District Judge Charles Haden declares that filling streams (except those that are intermittent) with mine waste is illegal; he suspends his ruling, pending studies and appeals.

2000 – The American Rivers Council names Coal River the sixth most endangered river in the United States. In Kentucky, a slurry pond collapses on Tug Fork, sending 2 million gallons of coal waste into the Ohio River. The National Academy of Sciences, subsequently appointed to study the issue, holds a town meeting concerning the Brushy Fork Sludge Pond on Coal River, a 500-million-gallon impoundment.

2001 – A. T. Massey subsidiaries file permits to strip Bailey Mountain, Bradley Mountain, and Montcoal Mountain, with proposed discharges and valley-fill impoundments to affect tributaries on Hazy Creek and Drew's Creek. A study ordered by Judge Haden in his 1998 decision is completed by the Office of Surface Mining and the Corps of Engineers but not released. The study points out that a surface mine on the Cabin Creek Plateau could increase peak storm runoff by up to 10 percent. Massive flooding following heavy rains devastates homes in six southern West Virginia counties, causing severe damage to communities at Sycamore, Colcord, Dorothy, and Twilight. More than 300 citizens file suit against 20 coal companies.

Patterns on the Land

During the 1980s and 1990s a struggle over community space and environmental resources centered on the impact of mountaintop removal on nearby communities: cemetery removal; flooding; union busting; undevelopment; and the enclosure of lands heretofore treated as commons for hunting, gathering, fishing, and other communal use. The liberalization of international trade under the North Atlantic Free Trade Agreement (NAFTA) in 1993 and the General Agreement on Trade and Tariffs (GATT) in 1994 broadened the coal industry's access to markets, labor, and resources worldwide.

The effects of mountaintop removal on environmental resources entwined with other national and international concerns, such as air pollution, water quality, and forest decline precipitated by fossil-fuel combustion. Tourism and initiatives such as the Coal Heritage Area and Trail gathered impetus as economic strategies for building a post-coal economy around the state's scenic resources and cultural and historic landmarks, and plans to develop New River Gorge National River as a tourist destination took shape. Meanwhile, however, beyond the tourist areas, the evolving technology of an earthmoving industry carved the mountains into postindustrial landform complexes. On Coal River, a new "Three r's" was coined: "Remove, remove, reclaim."

Concern mounted over the disposition of water in the mountains--not only the effect of acid mine drainage on water quality, but the build-up of water in underground mines and the accumulation of coal-waste water behind massive impoundments. In response, new citizens' associations sprang up, building regional and national coalitions to publicize their concerns and to plan for the future. Cemeteries, protected by federal law, became rallying points as emblems of community life in the protests of the 1990s.

The number of union mines operating on Coal River declined dramatically in the 1980s and 1990s. E. Morgan Massey opened a non-union mine at Elk Run and vowed to

run coal in a "union-free" climate. Armco, a strong supporter of the union, relinquished its leases. Peabody Coal Company, Armco's successor, closed a number of union operations and opened non-union mines. As American companies increasingly became subsidiaries in transnational conglomerates, foreign coal producers competed with American producers often held by the same transnational parent company for high "return on investment," depressing wages and benefits. ⁵⁵

Employment dropped again, spurring another round of outmigration--this time to the south, for work in the furniture factories in Hickory, North Carolina. Meanwhile, mobile contractors, working for transnational corporations, created a market for boarding houses, restaurants, and machinists. In Naoma, Syble Pettry opened the Back Porch Restaurant and Syble's Bed and Barn, both of which closed in the late 1990s.

And the American Folklife Center's Coal River Folklife Project (1992-99) documented traditional uses of the mountains, creating a resource for the community and the wider world for generations to come.

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¹ Karl B. Raitz and Richard Ulack, *Appalachia: A Regional Geography: Land, People, and Development* (Boulder, Colo.: Westview Press, 1984), 41.

² Allan Eckert, West Virginia History Film Project, West Virginia: A History.

³ Charles E. Krebs, *West Virginia Geological Survey: Raleigh County* (Wheeling, W. Va.: West Virginia Geological Survey, 1916), 17-18.

⁴ William David Bone, *The History of the Headwaters of Big Coal River in Southern West Virginia*, 2 vols. (Elkview, W.Va.: W.D. Bone, 1994).

⁵ For an explanation of the term "newgrounds," see "We didn't use fertilizer in newgrounds" [audio recording], http://memory.loc.gov/cgi-bin/query/r?ammem/cmns:@field(DOCID+@lit(102006)).

⁶ Principal sources: Wilma A. Dunaway, "Settlers, Speculators, and Squatters: Competition for Appalachian Land Resources, 1790-1860," in *The First American Frontier: Transition to Capitalism in Southern Appalachia, 1700-1860* (Chapel Hill: University of North Carolina Press, 1996), 51-86; Montgomery County (Virginia) Deed Book; Barbara Rasmussen, *Absentee Landowning and Exploitation in West Virginia, 1760-1920* (Lexington: University Press of Kentucky, 1994); Paul Salstrom, *Appalachia's Path to Dependency: Rethinking a Region's Economic History, 1730-1940* (Lexington: University Press of Kentucky, 1994); Edgar B. Sims, *Sims Index to Land Grants in West Virginia* ([Charleston, W. Va.]: West Virginia Auditor's Office, 1952); Jim Wood, *Raleigh County, West Virginia* (Beckley, W. Va.: Raleigh County Historical Society, 1994).

⁷ Wood, 5.

⁸ Sims.

⁹ Wood.

¹⁰ Wood, 30.

¹¹ Principal sources: Bone; Salstrom; Wood; Joseph DiBello, Donald Briggs, Michael Creasey, and Alisa McCann, *A Coal Mining Heritage Study: Southern West Virginia* (Philadelphia: National Park Service, 1993); Ronald D. Eller, *Miners, Millhands, and Mountaineers: Industrialization of the Appalachian South, 1880-1930* (Knoxville: University of Tennessee Press, 1982); E. Estyn Evans, "The Scotch-Irish: Their Cultural Adaptations and Heritage in the American Old West," in *Essays in Scotch-Irish History*, ed. E. R. R. Green, 69-86 (London: Routledge & Kegan Paul 1969); John Solomon Otto, "The Decline of Forest Farming in Southern Appalachia," *Journal of Forest History* 27 (1983): 18-27.

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<sup>12</sup> Bone, 1: 4A-3-4.
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¹³ Bone, 1: 4A-3.

¹⁴ Bone, 1: 4A-3-4.

¹⁵ Bone, 1: 4B-14.

¹⁶ Bone, 1: 5A-30.

¹⁷ Otto.

¹⁸ Principal sources: DiBello et al.; Salstrom; Allen W. Batteau, *The Invention of Appalachia* (Tucson: University of Arizona Press, 1990): Herbert Reid, "Global Adjustments, Throwaway Regions, Appalachian Studies: Resituating The Kentucky Cycle on the Postmodern Frontier," Journal of Appalachian Studies 2 (1996): 235-62; Philip Shabecoff, "After Decades of Deception, a Time to Act," in Appalachian Tragedy: Air Pollution and Tree Death in the Eastern Forests of North America, ed. Harvard Ayers, Jenny Hager, and Charles E. Little, 184-97 (San Francisco: Sierra Club Books, 1998); Henry D. Shapiro, Appalachia on Our Mind: The Southern Mountains and Mountaineers in the American Consciousness, 1870-1920 (Chapel Hill: University of North Carolina Press, 1978).

¹⁹ Bone, 1: 21A-3.

²⁰ Shabecoff, 187.

²¹ Wood, 223.

²² Bone, 1: 6-12.

²³ Salstrom, 21.

²⁴ Batteau; Reid; Kathleen Stewart, A Space on the Side of the Road: Cultural Poetics in an Other America (Princeton: Princeton University Press, 1996).

²⁵ Shapiro; David E. Whisnant, *Modernizing the Mountaineer: People, Power, and Planning in Appalachia*,

rev. ed. (Knoxville: University of Tennessee Press, 1994).

²⁶ Principal sources: Eller; Rasmussen; David Alan Corbin, Life, Work, and Rebellion in the Coal Fields: The Southern West Virginia Miners, 1880-1922 (Urbana: University of Illinois Press, 1981); Sam MacMullan and Betty Rowland, Rowland Land Company: The First Hundred Years 1888-1988 (Charleston and Pittsburgh: Rowland Land Company, 1988); Lon Savage, Thunder in the Mountains: The West Virginia Mine War, 1920-21 (Pittsburgh: University of Pittsburgh Press, 1990); John Alexander Williams, West Virginia: A History, rev. ed. (New York: W.W. Norton, 1984).

²⁷ Bone, 1: 21A-5.

²⁸ Bone, 2: 22B-3.

²⁹ Corbin, 219.

³⁰ Bone, 2: 23-1.

³¹ Williams, 107.

³² DiBello et al.

³³ Bone, 1: 18B-7-8.

³⁴ Richard Couto, "The Memory of Miners and the Conscience of Capital: Coal Miners' Strikes as Free Spaces," in Fighting Back in Appalachia: Traditions of Resistance and Change, ed. Stephen L. Fisher, 165-94 (Philadelphia: Temple University Press, 1993), 167.

³⁵ Bone, 2: 24-3.

³⁶ Bone, 2: 24-13-16.

³⁷ Bone, 2: 24-18.

³⁸ Shabecoff, 187.

³⁹ Bone, 2: 24-13.

⁴⁰ Bone, 2: 26B-2-3.

⁴¹ Bone.

⁴² MacMullan and Rowland.

⁴³ Hugh Perry, They'll Cut Off Your Project: A Mingo County Chronicle (New York: Praeger Publishers,

⁴⁴ Reid.

⁴⁵ Helen Mathews Lewis, Linda Johnson, and Donald Askins, eds., Colonialism in Modern America: The Appalachian Case (Boone, N.C.: Appalachian Consortium Press, 1978); Jack Weller, Yesterday's People (Lexington: University Press of Kentucky, 1965).

46 Paul J. Kaufman, "The Horse Creek Story: A Practical Resolution of Conflicting Interests," West

Virginia Public Interest Law Report 1 (1978), no. 4.

⁴⁷ Couto.

⁴⁸ DiBello et al.

DiBeno et al.

49 Couto; Whisnant.
50 Bone, 2: 27A-2-3.
51 Teresa Swartz Roberts, "Last Opponent Gives Up Fight Over Cemetery's Removal," *Beckley Register* Herald, December 3, 1987.

Shabecoff, 191.

Reid.

Herald, "Mountaintop Removal Worsens Flooding, Study Finds," Charleston Gazette, July 11, 2001.

Couto.