A Taste of Sowbelly and Saleratus Biscuit: Gifford Pinchot’s Arkansas Adventure

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Gifford Pinchot has long been considered the “father” of American forestry. In 1898, Pinchot became chief of the Division of Forestry (a predecessor to the modern-day Forest Service) and helped build the fledgling agency into the leading federal mechanism for forest conservation. In one capacity or another, Pinchot’s support and guidance helped Presidents Grover Cleveland, William McKinley, and Theodore Roosevelt (a close friend) establish and expand what would become the National Forest system, including the Arkansas (now Ouachita) and Ozark National Forests, created in 1907 and 1908, respectively. Pinchot’s many protégés staffed a growing number of forestry programs, and he sent friends and contemporaries like Samuel J. Record and Frederick E. “Fritz” Omlsted to help implement scientific forestry on public and private lands. Bankrolled by the Pinchot family, the Yale Forestry School emerged as the premier forestry institute in the United States at the beginning of the twentieth century. Early Yale faculty members like Herman Haupt Chapman and R. C. Bryant helped to prod portions of the timber industry towards sustainability and, hence, permanence. But in 1891, Pinchot was just a wide-eyed novice exploring many of the forests of his native land for the first time, and his journeys would bring him to Arkansas.

Forvent conservationists, the Pinchot family provided a large endowment to establish the school in 1900; James G. Lewis, “The Pinchot Family and the Battle to Establish American Forestry,” *Pennsylvania History* 66 (Spring 1999): 143-165.

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Pinchot had been born into an influential Connecticut family just after the Civil War. Because of his family’s affluence, Pinchot could attend Yale University and then pursue, with his father’s encouragement and blessing, a career in a profession so obscure in the United States that he had to travel to Europe for his technical education. When he returned from L’Ecole Nationale Forestière in Nancy, France, as the first American formally trained in forestry, Pinchot faced a predicament. Since most citizens

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Outside of a few lectures or abbreviated courses, “true” forestry (as opposed to botany or horticulture) was not offered collegiately in the United States until the late 1890s, when the first formal programs appeared at Biltmore, Cornell, and Yale; Herbert A. Smith, “Forest Education before 1898,” *Journal of Forestry* 32 (October 1934): 684-689.
in 1890 viewed the virgin forests of North America either as a limitless resource or an obstacle that needed to be cleared for “higher” uses such as agriculture, they had little desire to manage their timber for the future and even less to hire some European-trained upstart to tell them how to do it.

Fortunately for Pinchot, his family’s wealth allowed him to further his career by traveling with Dr. Bernhard Eduard Fernow, a Prussian-born and trained forester who was the chief of the Division of Forestry in the U.S. Department of Agriculture. In January 1891, the brusque Dr. Fernow invited the young forester on an excursion to the bottomlands of eastern Arkansas to observe the timberlands and lumbering operations of the South. Having just completed a report on the Pennsylvania white pine lands of the Phelps, Dodge Company, Pinchot accepted the non-paying trip: “Dr. Fernow had been asked to examine a body of hardwood timber in the overflow lands of the Mississippi in eastern Arkansas. Very kindly he invited me to go along. Here was an open door to learning a little more about the United States.” Although brief, this trip is interesting for what it reveals about Pinchot at the beginning of his career in terms of both his personal and professional development.

Before their widespread commercial and agricultural exploitation, the hardwood-dominated forests of the lower Mississippi River Valley had impressed many observers, including the writer Thomas Bangs Thorpe who, in 1840, romantically penned:

Gigantic trees obstructed my path, and as I cast my eye upward, my head grew dizzy with the height; here, too, might be seen dead trunks shorn of their mighty limbs, and whitening in the blasts of years, that appeared, dead as they were, as mighty as the pillars of Hercules; and I could not help comparing them to those lone columns of fallen temples, that occasionally protrude themselves above the ruins of Choep and Thebes.

With the exception of areas along the railways and a few of the major rivers, most of these hardwood forests had not experienced any significant

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McGeary, Gifford Pinchot, 24-25. Fernow is also sometimes dubbed the father of forestry in America. He encouraged Pinchot to study other professions such as horticulture to ensure that he would have marketable skills to fall back on.

Gifford Pinchot, Breaking New Ground (New York: Harcourt, Brace and Co., 1947), 37. Rather than alluding just to the “Sink Lands” along the St. Francis River, Pinchot referred to the entire region of northeastern Arkansas prone to flooding by the Mississippi River and its tributaries as the “overflow” lands.


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clearing by 1890. The big yellow poplars and black walnuts of Crowley’s Ridge had largely been cut by the time of Pinchot’s visit, but eastern Arkansas still contained extensive tracts of virgin timber dominated by oak, hickory, gum, baldcypress, elm, ash, and numerous other species.
of these trees reached truly imposing size, if Frederick Gerstaeker’s description can be believed: “the trees grow to a colossal grandeur—I have seen some measuring seven, eight, and even nine feet in diameter.”

But Fernow and Pinchot did not travel this distance just to enjoy the spectacle of Arkansas timber. As the nineteenth century drew to a close, there was growing interest in the developing lumber industry of the largely untapped forests of the South. Vast stands of virgin oak were still to be found there, and oaks were particularly vital to the American economy during this period. Domestic and European demand for barrels, carriages, and ships, for instance, had decimated white oaks in the eastern United States. But in Arkansas and other parts of the South, most oaks had only been harvested for local use, primarily for staves, production of tannin for leather manufacture, fuelwood, and railroad ties. Given his work on the mechanical properties of wood during this period, Fernow might have come to Arkansas to investigate the suitability of white oak grown in the South for use in carriages. As early as the 1860s, the chairman of the Arkansas Agricultural Bureau touted the value of white oak for “mechanical purposes,” such as wagons and plows. Apparently, though, some uncertainty remained about the ability of white oak from southern timberlands to serve in this demanding application.

Fernow, Pinchot, and the forests of Arkansas—The only two detailed sources for Pinchot’s Arkansas trip are his diary and an autobiography, both published many years later. Neither is an ideal source—his autobiography is a retrospective account written over fifty years later, and, unlike many of his contemporaries, Pinchot was neither a diligent nor copious diary keeper. His published diaries contain gaps covering days, months, and even years, and rarely did any of his daily musings for the two-week period encompassing his Arkansas adventure exceed more than a couple of lines.

Pinchot left New York City by train and, on January 18, 1891, arrived in Memphis, Tennessee, where he was to rendezvous with Fernow. In the early 1890s, Memphis was not a particularly impressive urban center. Periodically wracked by disease, it could hardly have seemed destined to become a key hub in the burgeoning hardwood tim-


4Caleb Langtree, “Arkansas—Its Advantages to Immigrants,” *De Bow’s Review* 3 (January 1867): 68 (quotation); William G. Robbins, “Federal Forestry Cooperation: The Fernow-Pinchot Years,” *Journal of Forest History* 28 (October 1984): 164-173; Rodgers, Fernow, 189. “White oak” can refer to the true white oak (*Quercus alba*) or any of a number of related species, including post oak (*Quercus stellata*), bur oak (*Quercus macrocarpa*), overcup oak (*Quercus lyrata*), chinkapin oak (*Quercus muehlenbergii*), and swamp chestnut (cow) oak (*Quercus michauxii*). The structural and mechanical properties of species within the white oak subgroup are virtually impossible to distinguish, so it has been common practice to lump them together when wood products are discussed; J. Frank Keeley, *Arkansas and Her Resources: Facts and Figures from Every County in Arkansas* (Little Rock: Little Rock Publishing, 1915), 13; Panshin and de Zeeuw, *Textbook of Wood Technology*, 1: 569-572.

5Harold K. Steen, ed., *The Conservation Diaries of Gifford Pinchot*, (Durham, NC: Forest History Society, 2001), 11, 64-65; Pinchot, *Breaking New Ground*. Presumably, the differences between his diaries and autobiography are explained by the fact that the latter was written over fifty years after his Arkansas trip and was intended to tell the public of the growing pains of the new profession of forestry, including those of its early participants, rather than report the details of any given juncture. Regrettably, I could find no contemporary references to Fernow or Pinchot in local newspapers published during their visit.
my first contact with an outlaw community, my first look at the hardwoods of the Mississippi Valley, and my first taste of sow-belly and saleratus biscuit. The emblem of this civilization was the frying pan.  

Pinchot did not elaborate on his “contact with an outlaw community,” although traveling the wilds of eastern Arkansas during the late nineteenth century could prove hazardous. The remote and impenetrable swamps and woods presented a foreboding natural environment and, when coupled with a sparse population and lax law enforcement, made the area welcoming to criminals. Undoubtedly, this seediness disturbed the well-to-do easterner, whose life to date had been considerably more sheltered than those of his Arkansas contemporaries. Yet Pinchot did not flinch from what was set before him. He particularly relished the gastronomic opportunities, claiming to have eaten, with some gusto, opossum (“very fat & good”) and sweet potato pie, as well as the aforementioned sow-belly and saleratus biscuit. Although these were considered conventional fare (or even treated as delicacies) by natives, Pinchot’s willingness to partake in local cuisines exemplified his flair for living “off the land,” as it were.

Pinchot settled into his lodgings in Jonesboro and promptly met with at least two local citizens who had apparently awaited his arrival—men he referred to as “Mr. Krewson” and “Colonel Markle.” Krewson appears to have been Amos L. Krewson, a well-known Jonesboro resident, realtor, and investor in the Jonesboro, Lake City and Eastern Railroad. Krewson had helped other local sawmill operators find properties for their businesses, and seemed keenly interested in promoting the growth of the Jonesboro area by developing timber resources. For example, Krewson had negotiated the sale of some city lots to Charles A. Stuck, a prominent lumberman who opened a planing mill in Jonesboro in early 1889. 

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15Ibid., 62; Pinchot, Breaking New Ground, 37. Sow-belly consists of salted pork taken from the belly of a hog, while saleratus biscuit is a flour, sour milk, salt, sugar, baking soda, and lard-laden concoction.
16Other accounts of trouble in the Arkansas delta during the early 1890s can be found in Michael B. Dougan and Ken Hubbell, “A Late Frontier,” in The Arkansas Delta: A Landscape of Change, ed. Tom Basket, Jr. (Helena: Delta Cultural Center, 1990), 38-39.
17Ibid., 64; Pinchot, Breaking New Ground, 37. Sow-belly consists of salted pork taken from the belly of a hog, while saleratus biscuit is a flour, sour milk, salt, sugar, baking soda, and lard-laden concoction.
18Ibid., 64; Pinchot, Breaking New Ground, 37. Sow-belly consists of salted pork taken from the belly of a hog, while saleratus biscuit is a flour, sour milk, salt, sugar, baking soda, and lard-laden concoction.
19Ibid., 64; Pinchot, Breaking New Ground, 37. Sow-belly consists of salted pork taken from the belly of a hog, while saleratus biscuit is a flour, sour milk, salt, sugar, baking soda, and lard-laden concoction.
and native of St. Joseph, Missouri, spent a considerable amount of time in northeastern Arkansas from the mid 1880s until his death in 1895. In addition to real estate, Markle had financial interests in some Arkansas sawmills.21

It is significant that Pinchot and Fernow met with those associated with land speculation and the lumbering business. Most counties in northeast Arkansas, including Craighead and Woodruff Counties where Pinchot spent most of his time on this trip, had stave mills in operation by that time. R. Elsworth Call decreed their wasteful use of white oak:

"It is felled with a wanton hand, a comparatively small portion of the tree is utilized—the bark not [at] all—the balance allowed to decay."22

But Pinchot and Fernow's associating with lumbermen was not entirely out of character. Both understood conservationism in the late nineteenth century as promoting the rational and sustainable use of forests, and Pinchot always considered his view of natural resources as a pragmatic, politically savvy, and utilitarian response to the needs of the day. Throughout his life, and especially during his formative years, Pinchot did not look upon an old-growth forest and see the same type of sanctity as his preservationist counterparts did. Rather he saw an opportunity to develop present and future value from the timber at hand.23 With this perspective, and given his confident and headstrong manner, it is not surprising that Pinchot frequently clashed with other pioneers in the American conservation movement. For instance, he occasionally feuded with Charles S. Sargent, a professor of arboriculture at Harvard University, director of the Arnold Arboretum, and publisher of the short-lived but influential horticultural magazine Garden and Forest. Professor Sargent, recognized by Pinchot as a key force behind early conservation efforts, preferred preservation of public timberlands to active management. Pinchot referred to Sargent and other like-minded individuals as "denudatics," viewing them as obstacles to the practical utilization of government lands.24 Pinchot, while befriending prominent environmentalists like John Muir, almost inevitably split with them in debates over

the use of the public domain, though he shared their love of the land and raised concerns about the future of America's forests.25

An incident on Pinchot's Arkansas trip further suggested these differences. On January 21, Pinchot and company rounded up horses and a guide for a ride. Heavy rain and thick mud hobbed the party, forcing them to walk their horses (fortunately Pinchot had purchased hip boots in Jonesboro). On this side trip, Pinchot shook an opossum off of a vine and killed it with a stick, apparently to see if it would resist the effort (it did, showing fight rather than "playing 'possum").26 Pinchot's termination of the opossum stands in stark contrast to the abhorrence many others in the early conservation movement felt toward the wanton killing of animals. Muir even once talked Pinchot out of dispatching a tarantula while on a camping trip to the Grand Canyon.27

Fernow arrived in Jonesboro early in the morning of January 22, prompting an after-breakfast visit with Colonel Markle at an unidentified hotel, followed by a fifteen to twenty mile ride through the forest. Pinchot reported with obvious pleasure that he was not stiff following this ride. Clearly, he did not wish to be regarded as some eastern dandy out on a holiday. On one of their sojourns into the Arkansas countryside, a local outfitter apparently decided to have some fun at the expense of Pinchot and his party by making dire warnings about the dangers of the "wild" horses they were riding. Pinchot, a skilled horseman, brushed off the notion and reported with evident satisfaction that in the end it was the guide who fell off his horse into the swamp.28

On January 23, Pinchot, Fernow, Krewson, and Markle traveled to Markle's property near Meredith, a rail stop and post office along the St. Louis Southwestern (Cotton Belt) Railway in eastern Woodruff County. Given the localities Pinchot mentioned, the Cotton Belt seems to have been he and his associates' major avenue of travel in Arkansas.29 After visiting Markle's land, they inspected a sawmill, and Fernow and Pinchot

22Call, "Notes on the Native Forest Trees," 83.
26Stein, Conservation Diaries, 64.
27Pinchot, Breaking New Ground, 103.
28Stein, Conservation Diaries, 64.
29The St. Louis Southwestern traversed Arkansas from Piggott in Clay County through Paragould and Jonesboro toward Brinkley, then Stuttgart and Camden before exiting at the southwest corner of the state; Cram's Township and Rail Road Map of Arkansas (Chicago: George Franklin Cram, 1895), http://hdl.loc.gov/loc.gmd/g4001p.r001840, (accessed May 25, 2004).
took another ride. They admired the timber but also clearly recognized the rich agricultural potential of this area:

For miles on end Fernow and I rode our horses through the great flatwoods of superb Oak timber—miles of the richest alluvial soil, where there wasn’t a stone to throw at a dog, and the cotton in the little clearings grew higher than I could reach from the saddle. Everything was new and strange. Every fence in the scanty settlements was plastered with signs of Ague Buster, and the people looked as if they needed it.30

“Ague Buster” was, no doubt, a professed remedy for malaria.31 In an era before vaccines, pesticides, and a clear understanding of microbes, the unhealthy nature of this area was typical of rural America, especially the southern bottomlands. Mosquito-borne malaria haunted the lowlands of Arkansas throughout the 1800s.32 Decades earlier, for instance, Frederick Gerstaeccker and many of his companions had suffered repeated bouts of the disease, including one episode that nearly killed Gerstaeccker.33

But for all their potential hazards, the forested bottomlands of eastern Arkansas proved instructive to Pinchot: “The Arkansas lumberjacks were tough, but very willing to talk. I got new light on logging and sawing, learned some of the mysteries of whisky staves and quartered Oak, [and] collected a fine specimen of Hackberry (I have it yet).”34 It is important to remember that, in the 1890s, so little systematic study of forests, forestry, or even lumbering had been conducted that Pinchot and his American contemporaries had no text from which to learn. Hence, even simple observations of logging practices or saw-milling were very informative to the young forester. Pinchot doubtlessly used these experiences in Arkansas, as well as his observations of the consequences of nineteenth-century lumbering, in developing the first recommendations for practical forestry in places like the Bilt-

31Local newspapers were replete with advertisements for similarly dubious products, such as “Mansfield’s Magic Arnica Liniment” for curing “Rheumatism, Sore Throat, Pain in the Back, [and] Frosted Feet” and “Dr. C.P. Duncan’s Liniment For Man, Horse and Cow,” Croghan County Sun (Jonesboro), January 30, 1891.
33Gerstaeccker, Wild Sports, 154-171.
34Pinchot, Breaking New Ground, 38.

more Estate in North Carolina and the Adirondack Mountains of New York.

But Pinchot mixed some pleasure with business in his Arkansas inspections. He mentioned in his memoir playing a “low trick” on his family while in Arkansas:

Chained in the yard of the house where we stayed in Jonesboro was a young bear by the name of Betsy. Betsy and I struck up a vivid affection, stimulated, if not created, by sundry bottles of molasses and water. It was love at first sight.

So I wrote home about the nice people I had met, and in particular and in detail about how much I liked Betsy. Then, when I judged the family were sufficiently keyed up over the prospect of an Arkansas flatwoods daughter-in-law, I sent them a photograph of Betsy and me very close together, with the molasses bottle in full flood. It achieved an instant and unconditional success.35

A point apparently lost on Pinchot was that Arkansas, once known as the “Bear State,” had relatively few bears by 1891. A cub tied to a post as a curiosity was the rarest remnant of the wildlife that had so impressed Gerstaeccker, Thorpe, and other writers only a few decades before, a clumsy tribute to a species that helped shape the image of the territory during its formative stages.36

Fernow did not seem to enjoy this trip as much as Pinchot. Pinchot’s diary entry for January 26 mentioned that a carriage driver charged Fernow $9.00 for a ride (presumably between Paragould and Harrisburg), which Pinchot termed “wicked.” Soon thereafter, Pinchot accompanied a lumbago-stricken Fernow to Memphis. By January 28, Pinchot and Krewson had returned to Jonesboro without him. At this point, Pinchot examined a 140-acre tract of land on the east side of Jonesboro bordering the junction of the St. Louis Southwestern and Kansas City, Fort Scott, and Memphis railroads. Krewson was eagerly seeking investors to help purchase this property, for which he was willing to pay 6 percent interest and the principal of one-third of the $5,000 purchase price before taking any money for himself. Pinchot viewed this transaction favorably, believing the location, Jonesboro’s development (“growing very fast,” he remarked), and Fernow’s impending

35Ibid.
positive report on the timber would attract an "English syndicate" apparently interested in locating a mill in the area. This "English syndicate" may have been associated with the shipbuilding industry, which consumed large quantities of oak timber. A booklet published by the St. Louis, Iron Mountain & Southern Railroad the following year promoted the value of oak from Arkansas in boat construction: "Several varieties of oak abound both on the rich alluvions and on the uplands. Some of these species attain large proportions, and are now extensively exported to England for that purpose, being pronounced the finest timber ever put on the Liverpool docks." Pinchot thought enough of the financial potential of Krewson's venture to write his father (and benefactor) about the investment.

There is no evidence that Pinchot, his father, or Fernow ever invested in Arkansas real estate. Some may find the prospect of Gifford Pinchot participating in land speculation and development remarkable, given his later advocacy of the withdrawal of millions of acres of public domain to prevent its exploitation by others with similar notions. However, Pinchot never pushed for the elimination of all commercial activity on public lands but rather that it be conducted in a manner that supported both local communities and national interests. Years later, he made this point abundantly clear when addressing a gathering of the Arkansas Club of Washington (D.C.), seeking to soothe some of the hard feelings many Arkansans harbored toward the Forest Service following the formation of the Arkansas and Ozark National Forests. Pinchot declared:

For a Yankee, I am the best Southerner that ever lived... having fished in the South’s streams, climbed its mountains, and enjoyed the hospitality of its people... Everywhere we have found that the Southern people appreciate and support the fundamental principles of the forest service, which is to put every piece of land to that use in which it will best serve the interests of the people of that country, whether that be a forest use, an agricultural use, or any other use."

Pinchot's trip to Arkansas concluded rather unexpectedly. After declaring the coffee available in the Jonesboro area "awful" on January 29, Pinchot continued the timber inspections for the still-ailing Fernow in the company of a man he identified as Will Beasley, possibly "Uncle Billy" Beasley, a logger and long-time resident of Marked Tree. While journeying through the countryside, Pinchot collected samples of hickory wood and a baldcypress "knee." To help cover his travel expenses, he also gathered wood and other botanical materials to sell to interested academics. By January 30, Pinchot (with Colonel Markle's help) took a train from Jonesboro to Pine Bluff on Fernow's pass. The next day, Pinchot met with Fernow and a "Mr. Leak" in Arkansas City and then crossed the Mississippi River en route to Mobile, Alabama. This trip eventually took Pinchot to North Carolina and the Biltmore Estate of George W. Vanderbilt, the wealthy son of a highly influential eastern family who acted as a key sponsor in the early phases of Pinchot's forestry career.

That Pinchot eventually went to work at Biltmore can, in part, be attributed to his Arkansas sojourn. Prior to this adventure, Fernow and Pinchot had minor disagreements over Pinchot's career development. Fernow's abrasive manner probably chafed the young Pinchot even before their arrival in northeastern Arkansas, and Pinchot's journal indicates that it clearly did so during this journey. He wrote in Mobile: "Getting more weary of Fernow's endless detractions... [He] has been at it ever since we met in Arkansas." Pinchot seemed especially troubled by an outburst near the end of the trip directed at Dr. Charles T. Mohr, a German émigré chemist and botanist who after retiring from chemical manufacturing had been appointed agent of the Division of Forestry. It was in this capacity that he hosted Fernow and Pinchot in Mobile in early February 1891. Pinchot admired the elderly Mohr and recalled:


"Pinchot, Breaking New Ground, 38.

"Steen, Conservation Diaries, 65.

When Fernow directed one of his tirades against Dr. Mohr in the very room the kindly white-haired elder had given us, I was so disgusted that our association very nearly ended then and there. That incident settled my opinion of Fernow as a man, and colored all my future contacts with him.  

Coupled with advice from some of his mentors, this episode helped convince the young Pinchot to back out of a tentative arrangement to work under Fernow at the Division of Forestry and take a job at Baltimore. 

There is no way to measure what other impact this two-week journey may have had on Pinchot’s career in forestry and conservation. A recent definitive work on Pinchot’s life and philosophy devotes only a single, passing reference to the trip. Pinchot’s published works immediately following this trip likewise make no specific mention of the lessons he may have learned in Arkansas. But, if nothing else, Gifford Pinchot’s Arkansas adventure furthered his familiarity with the forests and people of America in the late nineteenth century. He remembered his 1891 tour of the South as “an eye opener of a trip, and it did the beginner much good. I had seen new kinds of trees. I had touched new kinds of people, and I had gained a new conception of what the United States was like. My real preparation had begun.”  

Within seven years of the trip, Pinchot was declaring: 

Under the present system the lumberman practically ignores the fact that the forest land is productive capital. He speculates in the timber with little regard to the real productive capacity of the land . . . Ordinary lumbering pays a high interest now, but it leaves the forest in a very bad condition.  

Of course, lumbering also brought disquieting and not necessarily welcome changes to local populations. The clearing of the virgin forests, the intrusion of the railroads, changing population dynamics and social life following the opening and closing of mills, and the prospect of reforesting farmland would affect countless Arkansas communi- 

47Pinchot, Breaking New Ground, 39.  
49By the early 1930s, most Arkansas forests had been cleared, burned, farmed, eroded, and otherwise abused, and the state’s timber industry was in dire straits. Fortunately for Arkansas and the rest of the nation, Pinchot’s hard work with the Forest Service and Yale University helped to shape forestry into a full-fledged profession, and the implementation of sustainable forest management has helped to restore tree cover to millions of acres in the state and support a multi-billion dollar industry.  