HISTORY OF THE FORESTRY MOVEMENT IN TEXAS, 1900-1950

A Thesis

Presented to

the Faculty of the Department of History

University of Houston

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

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by

Marilyn Dubberly Rhinehart

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ABSTRACT

Early travelers through eastern Texas extolled the beauty and economic possibilities of the area's magnificent virgin forest, then virtually untouched by human hands. As widespread settlement began, however, indiscriminate cutting and annual burnings by settlers and destructive logging methods of the lumber industry plagued forested lands. By the turn of the century, lands once covered by stately pines attracted attention, not for their beauty, but for the ugliness of blackened tree stumps, uprooted seedlings, and the slash and debris of logging operations covering them. Subsequently, a few concerned citizens stepped forward to protest the depletion of the state's valuable East Texas timber belt. Led by W. Goodrich Jones, this vocal group of conservationists quickly began the presentation of their case before the public. Through agitation for an Arbor Day, the convening of conservation congresses, and letter writing campaigns to the news media, they attempted to educate citizens to the need for forest protection and replenishment. By 1914 these activities apparently had achieved some success, and the time seemed ripe for the presentation of a bill before the legislature creating a Department of Forestry.

To lobby for the bill and forestry in general, concerned Texans

formed the Texas Forestry Association. Largely because of their efforts and the support of the state's large newspapers, the bill passed, but only by a slim margin. This afforded an early indication that serious problems would beset the department. Within a short time, uninformed legislators, concerned with trimming the state's budget, cut the forestry department's appropriations. Only after Jones and his colleagues brought strong pressure to bear on the legislative finance committee did the legislature reinstate forestry in the budget. For the next ten years the agency continued to suffer from an acute shortage of funds. This financial deficiency forced foresters to center fire protection activities around an educational campaign and prevented the control or suppression of any but the smallest fires. Despite this handicap, the department optimistically proceeded with its work and in so doing encouraged the public and their representatives to take note of the forestry movement and to expend more funds for it.

Early in the 1920's, State Forester Eric O. Siecke worked in conjunction with the Texas Forestry Association to attempt passage of a more comprehensive forestry bill. Because of the lumber industry's opposition to a proposed severance tax, none of the forestry measures which the organization placed before the legislature in 1921 passed. Conservationists, however, did not dishearten, and two years later achieved significant success. Equipped with funds for two state forests,

two new fire regulation laws, a nd increased expenditures for fire protection afforded by the Thirty-eighth Legislature, the department could more actively pursue an efficient forestry program.

Agitation for further forestry work did not end with these achievements. Forest protection still suffered from insufficient appropriations and private cooperation with the Texas Forest Service lagged. The development of protection units in 1927 to facilitate joint forest protection and management by the state and private parties, as provided for under the federal Clarke-McNary Act, gradually ameliorated this situation. Construction and fire fighting activities by participants in the Civilian Conservation Corps also advanced forestry ten years in the state. In addition, the creation of national and community forests in the late 1930's and early 1940's contributed to the success of the forestry movement.

The culmination of forty years of forestry activities came with the inception of a Tree Farm System in 1943 and further perfection of the fire fighting system through the use of aerial patrol and mechanized equipment throughout the 1940's. Both accomplishments represented major goals which conservationists at the turn of the century proposed in hopes of effecting the efficient protection and replenishment of Texas's forest wealth. As a half-century of forest conservation activities closed, the Texas Forest Service, operating as the spearhead of the forestry movement, looked ahead to the prospect of further advancement of practical forestry for years to come.

A comprehensive study of the forestry movement in Texas would not have been complete without the examination of several significant primary sources. The lumber trade journal, the Gulf Coast Lumberman, chronicled forestry activities in bi-monthly reports and presented a good picture of the lumber industry's response to forest conservation. The papers of W. Goodrich Jones, at Stephen F. Austin University, and John Henry Kirby, at the University of Houston, provided insight into the attitudes of conservationists and lumbermen and helped make the study more personal. Publications of the Texas Forest Service from its inception in 1915 to 1950 offered invaluable assistance in developing the story of forestry's progress and failures in the period.

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CHAPTER I

THE WOODED AISLES OPEN TO THE SUNLIGHT

Man's awe of nature has traditionally prompted efforts to discover its secrets and to utilize its components for human needs. This is particularly true of America's forests, which to the early settlers seemed inexhaustible and obstructive to the progress of civilization. As a result, forests throughout the nation early faced the pioneer's axe and eventually the exploitative logging of the lumber industry. As man began to recognize the threat which the exhaustion of this resource offered to his welfare and to that of generations to follow, he gradually moved toward a concerted conservation movement. Within the framework of a nationwide crusade for the implementation of practical forestry methods, individual states developed their own forestry agencies to function in cooperation with the federal government and replenish the nation's timber resources.

A close examination of the forestry movement in Texas reveals that the state's timber resources faced similar threats from both the early pioneers and later the lumber industry. Fortunately, a few concerned citizens realized the potential danger in the depletion of the forests and directed the state toward their protection. Although often confronted by overwhelming obstacles, the movement persevered and, as in other states,

approached the goal of restoring the landscape to the original verdure which so impressed early visitors.

A land company official inviting settlers to Texas described the state's forest wealth as "a little tract of primeval forest not yet culled out, about the size of the State of New York."[1] Although written less from fact than hope for economic gain, the account provided an adequate representation of the Texas timber belt centered in the state's eastern regions. Other comments on this East Texas timber belt by early visitors

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[1]William W. Lang, A Paper on the Resources and Capabilities of Texas (New York, 1881), 6; Texas' timber wealth centers in East Texas, including eleven and one-half million acres of forest land extending east of a line from Paris to Palestine, then south along the Trinity River to the western edge of Walker, Montgomery, and Harris counties to the Gulf of Mexico. Three pine species in this section form major sources for the lumber industry. The longleaf belt in the southeast is the center of lumbering and turpentining. In the northeast, shortleaf pine abounds while dense loblolly pine forests extend between the longleaf region and the coastal prairie to the south and southwest of the shortleaf region. For a discussion of the East Texas timber belt see Lenthall Wyman and W. Goodrich Jones, Forest Fire Prevention in East Texas, Agricultural and Mechanical College of Texas, Bulletin 9 (College Station, 1919), 2-5; Dorothy Edmiston, "Tragedy of Trees," The Texas Monthly, V (June, 1930), 577; J. H. Foster, H. B. Krausz and A. H. Leidigh, General Survey of the Texas Woodlands including a Study of the Commercial Possibilities of Mesquite, Agricultural and Mechanical College of Texas, Bulletin 3 (College Station, 1917), 12; William L. Bray, Forest Resources of Texas, United States Department of Agriculture, Bulletin 47 (Washington, 1904), 11-12, 19; Charles T. Mohr, The Timber Pines of the Southern United States, United States Department of Agriculture, Bulletin 13 (Washington, 1896), 97; for a county-by-county survey of Texas timber resources see J. H. Foster, H. B. Krausz, George W. Johnson, Forest Resources of Eastern Texas, Agricultural and Mechanical College of Texas, Bulletin 5 (Austin, 1917). See Appendix, p. 109.

provided good accounts of the size, location, and species of timber grown in the region. Frederick Law Olmstead, describing his excursion through the area, noted that the "immense trees, of a great variety of kinds, interlaced their branches and ruled with their own rank growth."[2] Another traveler related her impression of "the peculiar beauty of a Texas landscape" composed of alternating woodland and prairie.[3]

With an eye to economic development, several land companies and interested parties expressed amazement at the potential of Texas woodlands. A noted French writer, Frédéric Gaillardet, wrote in 1839 that "forests of future masts rise up to the sky as they await the axe of the Americans, who have so far left them untouched."[4] Another visitor credited the East Texas region with having "the most extensive and valuable pine, cypress, and live oak forest remaining uncut in North America. . . ." Its greatest value lay in the "large yield per acre, the magnificent proportions of the trees, the quality of the timber, and its accessibility to the ever increasing markets on the wide prairies . . . and to the Gulf ports for shipment to the markets of the world."[5] Reports of trees with circumferences

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[2]Frederick Law Olmstead, A Journey Through Texas (New York, 1857), 91.

[3]Mary Austin Holley, Texas Observations, Historical, Geographical and Descriptive, In a Series of Letters (Baltimore, 1833), 31.

[4]Frédéric Gaillardet, Sketches of Early Texas and Louisiana, trans. James L. Shepherd III (Austin, 1966), 63.

[5]Lang, A Paper on the Resources and Capabilities of Texas, 6.

of nearly thirty-six inches as high as fifty feet from the base and heights of one hundred fifty and one hundred seventy-five feet without "a single crook or limb on the first one hundred feet," offered great inducements to settlers in need of woodlots and lumber interests seeking resources.[6]

As active settlement of the area progressed, threats to this valuable forest wealth multiplied. Settlers in clearing the land for farms often viewed timbered land as an obstacle and considered the wood supply to be inexhaustible.[7] "It is the common practice with settlers here," one observer wrote, "to cut away every tree of a clearing, and to substitute, for the noble giants of the forests, those of diminutive size, and ephemeral growth. . . ."[8] To contemporaries, those individuals hardy enough to take on the task of carving a farm out of forested land provided a beneficial public service.[9] Later concern about the denuded land and erosion resulting from it changed this view into a less tolerant opinion, which branded pioneers of the South and Southwest as "vandals

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[6]William Kennedy, Texas: The Rise, Progress, and Prospects of the Republic of Texas (London, 1841), I, 104.

[7]Samuel Trask Dana, Forest and Range Policy, Its Development in the United States (New York, 1956), 3; Mohr, The Timber Pines in the Southern United States, 11.

[8]Holley, Texas Observations, 48.

[9]"Address of W. Goodrich Jones before the Texas Lumbermen's Association," Gulf Coast Lumberman, III (April 15, 1915), 45.

without knowing it."[10]

Much of the towering virgin growth showed little sign of previous forest fires when civilization first entered the forests. Lightning caused most of the conflagrations which occurred, but the rain which followed, or evening dampness, quickly extinguished them. Indians occasionally set fires to improve the grass for grazing, drive game, or impede the progress of an enemy, but early settlers reminisced that these were isolated incidents. Actually, fire prevention was a vital concern of both the Indians and white men because of their mutual need to protect their food supplies. The inconsequential penetration of sawmills into the region before the last decades of the nineteenth century also kept the forests relatively free from blazes caused by loggers or machinery.[11]

This comparative freedom from manmade fires subsided with the widespread use of intentional burnings to clear areas of trees and brush for

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[10]"Preserve the Timber Resources," Southern Industrial and Lumber Review, XXVI (February, 1917), 14.

[11]Manuscript of Speech delivered by W. Goodrich Jones at Waco, Texas dated February, 1928, entitled "The Forests of Texas and the Early Sawmills," 10, W. Goodrich Jones Papers (Stephen F. Austin University, Nacogdoches, Texas). Hereafter cited as Jones Papers; memo titled "Information Regarding Early Forests and Lumbering Conditions in East Texas furnished by Division Patrolman J. M. Turner," ibid.; "Address of W. Goodrich Jones before the Texas Lumbermen's Association," 45; R. D. Forbes, Timber Growing and Logging and Turpentining Practices in the Southern Pine Region, United States Department of Agriculture, Technical Bulletin 204 (Washington, 1931), 8, 18; Jacob De Cordova, Texas Her Resources and Her Public Men (Philadelphia, 1858), 44; "A Bulletin on Forest Fires," Southern Industrial and Lumber Review, XX (December, 1912), 72.

cultivation or grazing. Many erroneously believed that igniting a grass fire before the winter rains came would remove dead vegetation and encourage the germination of new turf.[12] Since cattle could not graze until moisture renewed the feeding ground, unscrupulous stock dealers occasionally burned a competitor's pasture to force the distressed sale of livestock.[13]

As further justification for this practice, southerners argued that the flames killed disease spreading cattle ticks and poisonous rattlesnakes.[14] Accepted opinion also prescribed the use of fire to facilitate road building and to clear undergrowth, which if allowed to accumulate

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[12]Speech delivered by W. Goodrich Jones entitled "The Forests of Texas and Early Sawmills," 10, Jones Papers; Mohr, The Timber Pines of the Southern United States, 62; "Address of W. Goodrich Jones before the Texas Lumberman's Association," 44; J. H. Foster and F. H. Millen, Forest Fire Prevention in Cooperation with the Federal Government, Agricultural and Mechanical College of Texas, Bulletin 6 (College Station, 1917), 3; J. H. Foster, Grass and Woodland Fires in Texas, Agricultural and Mechanical College of Texas, Bulletin 1 (Austin, 1916), 3: Foster, et al., General Survey of the Texas Woodlands, 28; Wyman and Jones, Forest Fire Prevention in East Texas, 5, 8; Kennedy, Texas, 140; William T. Chambers, "Pine Woods Regions of Southeastern Texas," Economic Geography, X (July, 1934), 309; "Condemns the Burning of Forest Land," Southern Industrial and Lumber Review, XVI (March, 1909), 73: Arthur Ikin, Texas; Its History, Topography, Agriculture, Commerce, and General Statistics (London, 1841), 53.

[13]J. H. Foster, "Forest Fire Prevention," Gulf Coast Lumberman, V (January 1, 1918), 14.

[14]Chambers, "Pine Woods Regions of Southeastern Texas," 309; Foster, Grass and Woodland Fires in Texas, 1-10; Wyman and Jones, Forest Fire Prevention in East Texas, 8.

could produce grass fires hazardous to stands of valuable mature timber.[15] Unfortunately, the public little realized that the same flames also destroyed seedlings, retarded tree growth, killed wildlife, and reduced the fertility of the soil.[16]

Growing concern over this practice of burning the woods and prairies emboldened Texas legislators to eventually pass several acts restricting the employment of fire. As early as 1848, a law prohibited the burning of another's property between July 1 and February 15. Those convicted of this misdemeanor were subject to a fine of not less than ten dollars nor more than fifty dollars.[17] The 1883 legislature passed a somewhat similar law prohibiting the setting of fires upon another's land at anytime during

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[15]Foster, Grass and Woodland Fires in Texas, 10; Henry S. Graves, Protection of Forests from Fire, United States Department of Agriculture, Bulletin 82 (Washington, 1910), 27.

[16]Foster, et al., General Survey of the Texas Woodlands, 28; Speech delivered by W. Goodrich Jones entitled "The Forests of Texas and the Early Sawmills," 10, Jones Papers; Mohr, The Timber Pines of the Southern United States, 62; Foster, "Forest Fire Prevention," 14; E. L. Demmon, "Fires, and Forest Growth," American Forests and Forest Life, (title varies) XXXV (May, 1929), 275; J. G. Peters, "A Program of Forest Conservation for the South," Journal of Forestry, XVII (April, 1919), 365; E. M. Bruner, "Progress in Forest Protection in the South," ibid., XXVI (March 1928), 300; Edmiston, "Tragedy of Trees," 580; "Conservation and Reforestation," Southern Industrial and Lumber Review, XX (July, 1913), 77; J. L. Thompson, "Forestry Needs of Texas," Gulf Coast Lumberman, XIII (April 15, 1925), 36; Forbes, Timber Growing and Logging and Turpentining Practices in the Southern Pine Region, 8; Foster, Grass and Woodland Fires in Texas, 5.

[17]H. P. N. Gammel (compiler), The Laws of Texas 1822-1897 (Austin, 1898), III, 138-139.

the year. The act also held the landowner responsible if in firing his own land, the blaze subsequently damaged the property of his neighbor. The law increased the fine to not less than fifty nor more than three hundred dollars.[18] The year 1884 witnessed the passage of another law to deal with those who set fires to destroy the grazing land of a competitor. Such an infringement constituted a felonious act, punishable by confinement in the state penitentiary for not less than two years nor more than five years.[19] Legislators naturally intended through these laws to diminish both wilful and negligent spreading of fires, but because no state forestry agency existed before 1915, lax enforcement of the laws resulted and precluded their effective operation.

The state took some steps toward the establishment of a forestry commission in 1907 by delegating some fire policing responsibilities to both the Commissioner of Agriculture and the Game, Fish, and Oyster Commissioner. The legislature added to the duties of the agriculture commissioner the collection and publication of information relating to forestry,

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[18]Foster, Grass and Woodland Fires in Texas, 12-13; Sam A. Willson, Revised Penal Code and Code of Criminal Procedure and Penal Laws Passed by the 16th, 17th, 18th, 19th, 20th Legislatures of the State of Texas (St. Louis, 1888), pt. 1, p. 232; Wyman and Jones, Forest Fire Prevention in East Texas, 13; "Forestry Laws of Texas," Gulf Coast Lumberman, II (November 15, 1914), 34.

[19]Gammel, Laws of Texas, IX, 598; "Forestry Laws of Texas," 34; Foster, Grass and Woodland Fires in Texas, 13; Wyman and Jones, Forest Fire Prevention in East Texas, 13; Willson, Revised Penal Code, pt. 1, p. 234.

tree planting, forest preservation, and reforestation. Also, he was to encourage the planting and cultivation of nut trees and recommend legislation necessary for the protection and perpetuation of the state's timber resources.[20] The legislature also bestowed fire policing powers on the Game, Fish, and Oyster Commissioner and his deputies. In addition to cautioning sportsmen or others of the danger from fire, legislation empowered them to extinguish smouldering fires and to give public notice when they learned of areas where fires raged to facilitate control of them.[21] Although this action represented some progress toward creation of an organized forest agency, these agencies virtually ignored their forestry duties because of public apathy and a lack of actual authority.[22]

Local newspapers exhibited little interest in reporting fires as front page news, apparently because they were such frequent occurrences and of little concern to the public.[23] Another reason for this lack of attention to fires lay in the type of blaze which plagued southern forests.

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[20] Vernon's Annotated Revised Statutes of the State of Texas (Kansas City, Mo., 1965), I, 298-299.

[21] Vernon's Annotated Penal Code of the State of Texas (Kansas City, Mo., 1961), II, 602.

[22] "Forestry Laws of Texas," 34.

[23] Interview with E. O. Siecke, December 8, 1971, Galveston, Texas; see the East Texas Register, November 27, 1914, and October 1, 1915, and the Upshur County Echo, September 24, 1908, for examples of coverage of fires.

The spectacular crown fire typical of the Northwest,where tumultous blazes raged in the tops of the trees, attracted widespread attention by citizens fearful for their homes and their lives. These destructive conflagrations required very dry woods and strong winds, factors which the humid southern pine forests generally lacked. Southern fires, usually termed surface blazes, burned among the layers of dry leaves, grass, brush, and small trees on the forest floor without progressing higher into the trees.[24] Mature timber displayed little visible damage from these surface fires, which to the casual observer reinforced the belief that they were not very destructive.[25] As a result, intentional burning continued well into the twentieth century despite laws designed to curtail the practice.

Fire was not the only tool which settlers employed that influenced the possibility of future timber growth. The lack of enclosures for livestock also adversely affected the likelihood of natural regrowth. Large livestock left to roam cutover areas trampled many young seedlings,

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[24]Graves, Protection of Forests from Fire, 7-8, 11; Demmon, "Fires and Forest Growth," 275; Peters, "A Program of Forest Conservation for the South," 365; Foster, et al., General Survey of the Texas Woodlands, 14; H. R. Kylie, G. H. Hieronymus, A. G. Hall, CCC Forestry (Washington, 1937), 72.

[25]Bruner, "Progress in Forest Protection in the South," 312; "How Fires Retard the Growth of Young Timber," Gulf Coast Lumberman, XVII (November 1, 1929), 52; "Mature Southern Pine Seldom Fire Damaged," ibid., XIII (October 1, 1925), 54; "J. L. Thompson Writes on Forest Fire Losses—Some Reflections," ibid., (November 1, 1925), 13.

while razorback hogs stifled the growth of millions of longleaf seedlings by digging up the tender tap roots for feed.[26] Known as "pine-woods-rooters," the razorback hog also devoured pine seeds as readily as acorns and could destroy small trees five to ten years old when feed was scarce.[27] This practice thus greatly lessened the chance for reproduction even in areas where no fires had occurred.

The establishment of local, small-scale lumbering operations normally coincided with the arrival of settlers and also increased the threats to timber resources. In the 1830's, Texans witnessed the first real beginnings of the industry as small facilities appeared along water courses.[28] Cutting had to be limited to short distances from the streams which could be serviced by oxen and mule transportation, since railroads had not yet penetrated the piney woods. For much the same reason,

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[26]Bruner, "Progress in Forest Protection in the South," 300; Edmiston, "Tragedy of Trees," 580; "Conservation and Reforestation," 77; Thompson, "Forestry Needs of Texas," 36; Mohr, The Timber Pines of the Southern United States, 62; Forbes, Timber Growing and Logging and Turpentining Practices in the Southern Pine Region, 8; Foster, Grass and Woodland Fires in Texas, 5.

[27]Mohr, The Timber Pines of the Southern United States, 62; Forbes, Timber Growing and Logging and Turpentining Practices in the Southern Pine Region, 8; Chambers, "Pine Woods Regions of Southeastern Texas," 308.

[28]Manuscript of speech delivered by W. Goodrich Jones at Waco, Texas dated May 1, 1930, entitled "The A-B-C of Texas Forestry," 4, Jones Papers; J. B. Woods, "Industrial Forestry in the South and West: What Lessons Each can Teach the Other," Journal of Forestry, XXVI (February 1928), 215; Edmiston, "Tragedy of Trees," 576; Ruth A. Allen, East Texas Lumber Workers, An Economic and Social Picture 1870-1950 (Austin, 1961), 21.

loggers cut selectively because only mature timber over twelve or fourteen inches in diameter located adjacent to these streams proved profitable enough to cut.[29]

With the entrance of logging railroads into the forests during the 1880's, large operations replaced smaller local enterprises.[30] In a short time scores of short spurs and tramroads from the main lines "thrust into the last strongholds of isolation and brought the great sawmills into the heart of the forests."[31] Many timber speculators also built railroads in the piney woods, which provided transportation and a market for the output of the industry and thus helped expand lumber operations.[32] Significantly, much of their capital and management emanated from other sections of the country, notably the eastern and Great Lakes areas.[33] With

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[29]Woods, "Industrial Forestry in the South and West," 215; speech delivered by W. Goodrich Jones entitled "The A-B-C of Texas Forestry," 4, Jones Papers; Bray, Forest Resources of Texas, 38; Foster, et al., General Survey of the Texas Woodlands, 18.

[30]Chambers, "Pine Woods Regions of Southeastern Texas," 304; speech delivered by W. Goodrich Jones entitled "The A-B-C of Texas Forestry," 4, Jones Papers; Eric O. Siecke to W. Goodrich Jones, December 20, 1927, ibid.; John M. Collier, The First Fifty Years of the Southern Pine Association 1915-1965 (New Orleans, 1965), 13.

[31]T. C. Richardson, East Texas: Its History and Its Makers (New York, 1940), II, 471.

[32]Allen, East Texas Lumber Workers, 21.

[33]Hamilton Pratt Easton, "The History of the Texas Lumbering Industry" (unpublished Ph.D. dissertation, Univ. of Texas at Austin, 1947), 95; F. V. Emerson, "The Southern Longleaf Pine Belt," The Geographical Review, VII (February, 1919), 85.

their own forest reserves facing exhaustion and the timber needs of middle western farming areas increasing with population growth, large northern lumber companies turned toward the southern yellow pine for exploitation.[34] A public receptive to the possibility of new jobs and contacts, favorable weather conditions making logging a year-long activity, and a liberal land policy in Texas offered the additional incentives to stimulate the industry's movement south.[35]

With capital and good transportation facilities available in eastern Texas, large companies could well afford purchases of enormous acreage for their operations. The state's liberal land policy, complemented by careless valuation of land, fraudulent classification, and disregard for timber theft on public lands, quickly placed thousands of acres of virgin timber into the hands of these entrepreneurs.[36] The Texas legislature encouraged the alienation to private ownership of the 140,000,000 acres of public domain which the state retained when annexed by the United States. It readily disposed of this land as gifts to settlers, payment to soldiers, grants to internal improvement companies, and endowments for education.

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[34]Woods, "Industrial Forestry in the South and West," 214-215.

[35] Easton, "The History of the Texas Lumbering Industry," 101; For a detailed account of the development of the lumber industry in Texas, see James Boyd, "Fifty Years in the Southern Pine Industry," Part II, Southern Lumberman, CXLV (January 1, 1932), 23-34.

[36]Allen, East Texas Lumber Workers, 19.

The legislature also authorized the sale of much of the domain, particularly that set aside as school lands, to acquire revenue, but private owners usually purchased these lands without paying their true value.

Until the 1880's, this land sold for a minimum of one dollar an acre, with no distinction made between timbered and agricultural land. This practice facilitated the transfer to private ownership of thousands of acres of timbered land on the same terms as agricultural land and encouraged wasteful clearing and a "cut-out and get-out" policy by lumbermen, which adversely affected the future value of this forest land for generations. An 1882 law concerning the sale of school lands set the price of timber land at a minimum of five dollars an acre. Because this law failed to distinguish between different classes of timber, it lost the state revenue that should have come from the sale of better grades of timber. An act of 1887 finally made some distinction, authorizing the sale of poorer timber land for two dollars an acre and the more valuable for five dollars, but fraudulent classification kept the price for all practical purposes at the minimum.[37]

William C. Walsh, who took over the job of Land Commissioner in 1878 when illegal dealings pervaded the state Land Office, discovered a

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[37]Reuben McKitrick, "The Public Land System of Texas, 1823-1910," Bulletin of the University of Wisconsin Economics and Political Science Series (Madison, Wisconsin, 1918), XIV, 8, 22, 105-106, 109; Allen, East Texas Lumber Workers, 20; Edmund T. Miller, "A Financial History of Texas," Bulletin 37 of the University of Texas (Austin, 1916), 343-45.

fraudulent case which involved agents of lumbermen from Toledo, Detroit, and Toronto. Backed by $10,000,000, they worked with state agents in the pine country helping to evaluate the state land subsequent to its being offered for sale. As the land agents drew up lists of timber land, usually valued at no more than two dollars an acre, the lumbermen quickly bought up every acre as the lists received rubber-stamp approval from a bureaucrat in Austin who never observed the forests. The commissioner immediately informed the governor, who took action to change the minimum price to five dollars an acre for forested land.[38] Walsh subsequently stifled much of this fraud, but by the turn of the century 95 per cent of the public domain was in private hands and removed from the jurisdiction of the Land Office.[39]

Laws to prevent the theft of timber on private lands existed as early as 1848. An attempt in 1858 to apply these laws to the destruction and theft of timber on public lands failed, but action taken after 1879 at least intended the alleviation of this problem by regulating the use of timber on the public domain.[40] As in the case of fire protection legislation,

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[38]Charles Ramsdell, "Memories of a Texas Land Commissioner, W. C. Walsh," Southwestern Historical Quarterly, XLIV (April 1941),484.

[39]McKitrick, "The Public Land System of Texas," 108; "Address of W. Goodrich Jones before the Texas Lumbermen's Association," 45; Bray, Forest Resources of Texas, 37; Allen, East Texas Lumber Workers, 20.

[40]McKitrick, "The Public Land System of Texas," 105.

lax enforcement did little to improve the situation on private and public lands.

Afforded the advantages of large acreage and cheap stumpage, the lumber industry proceeded with the wholesale exploitation of Texas' virgin timber.[41] The equipment and logging methods employed to clear the forests also devastated the area, reducing the possibility of natural forest renewal. Railroad spurs and tramroads equipped with spark-spouting wood and coal-burning engines replaced oxen and mule transportation and greatly increased the possibility of fires.[42] In the late 1890's, the rehaul skidder joined the trams and spurs as a menace to forest growth. Developed to carry logs to logging railroads, the skidder, "an octopus of steel with several grappling arms running over 300 feet or more," perpetrated extensive damage.[43] The device consisted of a steam engine with cables connected to two large drums. Loggers attached a hook at the end of the cable to a log, which moved wildly to the railroad tracks at an amazing

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[41]Report of the Committee for the Application of Forestry to the Society of American Foresters entitled "Forest Devastation; A National Danger and A Plan to Meet It," Journal of Forestry, XVII (December 1919), 941-42.

[42]Manuscript of speech delivered by W. Goodrich Jones to the Daughters of the Republic of Texas dated November 19 (circa 1920) entitled "The Pine Belt of Texas," Jones Papers; Foster, "Forest Fire Prevention," 14.

[43]Speech delivered by W. Goodrich Jones entitled "The Forests of Texas and the Early Sawmills," 2, Jones Papers.

rate of speed as the drum of the machine rolled. The uncontrollable motion of the log frequently knocked over standing trees as much as eight inches in diameter and seriously bruised others. The mechanism also uprooted millions of tiny seedlings, leaving whole sections of land totally denuded.[44] A description of the skidder's work offered the following picture of destructive lumbering: "Skidder tentacles never turned loose what they grabbed and the enormous logs went like an avalanche to the track, bowling over all the young trees and skinning the larger ones so badly that insects soon ruined the standing trees."[45]

The desire for quick monetary gain in an expanding market encouraged the clear cutting of timbered areas with little thought given to leaving immature trees or seed trees for second growth reproduction.[46] When loggers depleted a timber stand, its owners usually deserted the area, leaving it mutilated and valueless.[47] A great amount of waste composed of stumps as much as three feet tall and tree tops of thirty or more feet,

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[44]Chambers, "Pine Woods Regions of Southeastern Texas," 306; Edmiston, "Tragedy of Trees," 577, 579; speech delivered by W. Goodrich Jones entitled "The A-B-C of Texas Forestry," 4, Jones Papers.

[45]Speech delivered by W. Goodrich Jones entitled "The Pine Belt of Texas," 1, Jones Papers.

[46]Mohr, The Timber Pines of the Southern United States, 61; Overton W. Price, "Saving the Southern Forests," World's Work, V (March 1903), 3213.

[47]Price, "Saving the Southern Forests," 3215; Chambers, "Pine Woods Regions of Southeastern Texas," 307; Collier, The First Fifty Years of the Southern Pine Association, 39.

which loggers discarded among the assorted debris, constituted the remnants of a towering virgin forest after being reduced to an extensive cut-over section.[48] "Tops and trunks smashed and riven by careless fellings, logs left lying because of small unsoundness, young growth trampled and bruised beyond necessity" became kindling for fires occurring in dry weather or after the grass-killing frost.[49] Against such obstacles nature could not reproduce naturally, so valueless woods such as scrub oak frequently replaced the formerly magnificent pine stands.[50]

The longleaf pine belt also suffered damage from turpentining. Often improper streaking actually killed the tree outright or effectively reduced its future value. The burning of residue and brush piled some distance from the trees, even when there was little danger of spreading, still effectuated much injury to the forest. As with fires set by cattlemen and farmers, the fires in turpentine orchards often stunted the growth of larger trees, destroyed young seedlings, and increased the timber's susceptibility

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[48]Speech delivered by W. Goodrich Jones entitled, "The A-B-C of Texas Forestry," 4, Jones Papers; speech delivered by W. Goodrich Jones entitled "The Pine Belt of Texas," 2, ibid.; Bruner, "Progress in Forest Protection in the South," 301; Kylie, et al., CCC Forestry, 37.

[49]Price, "Saving the Southern Forests," 3214; Mohr, The Timber Pines of the Southern United States, 61; Chambers, "Pine Woods Regions of Southeastern Texas," 308.

[50]Chambers, "Pine Woods Regions of Southeastern Texas," 308; Edmiston, "Tragedy of Trees," 579.

to decay and insects.[51]

To those few who questioned these lumbering practices, lumbermen furnished a number of reasonable justifications. They contended that it was more logical to cut out all trees that could be marketed immediately, regardless of size, than to wait for a larger return on timber subject to high land taxes and destruction by fire or theft.[52] With no organized fire control or prevention practices and little chance for the effective enforcement of laws prohibiting timber theft, the foregoing reasoning seemed plausible enough. The state taxation system, which annually assessed timber lands on the basis of the value of the standing trees, did little to encourage a lumber company management to plant second growths. Naturally as the trees matured and appreciated in value, taxes increased and offset the value of the timber.[53] Confronted with these problems, lumbermen found it easier and, of course, more profitable to move on to cheaper stumpage.[54] Since settlers needed cleared land for farming, this also

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[51]Bruner, "Progress in Forest Protection in the South," 300-301; Speech delivered by W. Goodrich Jones entitled "The A-B-C of Texas Forestry," 2, Jones Papers; Mohr, The Timber Pines of the Southern United States, 61-62; Chambers, "Pine Woods Regions of Southeastern Texas," 305.

[52]Bray, Forest Resources of Texas, 42; Emerson, "The Southern Longleaf Pine Belt," 84.

[53]Woods, "Industrial Forestry in the South and West," 217; Bray, Forest Resources of Texas, 43.

[54]Woods, "Industrial Forestry in the South and West," 216; Collier, The First Fifty Years of the Southern Pine Association, 39; Kylie, et al., CCC Forestry, 50.

encouraged a disregard for future forest growth on cutover land.[55]

Although a dense, emerald green forest of virgin timber greeted Texas pioneers, large patches of denuded cutover land had appeared by the late 1890's because of indiscriminate clearing, intentional burnings by settlers, and exploitative lumbering. By the turn of the century, Texas ranked third among the states in lumber production, but depleted forests implied a future hardship to both the lumber industry and consumers which could no longer go unnoticed.[56] William L. Bray, a botanist at the University of Texas and author of the first reliable work on Texas forests,[57] wrote in 1904 that because of current market demands and logging methods, timber lands had become so denuded and barren that future stands seemed unlikely.[58] The Galveston Daily News reiterated this warning in 1908, calling attention to the "tens of thousands and hundreds of thousands of acres of forest which really have been butchered with no apparent care for the future."[59]

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[55]Collier, The First Fifty Years of the Southern Pine Association, 39; Kylie, et al., CCC Forestry, 50.

[56]Richardson, East Texas, 471.

[57]Jones, "Address of W. Goodrich Jones before the Texas Lumbermen's Association," 43.

[58]Bray, Forest Resources of Texas, 23.

[59]Scrapbook clipping from the Galveston Daily News dated 1908, Jones Papers.

Because of the public's attitude toward fires as being inevitable and even beneficial and the widespread belief in the inexhaustibility of the forests, private fire protection and reforestation appeared to be dubious solutions to Texas' timber problems. Denuded land covered with blackened stumps and wiry grasses aroused only a few concerned people. They at least realized that to the detriment of the public welfare, "the somber wooded aisles /were/ opening to the sunlight. . . ."[60] A majority of Texans still viewed sawmill owners as the "true pioneers" without whom "the great pine woods section would still have been an uninhabited and a desolate wilderness."[61] The pioneer's axe to most citizens remained "one of the great civilizing factors of this wonderful nation."[62] In spite of the obstacles these attitudes presented, a small number of conservationists began their fight to save Texas' forests, voicing their own concern that the same axes and sawmills which opened the forests were erasing them from the map. In view of the state of the forests and the emergence of some public attention to the problem, the time was auspicious for legislative action to create a state organization designed to protect and perpetuate the rich but quickly disappearing forest resources of Texas.

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[60]H. M. Mayo, "East-Southeast Texas—The 'Cut-Over' Empire," Gulf Coast Lumberman, I (January 1, 1914), 28.

[61]"Passing of the Pine Woods," Southern Industrial and Lumber Review, XXVII (March 31, 1918), 11.

[62]Mayo, "East-Southeast Texas—The 'Cut-Over' Empire," 28.

CHAPTER II

THE BATTLE BEGINS: GENESIS OF AN ORGANIZED STATE FOREST POLICY

The first significant indication of concern over the disappearance of valuable forests from the Texas landscape and recognition of the need for the state to rectify it in the last decades of the nineteenth century came with agitation for a statewide Arbor Day celebration. Governor L. Sul Ross first suggested the idea in a speech presented at the Abilene fair on October 6, 1888. That winter the citizens of several towns, most notably Temple, Texas, formed Arbor Day Associations to encourage legislative action designating February 22 of each year as Arbor Day. On February 1, 1889, concerned townspeople met at the Temple National Bank, and under the direction of the town's mayor, passed a resolution asking State Senator George W. Tyler to bring the matter before the Twenty-First Legislature. The citizens assigned W. Goodrich Jones, a prominent banker in Temple, to help promote passage of the bill. Largely through the efforts of Tyler, Jones, and Representatives Seth Mills and Jesse M. Strong, the act became law and provided Texas with a new legal holiday dedicated to the planting and cultivation of trees to provide shade, serve as sources of timber for prairie dwellers, and perpetuate the state's timber supply.[1]

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[1] Forestry in Texas, First Proceedings of the Texas Arbor Day and Forestry Association (Temple, Texas, 1890), 4-6, 17. A copy of the pamphlet is included in the Jones Papers.

After approval of the bill, those interested in the cause of forestry continued their efforts to keep conservation before the public. The Austin Board of Trade invited all members of the newly created Arbor Day Associations and others interested in forestry to meet in Austin, February 17, 1890, during the American Horticultural Society Convention to create a state forestry association. After the opening sessions, the delegates to the State Forestry Convention retired to the Senate Chamber and formed a permanent organization known as the Texas Arbor Day and Forestry Association, which would meet annually.[2] Article III of the organization's constitution indicated a purpose for action which typified early conservation efforts. Intent on publicizing their actions and educating the public to the benefits to be derived from them, the members suggested that as a group they advance the cause of conservation through legislative or educational efforts and encourage tree planting and preservation, forest management and renewal, and the collection of forest statistics.[3]

W. Goodrich Jones played a prominent role in securing these early steps toward forest conservation. He credited much of his love for trees to the time his family spent in Germany and Austria, where in visits to several forestry schools he learned to appreciate the benefits a nation

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[2]Ibid., 6-8, 20; Austin Statesman, February 18, 19, 1890.

[3]Forestry in Texas, 29.

could accrue from reforestation.[4] Jones never lost this appreciation and throughout his life worked diligently to save Texas' timber resources, eventually earning for himself the title, "father of forestry in Texas."[5]

Jones demonstrated his first great interest in the state's timber supply after his graduation from Princeton in 1883. Surveys of his father's lands in East Texas convinced him of the need to protect the forest from fire and overcutting.[6] Officials in the Bureau of Forestry in Washington recognized his concern, perhaps from letters he wrote to the Galveston Daily News on the timber situation in East Texas, and in 1898 sent Chief Forester Bernhard E. Fernow to persuade Jones to survey the state's timber lands for the federal government. Within a short time, travelling by horseback, buggy, and railroad, Jones covered the East Texas timber belt and made an extensive report to Fernow on conditions there.[7]

In the account of his experiences, Jones noted that little or no progress toward forestry had been made in the state, but that public

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[4]"W. Goodrich Jones of Texas," American Forestry, XXI (June 1915), 738.

[5]"History of Jones' Life, Works Told," Texas Forests and Texans (May-June, 1964), 1; "W. Goodrich Jones, Father and Friend of Texas Forestry, Succumbs at 89," Gulf Coast Lumberman, XXXVIII (August 15, 1950), 18.

[6]"History of Jones' Life, Works Told," 2.

[7]Ibid., 2; "Fortieth Anniversary of the Texas Forest Service," Texas Forest News, XXXIV (March-April, 1955), 4; The Texas Forest Service, Its History, Objectives and Activities, Texas Forest Service,Circular 100 (College Station, 1965), 3.

sentiment was slowly undergoing some change as citizens began to view "the ghosts of our hacked, scorched, & wasted forests . . . walk/ing/ the land. . . ."[8] His report also provided a lucid, shocking picture of a deplorable condition in Texas timber lands. "Everything that has a diameter of from ten to twelve inches at from 40 to 60 feet above the ground is cut," he noted, and "after the saw comes the tie cutter and rail splitter." In addition, Jones lamented, "the felling of the trees has bruised & broken most of the smaller trees & with fires twice a year, eating and gnawing into the stumps and littered tops & withered leaves, & with the sawyer worm attacking all this sap-soured wealth . . . 'tis a sad reckoning & accounting the present will have with the future."[9]

On the basis of this analysis and Jones' warnings that if the government did not step in to help, forests would be just a memory to future generations of Texans, Fernow suggested that Jones begin work toward the passage of a law creating a state department of forestry. From this time to 1914, Jones wrote numerous letters to daily newspapers, explaining how forests were being exploited and urging Texans to support efforts to

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[8]"Paper by W. Goodrich Jones on Texas Timber Resources," Report to the U. S. Bureau of Forestry /circa 1900/ reprinted in Robert S. Maxwell and James W. Martin, A Short History of Forest Conservation in Texas, 1880-1940, Bulletin 20 School of Forestry, Stephen F. Austin University (Nacogdoches, Texas, 1970), 47.

[9]Ibid., 48.

stop the devastation.[10]

Activities in the first decade of the twentieth century to establish an organized forestry department in Texas met with little success, but at least publicity given to the movement made the average citizen more aware of the diminishing timber supply. As early as 1903, a newspaper editor cited the need for a special state agency to study forest problems in Texas. He reported that Representative William Seabury of Starr County had studied forestry in the state and on the basis of his findings had urged the legislature to create a standing committee on forestry to investigate forest preservation and report on needed legislation. Seabury also suggested the passage of more stringent penalties for setting fires and the presentation of rewards for those helping apprehend and convict arsonists, the adoption of stricter regulations for burning undergrowth, and the restriction of timber cutting on public lands.[11] Unfortunately, the legislature displayed little or no interest in either the representative's or the editor's suggestions.

The Conference of Governors called by President Theodore Roosevelt in 1908 to consider questions of conservation and the use of the

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[10] Ibid., 54; The Texas Forest Service, 3; "History of Jones' Life, Works Told," 2; manuscript of speech delivered by W. Goodrich Jones at Nacogdoches, Texas, dated July 26, 1939, entitled "Forestry," 1, Jones Papers.

[11] Unidentified newspaper clipping dated 1903 in scrapbook collection of W. Goodrich Jones, Jones Papers.

nation's resources served to heighten interest in what the individual states could do to promote the conservation of a rapidly disappearing resource, the forest.[12] Among the participants in the meeting was W. Goodrich Jones, representing the absent Texas Governor Tom Campbell. In an address before the conference, he pledged Texas' support for national conservation programs and further dedicated the state to conservation efforts.[13]

The Texas visit of the United States Chief Forester, Gifford Pinchot, in 1909 provided yet another stimulus to a concerted forestry movement in the state. At Woodville, Texas, the crusading conservationist met with the Conservation Committee of the Yellow Pine Manufacturers' Association and twenty-nine senior forestry students from Yale, who with their instructors, H. H. Chapman and Ralph C. Bryant, had been observing the operations of the Thompson Brothers' Lumber Company. Among other things, the Yale foresters studied the possibilities of timber regrowth on the company's lands.[14] As the first cooperative endeavor between the United States Forest Service and lumber manufacturers on the conservation of the forests, the conference ranked in Pinchot's eyes as the most

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[12]Newton C. Blanchard, and others (ed.), Proceedings of a Conference of Governors in the White House, Washington D.C., May 13-15, 1908 (Washington, 1909), 3.

[13]Ibid., 190-191.

[14]J. C. Dionne, "Yale Foresters in Texas," Southern Industrial and Lumber Review, XVI (April, 1909), 44-45; "Mr. Pinchot in Texas," ibid. (May, 1909), 60.

important step yet taken in forestry and the conservation of resources. During the discussions, the Yellow Pine committee passed a number of significant resolutions aimed at the passage of federal and state legislation for presentation before their association at its next meeting. The group agreed that all lumbermen, whether members of the association or not, should cut only mature timber above an agreed upon minimum diameter, being careful to leave seed trees for renewal, stop intentional burnings completely, and lobby for laws on the state and federal level providing organized fire protection on timber lands.[15] That some lumbermen by the first decade of the twentieth century recognized the need for state and federal legislation to protect the timber supply helped further the legislative aspirations of conservationists in the state.

Taking advantage of the increasing concern for conservation of the state's resources, two hundred delegates to the first Congress of the Texas Conservation Association and a smaller number of members of the Texas Irrigation Congress met in Fort Worth in April, 1910. Among those attending the conservation meeting were Commissioner of Agriculture Ed R. Kone, W. Goodrich Jones, and J. Lewis Thompson, representing the state government, conservationists, and lumber interests. Along with the other delegates, they felt confident that Texans would accept conservation

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[15] "Mr. Pinchot in Texas," 60.

if they realized the benefits it would provide the state.[16]

Although the groups met separately to formulate by-laws and elect officers, both adopted similar proposals suggesting the promulgation of conservation and irrigation legislation and agreed that in preparation for this legislative action, a publicity campaign had to be conducted throughout the state.[17] The resolution adopted at the final proceedings indicated an increased sense of disgust at the devastation of the state's resources, a sentiment which would continue to characterize the forestry movement until the realization of its first goal in 1915:

> Resolved, That we hereby deplore the wasteful methods of lumbering as practiced in Texas and look with dismay at the early day . . . when all our best timber will be cut and unobtainable except at great cost, when the cut-over land littered with dead branches and decayed treetops will be annually burned over, the humus destroyed, and the soil . . . unfit for cultivation and washed into the streams.

More importantly, the recommendation which followed advised the establishment of a forestry department with a trained forester under the direction of the state agricultural department.[18]

The Conservation Association of Texas, although the product of an intense desire to promote forest conservation in Texas, did not develop into the statewide forestry association which Jones and others envisioned.

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[16]Dallas Morning News, April 6, 1910.

[17]Ibid.

[18]Ibid., April 7, 1910.

By 1913-1914, Jones sensed that public sentiment was favorable enough to facilitate the creation of a new organization dedicated to the establishment of a state board of forestry.[19] The passage of the Weeks Law in 1911,which offered federal aid for forest protection to those states having organized forestry departments, must have also encouraged the advocacy of a department for Texas at this time. With this in mind, Jones called a meeting of interested citizens in Temple for November 1, 1914.[20]

A number of events in 1913 demonstrated the increased interest in forestry and led to Jones' decision to plan the November meeting. In October,1913, John Henry Kirby, President of the Kirby Lumber Company of Beaumont and Houston, wrote Percival S. Ridsdale, Executive Secretary of the American Forestry Association, submitting $100 for life membership in the organization and asking Ridsdale to take action toward educating public opinion in Texas on the merits of forestry. He explained the need for this aid by stating that the state was "pursuing a policy of madness" in allowing the "uninformed commercial bodies and greedy land owners" to turn cutover timber land into agricultural tracts. In so doing, lumbermen prevented the replenishment of the forest, which Kirby feared would result

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[19]"T. F. A.—50 Years of Continuous Service," Gulf Coast Lumberman, LII (February 15, 1964), 19; "History of Jones' Life, Works Told," 2; The Texas Forest Service, 3; "Texas Forestry Association," Gulf Coast Lumberman, II (November 15, 1914), 29.

[20]Ibid.

in the eventual importation of lumber at exorbitant rates.[21] Ridsdale recognized the helpful role which a state forestry association could play in Texas and the need for an educational campaign to enlighten citizens on the advantages of an organized forest policy. He asked Kirby to suggest someone who was familiar enough with the situation to present for publication in Texas magazines and newspapers the progress forestry had made and what more could be done.[22] Kirby advised Ridsdale to get in touch with W. Goodrich Jones.[23]

In May,1914, J. Lewis Thompson presented a resolution at the annual meeting of the Houston Lumberman's Club suggesting the need for a state forester and forestry law for Texas.[24] The American Forestry Association noted the adoption of this resolution,as well as Kirby's suggestions, and commenced a campaign to create a state organization and to arouse sentiment in favor of a forestry bill.[25]

Having been advised of the offer of assistance by the American

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[21]John Henry Kirby to P. S. Ridsdale, October 4, 1913, John Henry Kirby Papers (Texas Gulf Coast Historical Association, University of Houston Library, Houston). Hereafter cited as Kirby Papers.

[22]P. S. Ridsdale to John Henry Kirby, October 8, 1913, ibid.

[23]John Henry Kirby to P. S. Ridsdale, October 22, 1913, ibid.

[24]"Campaign for Texas Forester," Gulf Coast Lumberman, II (May 15, 1914), 23; "The Forestry Law Needs Help," ibid. (April 1, 1915), 3.

[25]"Texas Forestry Law," American Forestry, XXI (May,1915), 615; "Campaign for Texas Forester," 23.

Forestry Association, Jones proceeded with his plans, and in October, 1914, with the aid of the United States Senator from Texas, Morris Sheppard, the Forest Service in Washington sent J. Girvin Peters, Forestry Chief of State Cooperation, to survey forest conditions in Texas. Officials also instructed him to recommend a forest policy, determine how the federal government could cooperate and offer financial aid, and encourage a favorable attitude toward forest conservation. Together Jones and Peters travelled through East Texas and called on lumbermen, timber owners, farmers, state officials, and newspaper editors all over the state to determine the extent of public approval of their proposals.[26]

Apparently satisfied that forestry had a chance in Texas, Peters began work on an evaluative report of the timber situation and a draft of a state forestry bill. His account warned that unless the state took steps to eradicate fire and to implement forest management practices, large lumbering plants would have to cease operations in Texas in fifteen years. Cooperation with the federal government and the adoption of state laws creating an organized protective system and encouraging private and public forestry practice, Peters proposed, offered the best means of preventing the loss of the lumber industry to Texas. He noted the urgent need for

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[26]W. Goodrich Jones, "Campaigning for Forestry in Texas," American Forests and Forest Life, XXXIII (January, 1927), 42-43; speech delivered by W. Goodrich Jones entitled "Forestry," 1, Jones Papers.

a nonpartisan department to implement an effective forest fire protective system, cooperate with private owners, corporations, and towns, acquire lands by purchase or gift for state forests to serve as examples of proper forest management, and make forest investigations under the leadership of a technically trained, experienced state forester. He also recommended the amendment of the state's forest taxation policy, so owners would pay only a nominal yearly land tax until the timber matured and was cut, at which time the bulk of the tax would be due.[27]

Peters presented the draft of a forestry bill to about twenty citizens who responded to Jones' invitation to meet in the Carnegie Library at Temple in November. After some discussion, those attending passed a resolution urging the Thirty-Fourth Legislature to create a State Board of Forestry and then organized a permanent organization, the Texas Forestry Association, and elected officers to it. The members designated Jones as president and Jack Dionne as secretary and named Dionne's publication, the Gulf Coast Lumberman, its official organ. Intent upon the immediate passage of a forestry law, the organization dedicated itself to becoming a large, enthusiastic, and vocal lobbying group.[28]

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[27]J. G. Peters, "A Forest Policy for Texas," Gulf Coast Lumberman, II (January 15, 1915), 25, 27; a copy of the original policy is located in the Jones Papers (see pages 1-18).

[28]"History of Jones' Life, Works Told," 2; "T. F. A.—50 Years of Continuous Service," 19; "W. Goodrich Jones, Father and Friend of Texas Forestry, Succumbs at 89," 18; The Texas Forest Service, 3; "Texas Forestry Association," 29; speech delivered by W. Goodrich Jones entitled "Forestry," 1, Jones Papers.

Given the job of taking the proposed bill to Austin, Jones relied upon Representative Richard F. Burges, who had early demonstrated an interest in forestry, to place the act before the legislature.[29] Subsequently, on January 15, Burges presented the proposed law, and the House referred it to the Committee on Forestry.[30] Five days later, John Lester Wroe, private secretary to the newly elected Governor James E. Ferguson, read the Governor's first official message to the legislature. In it he proposed the appointment of a commission to study the question of legislation needed to preserve the state's timber supply.[31]

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[29]Richard F. Burges to John Henry Kirby, October 29, 1914, Kirby Papers.

[30]Journal of the House of Representatives of the State of Texas at the Regular Session of the Thirty-fourth Legislature (Austin, 1915), 71; Jones, "Campaigning for Forestry in Texas," 42; "History of Jones' Life, Works Told," 2.

[31]Journal of the House of Representatives of the State of Texas at the Regular Session of the Thirty-fourth Legislature, 134; in the official message to the legislature, Ferguson recommended the adoption of the planks of the Democratic party platform. In enumerating them, he included the appeal for a forestry commission. Ernest Winkler in Platforms and Political Parties in Texas (Austin, 1916) and coverage of the Democratic convention in El Paso by the Dallas Morning News (August 12-13, 1914) make no reference to such a plank proposing the establishment of a forestry commission. In a speech to the twenty-fifth meeting of the T. F. A. on July 26, 1939 entitled "Forestry," and in an article, "Campaigning for Forestry in Texas," in American Forestry Jones states that Ferguson, who was a friend of his, agreed to insert a statement in his inaugural address advocating the creation of a department of forestry. Contrary to the assertion made in A Short History of Forest Conservation in Texas 1880-1940, Ferguson did not include the proposal in his inaugural address but in his official message to the legislature. It is possible that the Governor inserted the recommendation when asking for the adoption of the Democratic platform by the legislature to fulfill his promise to Jones.

The bill which the House committee received contained seven sections. Section I established a State Board of Forestry to include the Governor, the Commissioners of the Land Office and Department of Agriculture, the Presidents of the University of Texas and Texas A & M University, and two other members knowledgeable and interested in forestry to be appointed by the governor to serve four years. Among its duties, the Board could make plans for a practical forestry system and supervise all matters of forest policy, protection, and management in the state.

Section II required that the State Forester, whom the bill empowered the Board to appoint, have two years of experience and proper training. For compensation the forester would receive no more than $3000 andtravelling expenses. As head of the department, he would appoint assistants, take needed action to prevent and extinguish forest fires, enforce all laws dealing with the protection of the forests, prosecute law violators, collect information on forest conditions, cooperate with land owners, and prepare an annual report on the progress and state of forestry work in the state.

Section III provided for cooperation of the Board with counties, towns, corporations, and individuals in forest protection work. Section IV allowed the state to accept gifts of land and to purchase it for state forests to demonstrate forestry methods. Section V placed all moneys received from the sale of timber on these forests in a special fund to be

used for forestry purposes. Section VI set the required appropriation at $20,000, and Section VII assured the cooperation of the state department with the federal Forest Service.[32]

In committee discussions the bill faced some strong opposition. Writing about problems the Texas Forestry Association experienced with the group, Jones quoted one member he talked with. "Mr. Jones," the committee member began, "you have talked a lot, now I want to say something. I don't want no forestry dudes coming to Texas. I've read all about them. They draw the people's pay and spend their time behind their offices playing lawn tennis." He characterized all foresters as "a lot of damn grafters," and expressed strong opposition to the bill. In regard to the question of the amount of lumber left in Texas, he stated, "we've got enough lumber in Texas for a hundred years. I'm a farmer and I'm fighting 'bresh' all the time. The pesky trees grow faster than we could cut them down."[33] Convincing this legislator and many others like him of the advantages possible in an organized forestry system was, to Jones, work "largely of the kindergarten variety, few having any idea that trees were of any use except for firewood, posts, or lumber. . . ."[34]

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[32]Peters, "A Forest Policy for Texas," 19-22, Jones Papers. A copy of the bill entitled "An act to establish a State Board of Forestry and to promote forest interests in the State" is located in the Kirby Papers.

[33]Jones, "Campaigning for Forestry in Texas," 42-43.

[34]Ibid., 43.

Opposition on a more intelligent level centered around whether the legislature should create another independent state board subject to political influence. When this slowed committee approval of the act, Jones persuaded William B. Bizzell, President of Texas A & M University, and the A & M Dean of Agriculture, E. J. Kyle, to help rewrite the bill, eliminating the Board. Subsequently they made the Department of Forestry a part of the Texas A & M University system and subordinated the state forester to the university's Board of Directors.[35] The House committee concurred in this change and then halved the proposed appropriation to $10,000, a move Jones anticipated by changing the original amount from $10,000 to $20,000 because he suspected that any funds asked for would be cut.[36] Finally the committee approved the bill and sent it to both legislative houses for a vote. In its revised form before the House the bill passed by a relatively comfortable margin, but in the Senate only one affirmative vote saved the act from defeat.[37]

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[35] Ibid.; The Texas Forest Service, 4.

[36] J. G. Peters to John Henry Kirby, November 11, 1914, Kirby Papers.

[37] "W. Goodrich Jones of Texas," 739; "History of Jones' Life, Works Told," 2; John A. Haislet, "Texans Evolve a State Forestry Agency," Texas Forests and Texans (May-June, 1964), 6; Journal of the House of Representatives of the State of Texas at the Regular Session of the Thirty-fourth Legislature, 415, 1078; Journal of the Senate of Texas Being the Regular Session of the Thirty-fourth Legislature (Austin, 1915), 1221-1222. The sources differ on the number of votes by which the bill passed in the House, some indicating six, others seven. The House Journal gives no report of the vote.

Many lobbyists thought the battle won with passage by both houses and left Austin, but Governor Ferguson's hesitation in signing the law, out of concern that the $3000 salary was unnecessary since a young A & M graduate would probably take the job for half the amount, recalled Jones, Bizzell, and State Geologist William B. Phillips.[38] After a personal visit with them, Ferguson realized the necessity of the bill's immediate passage and the acceptability of the salary level, and on March 31, 1915, signed it into law.[39]

The only immediate problems remaining were where to place the department's headquarters and whom to hire as state forester. Although Jones thought the department offices should be at Austin, Bizzell convinced him that College Station provided a better site since the bureau would be under the A & M University Board of Directors.[40] To solve the second problem, Dr. Bizzell, with the approval of the Board of Directors, appointed J. H. Foster of Vermont, then serving as forester in New Hampshire, to head the department. A 1907 graduate of Yale, Foster worked with the United States Forest Service until 1911 when he left to be Forester of the New Hampshire Experiment Station and Professor of Forestry at the state

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[38]"W. Goodrich Jones of Texas," 739; "The Forestry Law Needs Help," 3; speech delivered by Jones entitled "Forestry," 3.

[39]The Texas Forest Service, 4; Haislet, "Texans Evolve a State Forestry Agency," 6; "T. F. A.—50 Years of Continuous Service," 18.

[40]Ibid.

college.[41] In his new position in Texas, Foster received the titles Chief, Division of Forestry in the Texas Agricultural Experiment Station and Professor of Forestry at A & M.[42]

Jones attributed the success of the bill to the support of the state's large daily newspapers, which freely published letters and circulars from the Texas Forestry Association, and to the aid of men such as Bizzell, Kyle, Dionne, Representative Burges, Phillips and members of the American Forestry Association.[43] Many of those involved in the struggle agreed that in leading the movement, often against seemingly insurmountable odds, Jones played the greatest role. The Gulf Coast Lumberman in an eulogy written upon Jones' death in 1950, discussed his persuasive powers in these early years: "He appeared before the legislature, he button-holed the governor, wheedled appropriations here and there . . . when many considered the subject mere nonsense."[44] In the face of opposition from some legislators, whom Peters later termed "exceedingly practical politician[s]" who would kill many appropriations merely because they did not have an adequate voice as to their use, Jones

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[41]"Texas State Forester Begins Work," Gulf Coast Lumberman, III (November 1, 1915), 16; Haislet, "Texans Evolve a State Forestry Agency," 6.

[42]"History of Jones' Life, Works Told," 2.

[43]Jones, "Campaigning for Forestry in Texas," 43.

[44]"W. Goodrich Jones, Father and Friend of Texas Forestry, Succumbs at 89," 18.

and other conservationists handled the difficult task well.[45] The general support of the lumber industry, despite its having to bear much of the blame for the condition of the forests, also helped encourage the success of the venture.

As the forestry movement grew in popular appeal, lumbermen naturally found themselves on the defensive from widespread denunciation of their logging methods and reforestation policies. The Southern Industrial and Lumber Review conceded in 1908 that much destruction was due to the lumbermen's wasteful methods, but added that the industry could make amends.[46] At the same time, however, holding lumbermen "up to the public odium as ruthless destroyers of the people's birthright—as law-breaking conspirators banded together to throttle the public and force it to pay unjust prices for its product" struck the publication as totally unfair.[47] In its defense, the industry argued that conservation theorists and opportunistic politicians who regarded the theory only as a vote producer were not taking into account the rights, interests, and problems of those making a living from forest products.[48] In sum, the lumber interests reasoned, "the man who enters the public print and states that the

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[45]Peters, "A Program of Forest Conservation for the South," 365.

[46]"The Forest and the State," Southern Industrial and Lumber Review, XVI (September 20, 1908), 20.

[47]Charles A. Newning, "Conservation's Requirements," ibid., XX (January, 1913), 76-77.

[48]Ibid.

lumbermen are despoiling the forests, is telling an absolute untruth, and any reasonable man who knows aught of the trials and tribulations which the lumbermen have to contend with, will testify that such is a fact."[49]

In spite of attempts to levy much of the blame for the denuding of the forests on the lumber industry, Peters and Jones found that most of their labors did not involve convincing lumbermen of the worth of conservation, but in educating the people of the plains country, who were not familiar with the wooded East Texas region.[50] The sympathy which the lumber industry provided the movement emanated primarily from the accepted belief that fire protection and reforestation for the future welfare of all citizens was the business of the state, since economically it was unfeasible for individuals or corporations to attempt it.[51]

In 1908, a survey conducted by the Southwest Publishing Company, publishers of the Southern Industrial and Lumber Review, asked large timber holders and lumber manufacturers if they had any plans for conservation or reforestation on their lands. Out of those contacted, only three in Texas, the Lutcher and Moore Lumber Company of Orange, the Southern Pine Lumber Company of Texarkana and Diboll, and the Thompson

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[49]"A Continent Despoiled," ibid., XVI (May, 1909), 20.

[50]"Texas Forestry Association," 29.

[51]"For Texas Forestry Law," Gulf Coast Lumberman, II (November 1, 1914), 9.

and Tucker Lumber Company of Houston, practiced conservation. Companies which did not practice any kind of forest management generally explained that cutting over land and leaving it worthless was the only course available if lumbermen wanted to make any profit. High taxation rates on timber land and the threat of fire greatly lessened any desire to reforest. Without some kind of general regulation, one lumberman contended, it was unfair for companies which reforested to compete with those that did not. J. Lewis Thompson, President of the Thompson and Tucker Lumber Company, proposed that only government intervention could assure future forests.[52]

Several lumbermen were, in fact, prominent in the forestry movement as it increased in intensity from the end of the first decade of the twentieth century to the creation of the department in 1915. Jack Dionne in his Southern Industrial Lumber Review and Gulf Coast Lumberman ably served the interests of those involved in forestry. Articles intended to encourage conservation, while mindful of the lumberman's viewpoint on fire protection and reforestation, frequently appeared in his publications. As Secretary of the Texas Forestry Association, Dionne played an even more important role in furthering forestry in Texas.

J. Lewis Thompson was considered by many lumbermen to be one

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[52]"Southwest Mill Men on Reforestation," Southern Industrial and Lumber Review, XVI (August 20, 1908), 44-45.

of the first to actively and consistently pursue practical forestry and reforestation on private lands in the state.[53] As one of the more conscientious men in the lumber industry, Thompson sincerely concerned himself with the advantages of conservation and early suggested the need for state intervention.[54]

John Henry Kirby, upon whom Jones and Peters both relied for advice as the movement progressed, presented a somewhat enigmatic figure in the movement. In addition to encouraging the American Forestry Association to study forest conditions in Texas and to initiate action to rectify the damage, the famed lumberman also contributed to the implementation of practical forestry on private lands. In 1903, the Kirby Lumber Company, which held the cutting rights on 800,000 acres of timbered land in Southeast Texas belonging to the Houston Oil Company, applied to the Bureau of Forestry in Washington for a working plan designed to help preserve the younger trees and assure the renewal of forest growth. That a private organization intended to utilize such a plan convinced many conservationists that practical forestry could have business advantages.[55]

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[53]"J. L. Thompson Writes on Forest Fire Losses—Some Reflections," 13.

[54]"Southwest Mill Men on Reforestations," 45; "Campaign for Texas Forester," 23; "The Forestry Law Needs Help," 3.

[55]Price, "Saving the Southern Forests," 3220, 3222; Bray, Forest Resources of Texas, 45; Frank Heyward, "History of Industrial Forestry in the South," The Colonel William B. Greeley Lectures in Industrial Forestry (Seattle, 1958), 18.

Although Kirby expressed consternation at the condition of the forests on numerous occasions in correspondence with Jones and Peters as preparations for presentation of the forestry bill began, even replying to a letter from Peters that a "much more comprehensive statute" ought to be passed, he failed to give much direct, public assistance to their efforts.[56] Two letters to Jones explained his reasons for not participating more in the movement. In May, 1914, Kirby wrote, "I am so full of engagements that it is impossible for me to give any present attention to the forestry matter." Though he expressed concern over the supply of timber for future generations, Kirby confessed that "at the same time I am, like most businessmen, so eternally vexed with the present problems that I cannot possibly give any time to the effort to educate Texans in their plain duty to posterity."[57] Months later in response to a Texas Forestry Association circular, Kirby assured Jones that he would support the forestry bill in hopes that the timber supply could be perpetuated, saving the homebuilder of the future from buying material from the Pacific Northwest at exorbitant rates. Yet he still refused to offer direct aid, explaining that "the public will charge me with trying to subserve a selfish interest and I would, therefore, be discredited on the very threshold of the work."[58]

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[56]John Henry Kirby to J. G. Peters, November 17, 1914, Kirby Papers.

[57]John Henry Kirby to W. Goodrich Jones, February 20, 1914, ibid.

[58]John Henry Kirby to W. Goodrich Jones, November 30, 1914, Jones Papers. A copy of the letter is also in the Kirby Papers.

Jones and Peters depended on Kirby and other lumbermen who offered support when directly confronted with the issue, but when the time came for lobbying in Austin to insure passage of the bill, the lumber industry was relatively unrepresented.[59] Evidence available provides no definite reason for this lack of assistance, but it is possible that, like Kirby, many were engrossed in business problems or feared that open aid might hurt the cause of forestry in the public mind. As events in the next decade demonstrated, the depth of approval of forestry was not so great as to prevent lobbying against forest conservation legislation when lumbermen believed their interests were threatened. Luckily, the 1915 legislation posed no real problems to the lumber industry and actually promised benefits which would help perpetuate their source of revenue.

With the successful promulgation of the forestry bill and the first implementation of its provisions, conservationists sighed in relief after the long struggle. State Forester Foster immediately commenced his work, informing the public that the chief problems facing the department were fire protection, grazing, protection of the headwaters of streams, the possibility of establishing state forests, the development of

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[59] "The Forestry Law Needs Help," 3; W. Goodrich Jones to Max Bentley, Houston Chronicle editor, March 6, 1921, Jones Papers. In this letter Jones said very few lumbermen had anything to do with the formation of the Texas Forestry Association and the fight for forest conservation.

farm woodlots in the agricultural parts of the state, the encouragement of tree planting, and study of the forest taxation situation.[60] The next two years were critical ones for the department and Foster discovered that another problem, the lack of public interest in the functions of an organized forestry system, would create a crisis in 1917 and necessitate an extensive educational campaign to convince Texans that forestry work was valuable and necessary.

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[60] "Texas State Forester Begins Work," 16.

CHAPTER III

THE CHALLENGE TO FORESTRY: POLITICS AND TAXATION, 1915 - 1921

Passage of the Texas Forestry Act in 1915 enabled the state to begin active conservation work in cooperation with the federal government under the Weeks Law, a significant piece of federal conservation legislation enacted in 1911. The act essentially provided for the purchase of national forests on the watersheds of navigable streams and empowered the Secretary of Agriculture to cooperate in forest protection work with those states having organized state protective systems. In addition, to be eligible a state had to appropriate funds to implement forest protection and contain navigable streams with forested watersheds. The law further provided that the amount of funds which the government alloted could be no greater than the appropriation by the state and that no state could receive more than $10,000 annually from federal funds. Federal expenditures were to be used almost entirely for the salaries of federal patrolmen and lookout men appointed by the state forester. In return for federal aid, the state forester agreed to submit annually a fire plan, hire patrolmen, instruct and supervise them in their duties, and regulate federal and state

spending, submitting monthly reports on disbursements.[1]

As soon as J. H. Foster began his duties as state forester, he executed an agreement with the Secretary of Agriculture authorizing the state department to receive federal aid.[2] The United States Forest Service recognized the watersheds on the Sabine, Neches, Trinity, and Red Rivers as those most needing protection in Texas and established a "cooperative area" covering thirty counties and more than thirteen million acres of timbered land. The government then allocated $2500 to match the funds which Foster thought his department could disburse for fire protection.[3]

Ultimately, because of limited funds, of the area originally agreed upon for fire prevention work only a little over seven million acres received extensive policing. Foster decided to concentrate cooperative activities on the longleaf timber area in Southeast Texas where seed production occurred

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[1]Foster and Millen, Forest Fire Prevention in Cooperation with the Federal Government, 4-5; First Annual Report of the State Forester, Agricultural and Mechanical College of Texas, Bulletin 4 (College Station, 1917), 5. J. Girvin Peters, Forest Fire Protection by the States, U. S. Department of Agriculture (Washington, 1914), 4-5, 7; Wyman and Jones, Forest Fire Prevention in East Texas, 9; Foster, Grass and Woodland Fires in Texas, 14; J. Girvin Peters, Forest Fire Protection under the Weeks Law in Cooperation with the States, United States Department of Agriculture, Circular 205 (Washington, 1912), 5-8.

[2]Foster and Millen, Forest Fire Prevention in Cooperation with the Federal Government, 5.

[3]Ibid.; "Fire Prevention Work in East Texas," Gulf Coast Lumberman, IV (September 15, 1916), 30; First Annual Report of the State Forester, 6.

less frequently and timbered and cutover tracts were more abundant, factors which produced a greater fire hazard than in the northeastern counties.[4]

On February 1, 1916, the agreement became effective and upon appointment by Foster, George W. Johnson of Tenaha, Texas, began his duties as State Forestry Agent in the cooperative area. From February 1 to September 1 of that year, he surveyed forest conditions to accumulate data on fire damage, determine the protective needs of the forests, and record the amount of standing timber. After completion of the survey, the department appointed six federal fire patrolmen and initiated its forest protection program. With headquarters at Lufkin, Livingston, Jasper, Longview, Tenaha, and Linden, each patrolman covered on horseback each day as much acreage as possible of the twenty-five mile radius, or 1,256,640 acres, assigned to him around his base of operations. In addition to watching for possible fires, the patrolmen also contacted residents, told them of the need to prevent forest fires, and requested their cooperation in fire prevention and suppression. Other duties included posting fire notices, distributing literature on fire prevention, presenting lectures at schools, town meetings, and local club gatherings, smothering small fires, and securing

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[4]Wyman and Jones, Forest Fire Prevention in East Texas, 10.

aid from nearby residents to extinguish larger ones.[5] In the first few months of 1917, the state employed two extra federal patrolmen and two state employees for the spring fire season. Only the original six served the last four months.[6]

A chronic shortage of funds during the first two years of the department's existence precluded the operation of anything more than a "skeleton forest fire prevention force."[7] The state exhausted the federal allotment for the payment of patrolmen at the end of December, 1916, and had to discontinue temporarily its protection work. In the spring of 1917 the Forest Service increased its appropriation in Texas to $3500, which allowed patrol work to continue through April and May.[8] Even then because of the lack of tools and labor, patrolmen often had to choose a small fire to suppress and allow the larger ones to burn out.[9]

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[5]Ibid., 10-11; First Annual Report of the State Forester, 6-7; Foster and Millen, Forest Fire Prevention in Cooperation with the Federal Government, 6-7; "Fire Prevention Work in East Texas," 30.

[6]Foster and Millen, Forest Fire Prevention in Cooperation with the Federal Government, 6.

[7]Journal of the House of Representatives of the State of Texas at the Regular Session of the Thirty-ninth Legislature (Austin, 1925), 492.

[8]Second Annual Report of the State Forester, Agricultural and Mechanical College of Texas, Bulletin 8 (College Station, 1917), 3.

[9]D. A. Anderson to author, October 19, 1971.

Because of deficient funds, the department could actually do little more in the realm of forest protection than conduct an educational campaign to increase the cooperation of private and public interests and demonstrate the value of a concerted forestry policy. An initial educational program therefore attempted to counteract a number of popular myths which extolled the beneficial results of fire in the woods, or light-burning as it was commonly called.

In several early departmental publications and in lectures given by patrolmen, Foster and others argued that although southern surface fires seldom destroyed mature timber, the effect on the forest over a period of years was devastating. Continued scorching of the bark facilitated the possibility of wind damage and slowed normal tree growth. Annual fires also rendered the land unproductive by destroying the fertile rotted pine straw or humus and encouraged erosion by eliminating the water retaining forest cover. In addition, the foresters contended, intentional burning did not increase the value of grazing land, because it encouraged the growth of poor wire grass and broom sedge which were not as good feed for cattle as was a mixture of old and new grass. The department also dispelled the myth that fire could eradicate ticks or prevent malaria. Only dipping cattle and rotating the range could solve the tick problem, and since malaria did not emanate mysteriously from rotting wood, burnings

could not prevent it.[10] Although this activity brought the gospel of fire prevention to many Texans who accepted it willingly, light-burning the forests without proper control or supervision continued to prevail.

Although the forestry department patrolled only 7,500,000 of 16,500,000 acres requiring intensive protection in Southeast Texas, the educational campaign and policing of forested lands by patrolmen reduced timber losses from fire enough to indicate that the cooperative protection activities were functioning as well as could be expected. In 1916, the state experienced a highly hazardous dry season which kept damage high, and private interests suffered monetary losses of as much as $1,000,000. In 1917, losses declined to $770,000 and in 1918 to a mere $200,000, indicating the potential worth of the gradually improving, though inadequately manned and financed, forest protection system.[11] The cooperation of loggers, farmers, railroad men, and mill owners when contacted and informed on fire prevention and suppression lent much to the diminution of timber losses. Large lumber companies demonstrated less interest but cooperated by preventing the spread of fire from their tram engines and posting fire

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[10]Wyman and Jones, Forest Fire Prevention in East Texas, 5-9; Foster and Millen, Forest Fire Prevention in Cooperation with the Federal Government, 2-3; Foster, Grass and Woodland Fires in Texas, 3-9; Samuel T. Dana, "Farms, Forests and Erosion," Southern Industrial and Lumber Review, XXVI (April, 1917), 52-53.

[11]Second Annual Report of the State Forester, 4; "Forest Fire Prevention in East Texas," 13.

notices near their operations.[12]

The department prided itself on the work accomplished in the two-year period and optimistically published its plans for the future. If the appropriation for forestry could be increased, Texas foresters looked forward to more federal aid and the appointment of more patrolmen to increase the acreage under protection. The maintenance of tree nurseries, the direction of farm forestry projects, the formulation of more working plans for cities, corporations, and individuals, and the establishment of state and national forests became the department's immediate goals for the next few years.[13] The Gulf Coast Lumberman also indicated its satisfaction in the apparent successful operation of an organized forest policy and recommended an increase in appropriations to facilitate its continuation.[14] Unfortunately many legislators did not share the same sentiment.

When the Thirty-fifth Legislature met in January, 1917, many legislators, feeling the effects of an economic slowdown in the state, agreed to trim the budget by abolishing projects which had no apparent

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[12]Second Annual Report of the State Forester, 4; Foster and Millen, Forest Fire Prevention in Cooperation with the Federal Government, 11; "Would Prevent Texas Forest Fires," Gulf Coast Lumberman, IV (April 1, 1916), 11.

[13]First Annual Report of the State Forester, 13-16.

[14]"Texas Forestry Work Commendable," Gulf Coast Lumberman, V (May 15, 1917), 45; "Texas Forestry Work a Splendid Success," ibid., IV (March 1, 1917), 20; "Texas Forestry Appropriation Should be Doubled," ibid., VI (November 1, 1918), 32.

worth. Convinced that forestry was of no public interest or value, a legislative committee completely eliminated the Department of Forestry from the state's appropriations.[15] In response to this, W. Goodrich Jones travelled to Austin to "do kindergarten work" and convince the legislature of the worth of the department's labors.[16] The committee refused a hearing in behalf of forestry before its members, so Jones resorted to discussions with individuals outside the meetings and deluged them with telegrams and editorials in favor of retention of an organized forestry bureau in Texas.[17]

Jones later reminisced that in talks with the legislators, he found them all to be favorable to forestry except Senator J. C. McNealus from Dallas who, Jones intimated, "didn't strike me as being in his right mind." He was so opposed to everything that he threatened to "make a cotton ware house out of both the University and the A & M College if he had his way."[18] Fortunately, the views of Senator McNealus did not

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[15]Interview with Eric O. Siecke, December 8, 1971, Galveston, Texas; speech delivered by W. Goodrich Jones entitled "Forestry," 4, Jones Papers; W. Goodrich Jones to John Henry Kirby, May 19, 1917, Kirby Papers; "State Forester Hands Out a Needed Roast," Southern Industrial and Lumber Review, XXVII (March 31, 1918), 16.

[16]Speech delivered by W. Goodrich Jones entitled "Forestry," 4, Jones Papers.

[17]Jones, "Campaigning for Forestry in Texas," 43; W. Goodrich Jones to John Henry Kirby, May 19, 1917, Kirby Papers.

[18]W. Goodrich Jones to John Henry Kirby, May 19, 1917, Kirby Papers.

prevail and under the pressure applied by the Texas Forestry Association, the committee finally acquiesced in appropriating $10,000 of the $20,000 asked for with an additional $1500 for nursery stocking and tree planting.[19] Jones considered the department fortunate in receiving this much,for "those men were under a panic cutting out the little items & letting the big ones stand."[20]

State Forester Foster expressed great disappointment and consternation at the actions of this committee whose purpose, he charged, amounted merely to finding fault with the administrative accomplishments of former Governor Ferguson. He was appalled that the committee's investigative work cost $28,000, which could have been applied to something truly worthwhile such as forestry. He called the group's action a "gross injustice," because almost all the information at its disposal sufficiently proved the success of the department's work. Foster noted that the Federal government had helped draft the 1915 act and considered it a very good one. The niggardly appropriation which the legislature donated to the cause of forestry, he felt, could not support adequately a sound fire protection system and prevented the acquisition of sufficient federal aid. He added that although Texas ranked fifth in lumber manufacturing

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[19] Ibid.

[20] Ibid.

and had a greater timber area than most other regions in the nation, at least twenty states spent $60,000 a year for their forestry departments and were much more liberal in their attitude toward the conservation of timber resources. Despite this apathy and the inadequate patrol force available, losses from fires diminished, offering, in his opinion, some indication of the department's potential. Foster blamed the real lack of interest which the committee used as an excuse for deletion of the department from the budget on apathetic and ignorant committee members.[21] The Southern Industrial and Lumber Review joined Foster in his castigation of the legislators with the caustic remark that "Texas has been pretty well cursed with 'nuts,' but in this particular instance the production seems to have been overdone and to spare."[22]

Although public and legislative apathy in supporting the forestry movement presented serious problems to Texas conservationists, the involvement of the United States in World War I deemphasized their importance for a short time. During the first year of the European war several countries cancelled their lumber orders with the southern pineries, but by 1915 production increased and the region began to profit as the United States became a neutral manufacturer and transporter. When the nation

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[21]"State Forester Hands Out a Needed Roast," 16.

[22]"Forester Foster and the Legislative Committee," Southern Industrial and Lumber Review, XXVII (April 30, 1918), 11.

declared war in 1917 and initiated an active ship building program, production soared even higher. To fill such large orders, lumbermen naturally pursued a more active cutting policy, Texas being no exception since the Beaumont-Orange area served as a prime construction site for naval vessels.[23]

The existence of limited timber resources from which to fill these large lumber orders convinced many lumbermen of the need to practice conservation at least on a small scale. Loggers considered it their "patriotic duty" to keep fire out of the woods and to prevent wastefulness.[24] The emphasis which the Gulf Coast Lumberman placed on the importance of forest patrols on more than seven million forested acres in East Texas also indicated some appreciation of the need for forest protection.[25]

Texas also provided a number of volunteers for the Twentieth Forestry Engineers, the second batallion of foresters, woodsmen, and lumbermen sent to Europe to supply timber from French forests to the Allies. In cooperation with Chief Forester Henry S. Graves and his assistant William B. Greeley, Jack Dionne and J. H. Foster served as recruiting officers for

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[23]James Fickle, "The Origins and Development of the Southern Pine Association, 1883-1954," (unpublished Ph.D. dissertation, Louisiana State University, 1970, on microfilm), 189-190, 193, 198; "Tremendous Demand for Yellow Pine," Gulf Coast Lumberman, IV (February 1, 1917), 20; "Building Yellow Pine Ships," ibid. (January 1, 1917), 26; "Business After the War," ibid. (October 15, 1916), 33.

[24]"Fire Protection and Patriotism," Gulf Coast Lumberman, VI (April 1, 1918), 9.

[25]"Patrolling Southern Forests," ibid., V (November 1, 1917), 30.

the Texas volunteers. The first contingent of Twentieth Engineers arrived in France early in 1918 and included among them the first Texas lumberman to reach Europe, George W. Jordan, land timber agent for the Foster Lumber Company.[26] The state proudly followed the activities of Jordan and those who followed him and complimented them on the forestry work which they accomplished while furnishing timber to aid the Allied effort.[27]

The great use of timber in the war encouraged in many citizens a realization of the important role which timber resources played in the well-being of the nation. Convinced of the worth which the forest offered the country and cognizant of the drain on these resources which the war intensified, Americans felt a new appreciation of the need to conserve and replenish them.[28] Thus with an end to the war, emphasis shifted from concern over production to plans for conservation.[29]

Shortly after the conflict ended, Foster resigned his post to take a position in Vermont, having been so burdened with teaching duties at A & M that he could not offer as much time as he desired to actual forestry

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[26]"Twentieth Forestry Engineers," ibid. (December 15, 1917), 29; "The New Forestry Regiment," ibid. (October 15, 1917), 36, 39.

[27]"Texas Forestry Engineers Abroad," ibid. (February 1, 1918), 42.

[28]B. E. Fernow, "Forestry and the War," Journal of Forestry, XVI (February, 1918), 149.

[29]Fickle, "The Origins and Development of the Southern Pine Association," 293, 295.

practice. To replace him, Dr. Bizzell chose Eric O. Siecke, who had been serving in Oregon as Deputy State Forester.[30] Serving Texas as Chief Forester for the next twenty-four years, Siecke exerted a formidable influence on the forestry movement and assured, with the help of the Texas Forestry Association, many of its successes.

The problem of cutover lands proved a major challenge to Siecke and the department in the years following the war. Traditionally, lumbermen converted logged off lands into agricultural or grazing tracts in an attempt to convince the public that when the timber was gone, other lucrative alternatives remained.[31] Lumber journals printed numerous articles designed to prove the industry's assertion.[32] The Southern Industrial and Lumber Review regarded this converion of land use the "kind of conservation

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[30]"The Texas Forest Service," 4; "Texas Has New State Forester," Gulf Coast Lumberman, VI (April 1, 1918), 38.

[31]Woods,"Industrial Forestry in the South and West," 216; Heyward, "History of Industrial Forestry in the South," 15; Fickle, "The Origins and Development of the Southern Pine Association," 268.

[32]"East Texas Cut-Over Lands," Southern Industrial and Lumber Review, XXI (August, 1913), 29; "Cut-Over Lands—Their Marvelous Productiveness," ibid., XVIII (December, 1910), 36-37; "Developing and Colonizing Cut-Over Lands," ibid., XXI (August, 1913), 23; "Cutover Pine Lands a Success," ibid., XXVI (June 30, 1917), 56; "Some Cut-Over Land Examples," ibid., XXVII (November, 1917), 49; "The Cut-Over Lands Again," ibid., XXV (August, 1916), 47; "Strawberries on Cut-Over Lands," Gulf Coast Lumberman, I (September 1, 1913), 11; "Big Cutover Land Potato Crop," ibid., IV (May 1, 1916), 39. This represents just a sampling of articles printed on the subject.

of resources that helps to develop a country. . . ."[33] The Cutover Land Conference held in New Orleans in April, 1917, under the direction of the Southern Pine Association, the Southern Settlement and Development Organization, and the New Orleans Association of Commerce and attended by railroad men, lumbermen, agricultural specialists, farm implement companies, real estate firms, and foresters, endorsed this sentiment.[34] At one of the meetings Texas lumberman J. Lewis Thompson expressed the beliefs of many citizens as to the potential value of these lands. "Cutover land today," he asserted, "is fully as valuable a present asset as were the great forests of the South when the lumbermen first invaded them. The future possibilities of the land are easily as great as the possibilities of the forest have proven to be."[35]

To insure the constructive use of more than 100,000,000 acres of cutover land in the South, the members organized a Cutover Pine Land Owners Association. The objectives of the association were cultivation of cutover pine lands, gathering information on the value of cutover lands and their usage, promotion of the sale of the land, and encouragement of

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[33]"East Texas Cut-Over Lands," 29.

[34]Heyward, "History of Industrial Forestry in the South," 16.

[35]"An Important Conference," Southern Industrial and Lumber Review, XXVI (April, 1917), 49.

the transfer of the stock industry there.[36] The railroads encouraged the program because, if it succeeded, they could transport the goods produced to market, and lumbermen joyfully anticipated the prospect of selling cut-over land,which would relieve them of an unwanted tax burden. They also believed that successful agricultural operations would bring in a new population to consume their mill products.[37] Unfortunately many of the tracts were not always fit for agricultural development, requiring at the least, as the Southern Industrial and Lumber Review humorously noted, "two mean men and a quart of rot gut whiskey to raise a row. . . ."[38] In such cases the terrain served grazing purposes or lay barren, since private owners did not practice reforestation.[39]

By 1919 because of the realization that much land suited for pine forests could not be converted into agricultural tracts, the Department of Forestry began to emphasize public and private reforestation as sound forestry practice. Many foresters believed reforestation and management could be more easily attained in the South than in other areas because of

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[36]"Southern Cutover Pine Land Association," Gulf Coast Lumberman, V (June 1, 1917), 42; "Cutover Land Activities Begin," ibid. (July 1, 1917), 50-51; "An Important Conference," 49.

[37]Fickle, "The Origins and Development of the Southern Pine Association," 270.

[38]"The Cut-Over Lands Again," 47.

[39]Fickle, "The Origins and Development of the Southern Pine Association," 269.

the rapid tree growth, favorable climate, easy logging conditions, cheap labor, closeness to markets, and good transportation facilities.[40] The taxation problem, however, remained to convince lumbermen that they could not wait twenty years for a second growth timber crop to mature.[41] This "wild-land taxation" forced lumbermen to cut mature and immature timber alike before the increasing tax valuation offset its value.[42] Lack of knowledge about tree growing also presented an obstacle, because lumbermen remained uncertain that a company could reforest its land and still stay in business.[43]

Many lumbermen, like Harry T. Kendall, General Sales Agent of the Kirby Lumber Company, conceded that the only solution to reforestation problems lay with the state. In an article for the Journal of Forestry he wrote, "Texas lumbermen . . . know that there is little probability that the laws, organic and statutory, will be so changed that forest lands under private ownership may be carried for a sufficient time to enable those lands to produce a crop of trees." Thus, he continued, "as a lumberman, my interest in forestry is nil. When the lumberman of today saws the trees he

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[40]W. E. Bond, "Timber Growing Possibilities of East Texas," Gulf Coast Lumberman, XV (December 1, 1927), 44; Forbes, Timber Growing and Logging and Turpentining Practices in the Southern Pine Region, 12-14, 16-17.

[41]Emerson, "The Southern Longleaf Pine Belt," 85.

[42]Harry T. Kendall, "The Lumberman's Attitude Toward Forestry," Journal of Forestry, XVII (October, 1919), 648.

[43]Heyward, "History of Industrial Forestry in the South," 17.

owns and scraps his plant, his capital will enable him to become the banker, the ranchman, or the manufacturer of some other commodity." Yet as a private citizen Kendall expressed serious concern for the safeguarding of the state's forests and proposed that the state bear the cost. He recommended that the state purchase cutover lands suitable for reforestation, withdraw them from taxation, and place them under the control of the state forester.[44]

Aware of this sentiment and the existence of more than 4,300,000 acres of cutover nonagricultural land lying idle in East Texas, the Texas Forestry Association suggested that either the state buy such lands or enact legislation making it profitable for private owners to practice forestry under state regulation.[45] The Louisiana severance tax served as the model for their proposal. It provided for the annual payment of an ad valorem tax on the land itself but none on the timber growing on it until cut. At that time the state collected a percentage of the value of the timber and placed the revenue in a forestry fund.[47]

In August and September, 1920, Jones wrote Governor William P. Hobby asking for the creation of a "Committee of 50 on Forestry" to study

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[44]Kendall, "The Lumberman's Attitude Toward Forestry," 647, 649.

[45]"Forestry and the Texas Citizens," Texas Forestry Association Circular dated 1919, Jones Papers.

[46]Dallas Morning News, May 12, 1920.

[47]James Boyd, "Fifty Years in the Southern Pine Industry," Part I, Southern Lumberman, CVL (December 15, 1931), 66.

the state's forestry needs and to make recommendations.[48] Governor Hobby complied with his request, and the committee met in Dallas on December 16. At this conference the members resolved to propose before the legislature a 25¢ per thousand board feet severance tax to raise revenue for the purchase of state forests. They also promulgated a tentative forest policy which included the tax and a demand for a survey of the state's forest resources so research could be done to make the forest lands productive, to facilitate the manufacture of forest products with minimum waste, and to utilize and market these products to the best advantage. The group also recommended the classification of the East Texas pine region to determine the areas which should be used for timber growing. In addition, the members urged that the state be given power to acquire at fair valuation and to administer as part of the system of public forests, any land suited only for timber growth if the owner refused to take advantage of the opportunities and assistance which the state would provide him. The committee also cited the need for a state nursery to sell seedlings at cost or a nominal price to potential reforesters. To assure renewal of timber growth on cutover lands, the group also supported the annual acquisition of 25,000 acres of forest land.[49]

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[48]W. Goodrich Jones to William P. Hobby, August 9, 1920 and September 22, 1920, Jones Papers.

[49]Dallas Morning News, December 18, 1920; "Propose Severance Tax on Lumber," Gulf Coast Lumberman, VIII (January 1, 1921), 69, 72.

On January 25, 1921, the Thirty-eighth Legislature received a comprehensive forestry bill sponsored by the Texas Forestry Association. In the final draft of the proposed law, the Texas Forestry Association lowered the tax which the "Committee of 50" had approved to 12-1/2¢ per thousand board feet and added a number of strict regulatory measures to the proposals which the committee adopted in Dallas. The bill prohibited both the wilful and negligent setting of fires to forest or grass land and the operation of a locomotive or logging engine within two hundred feet of any cutover pine land under certain conditions. It also required that the engines be equipped with spark prevention devices and stipulated that owners of cutover lands leave standing not less than one pine seed tree of a prescribed dimension on each acre.[50]

Public discussion of the bill centered mainly around the desirability of the proposed severance tax. The Texas Forestry Association argued that as a production tax it was equitable and just to the producer and would not create a hardship on the consumer.[51] "A tax levied on sawmills and other industries which draw upon our forest resources," the group

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[50] Journal of the House of Representatives of the State of Texas at the Regular Session of the Thirty-seventh Legislature (Austin, 1921), 219.

[51] Circular of the Texas Forestry Association presented to the Thirty-seventh Legislature, Jones Papers; W. Goodrich Jones to Max Bentley, February 20, 1921, ibid.

stated, "would be just and reasonable, in view of the fact that protection of forests is at present inadequate."[52]

The severance tax immediately aroused the organized opposition of the lumber industry. Under the leadership of Houston attorney John A. Mobley and the Lumbermen's Association, the timber owners introduced formidable arguments against the proposed law. In the process, they assured forestry officials that their opposition to the tax did not mean disapproval of all the proposed forestry legislation, but they could not condone "the inequitable method of financing the venture."[53] Such a tax was "class legislation" which would "impose upon the purchasers of lumber today the burden of furnishing forests for all the citizens of the state in the future. . . ."[54] That a few should have to finance benefits that only the future could enjoy, they felt, was unfair. The lumbermen denied that they owed to future generations the obligations demanded of them by the bill but offered to support the forestry movement where the state fairly distributed the costs.[55] To achieve this, they urged the sale of bonds to

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[52]Dallas Morning News, September 16, 1920.

[53]Houston Chronicle, March 6, 1921; John A. Mobley to W. Goodrich Jones, May 2, 1921, Jones Papers.

[54]Jack Dionne, "The Texas Forestry Association, the Texas Lumbermen and the Proposed Forestry Legislation," Gulf Coast Lumberman, IX (June 1, 1921), 68-70, 73; "An Opinion on the Severance Tax," ibid. (April 1, 1921), 17-18; Galveston News, March 4, 1921.

[55]Dionne, "The Texas Forestry Association," 73.

Texas citizens to support the state forestry department.[56]

In response to arguments that the tax would be passed on to the consumer, ultimately costing the lumberman nothing, the industry retorted that the manufacturer would absorb the increased costs caused by the tax, because the cost of producing lumber had no direct connection with the selling price. Competition governed lumber prices, so the production cost of the item had no connection with the selling price.[57]

Lumbermen also argued that acceptance of this tax would just be the beginning of "an endless and eternal tax grab at the lumber industry," because the state would levy or raise the tax as it needed more revenue.[58] In addition they rejected the idea that Texas should have a severance tax just because Louisiana had instituted one. "The existence of unjust, and of fool laws," Jack Dionne wrote, "does not prove their worth. . . ."[59]

Lumber interests reacted aggressively to reports that lumbermen were selfish brutes who knowingly devastated the forests for personal gain. Accusations levied at lumbermen for their shortsightedness and antagonism to any policy of reforestation provoked the statement from several prominent

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[56]Houston Chronicle, March 6, 1921.

[57]"An Opinion on the Severance Tax," 17-18; Dionne, "The Texas Forestry Association," 68; Galveston News, March 4, 1921.

[58]"An Opinion on the Severance Tax," 17-18.

[59]Dionne, "The Texas Forestry Association," 73.

lumbermen that "no progressive lumberman is unfriendly to proper forest legislation."[60] Cutting timber constituted a necessary part of "a most high-minded . . . and patriotic profession," which supplied the products that consumers needed.[61]

The most active opponents of the proposed law in the upper echelons of Texas politics were Lieutenant-Governor Lynch Davidson and Commissioner of Agriculture George Terrell. W. Goodrich Jones later related some remarks which the lieutenant-governor made on forestry to Senator A. C. Buchanan, Mrs. Ben Boydston, a leader in the Texas Federation of Women's Clubs, and himself. Davidson figured that it would cost $75 to $100 per thousand board feet to grow a new crop of trees in fifty years, an estimate which Jones called "wild."[62] Davidson further contended that he had covered every foot of land owned by Henry Hardtner's Urania Lumber Company in Louisiana, an enterprise which practiced forest management. His observations, Davidson asserted, led him to the conviction that forestry on a state level was totally unsuccessful.[63] Hardtner later corresponded with Jones and informed him, "If Mr. Davidson has been over every

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[60]Galveston News, March 4, 1921.

[61]Dionne, "The Texas Forestry Association," 70.

[62]W. Goodrich Jones to Max Bentley, March 6, 1921, Jones Papers.

[63]W. Goodrich Jones to Max Bentley, February 20, 1921, ibid.

land I do not know it."[64]

A letter from George Terrell in 1918 in reply to a circular proposing an increase in the appropriation for the forestry department revealed his adamant stand on the issue. Terrell denied that the department had saved any money. On the contrary, he insisted, it had wasted $10,000. If a man did not have enough sense to plant trees on his land or put out a fire to keep it from spreading to another's property, he contended, "all of the advice that the paid agents of the government can give to such people is worthless."[65]

Facing such ignorance of the purposes and possibilities inherent in the forestry movement, Jones and others openly displayed disenchantment with both the industry and public officials. Jones suspected the lumbermen of complicity with the oil interests and nurserymen in the campaign to defeat the bill. Traditionally the oil interests opposed any such tax on any industry for fear that they too would be required to pay it ultimately. Nurserymen opposed only the section of the act enabling the state to sell seedlings at a nominal cost, because such unfair competition from the state would hurt their business.[66] Jones also conjectured that the big

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[64]Henry Hardtner to W. Goodrich Jones, February 21, 1921, ibid.

[65]George B. Terrell to R. A. Gilliam, December 31, 1918, ibid.

[66]"Forestry Legislation," editorial in Farm and Ranch, April 30, 1921, ibid.

lumber interests in Texas had made large land purchases in the Northwest with plans of leaving Texas in the next five to ten years. Obviously greatly disenchanted with the industry's opposition to a bill which conservationists avidly sought in the quest to save Texas' forests, Jones accused these lumbermen of wanting to "hog-tie Texas to the lumber trust of the North West" of which they would eventually be a part.[67]

In a letter to Max Bentley, editor of the Houston Chronicle, which took a moderate stand on the issue of the forestry bill and the lumbermen's opposition to it, Jones further revealed his irritation with the lumber industry. Criticizing an article which Bentley had written appealing to lumbermen, rather than the public, to support forestry practices, Jones stated that few lumbermen had done anything to help the forestry movement. Asking Bentley not to publish the letter in his paper, Jones candidly confessed his disappointment in the turn of events and blamed any failure of forestry methods on the lumber industry's opposition: "I have sore spots all over me that have been made by these lumbermen ever since the tree work started in Texas and I can't help telling you what very wicked people they are."[68]

Because of the lumber bloc's opposition, the bill never came to

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[67]W. Goodrich Jones to Max Bentley, February 20, 1921, ibid.

[68]W. Goodrich Jones to Max Bentley, March 6, 1921, ibid.

a vote. Although Governor Pat Neff leaned favorably toward forestry, he could not carry the battle alone, and attempts to reintroduce the bill in a special session failed.[69]

The Texas Forestry Association harbored no malicious motives in proposing the forestry bill. After listening to suggestions by private timberland owners that the state should reforest and studying the effectiveness of the Louisiana severance tax, the organization believed that this policy would be most equitable for all concerned. Verbal abuse and recriminations, characteristic of heated political battles, played a significant part in postponing the adoption of progressive forestry measures until later. On this point both groups may be faulted.

Yet, the position which the lumber industry took contained some features which open to question its supposed progressive stand on forestry. At the outset of the legislative proceedings, the severance tax did not raise as much furor on the part of the lumberman as two other taxes; one which required lumber companies to answer a questionnaire to discover their "intangible assets" and to impose a tax on them, and another, a "gross receipts" tax, which would force the lumber manufacturers to pay a percentage of the gross market value of their product whether sold or not. Lumbermen early warned that they would "fight them all, tooth and toenail,"

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[69]Letter by W. Goodrich Jones dated February 22, 1921, ibid.

but they classified the severance tax as the least dangerous. The Gulf Coast Lumberman editorialized in January, 1921, that "with the possible exception of the severance tax—which is far too heavy even if there should be such a thing—there is to be seen in these laws aimed at the lumber industry, simply the desire to hamper industry. . . ."[70] As the proceedings of the legislature progressed, however, opposition increased so greatly that there was no possibility of passing any parts of the forestry bill. Throughout this period the lumber bloc paid great lip-service to the need for reforestation, but their action in response to the severance tax revealed that the conviction was not felt deeply and that regrowth on private lands would have to be on the industry's terms.

The next few years were critical ones for the department and State Forester Siecke. Largely through the efforts of Representative Gary Stanford of Timpson, a member of the House Appropriations Committee, a rider attached to an appropriations bill relieved Siecke of his academic responsibilities, which had so burdened both him and Foster. For the first time the state forester could devote full time to solving the state's forestry problems.[71] Gradually, despite public apathy, legislative indifference,

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[70]"Texas Proposes Strange Lumber Tax," Gulf Coast Lumberman, VIII (January 1, 1921), 32.

[71]Haislet, "Texans Evolve a State Forestry Agency," 6.

and occasional opposition from the lumber industry, the department progressed in its work and by lessening the losses from fire and conducting helpful experiments for the state, a change in sentiment occurred which made the last years of the Twenties importance ones in aiding the forestry movement. Most notably, lumbermen realized the significance of the reforestation and protection work and eventually cooperated on a larger scale.

CHAPTER IV

FORESTRY'S ASCENDANCY: EIGHTEEN YEARS OF PROGRESS, 1922- 1940

With the battle for the severance tax over and the issue dropped for the time being by the Texas Forestry Association, lumbermen cast a more friendly eye toward Texas' forestry department.[1] This more favorable attitude and the gradual success of the educational campaign in impressing upon the public the need for an organized forest policy contributed to a progressive increase in departmental appropriations for the forestry crew. For the fiscal year 1922, the legislature doubled the department's allotment, which enabled Siecke for the first time to increase the disbursements for fire protection sufficiently so that patrolmen could direct greater attention to the actual control of fires.[2] In addition, political leaders recognized the vote potential in the adoption of the forestry cause, and Democrats included a platform demand for forest conservation in their program for the 1922 campaign.[3] All served to heighten interest in forestry and encourage

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[1]Jones, "Campaigning for Forestry in Texas," 43.

[2]E. O. Siecke, "Timber and Commercial Woods Reforestation," Arthur Waldo Stickle (ed.), State of Texas Book, One Hundred Years of Progress (Austin, 1937), 288; Ninth Annual Report of the State Forester, Agricultural and Mechanical College of Texas, Bulletin 17 (College Station, 1924), 26; John B. Woods, "Texas Timberlands and State Forestry," American Forests, LII (June, 1946), 273.

[3]Ninth Annual Report of the State Forester, 52-53, 55.

a more effective operation of the department.

This evolving change in sentiment greatly enhanced the state's forest protection activities. Throughout the 1920's and 1930's, the prevention and control of forest fires to assure the natural renewal of timber resources became the paramount concern of the state.[4] "Eliminating the fire nuisance, through prevention and fire suppression work," foresters argued, "constitutes the cheapest and most effective method of renewing forest growth on our idle forest land."[5]

To eradicate the fire menace from the piney woods, Siecke's department immediately sought the passage of further fire regulation from the Thirty-eighth Legislature. Texas lumbermen in turn also petitioned the legislators to pass more stringent fire laws.[6] Two measures included in the 1921 forestry bill reappeared in 1923 and passed both houses with little opposition. The first required the use of spark arrester equipment on locomotives, logging engines, and other wood and coal-burning engines operated within two hundred feet of any forest, cutover, or grass land. The act empowered the state forester and his agents to examine the devices to determine their effective operation, and those

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[4]Seventeenth Annual Report, Texas Forest Service, Bulletin 23 (College Station, 1932), 9.

[5]Ninth Annual Report of the State Forester, 23.

[6]R. W. Wier, "Some Problems of Reforestation," Gulf Coast Lumberman, XI (November 1, 1923), 30, 32.

lumbermen failing to comply risked a misdemeanor charge and a fine of not less than $10 nor more than $100.[7] The lumber industry exerted a significant influence in the ultimate approval of the measure and actively cooperated with forest officials in using these devices. By 1924 the lumber industry had spent $40,000 in equipping their engines with these spark arresters. Three division patrolmen enforced the law, but found themselves handicapped since at times of high fire hazard when the equipment most needed inspection, they had to join other patrolmen in fire fighting.[8]

The legislature also approved another regulatory fire measure prescribing penalties for negligent as well as wilful burning of forest and grass lands belonging to another property owner. A conviction required the guilty party to pay no less than $10 nor more than $200.[9] Although passage of the act represented a significant step forward in fire prevention, it could not be adequately enforced until Siecke added a special officer to his staff in the 1930's.

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[7] Ninth Annual Report of the State Forester, 34; Vernon's Annotated Penal Code of the State of Texas (Kansas City, Mo., 1953), III, 57; General Laws of the State of Texas Passed by the Thirty-eighth Legislature at the Regular Session (Austin, 1923), 270; Journal of the House of Representatives of the State of Texas at the Regular Session of the Thirty-eighth Legislature (Austin, 1923), 1417.

[8] Ninth Annual Report of the State Forester, 34.

[9] Ibid.; Journal of the House of Representatives of the State of Texas at the Regular Session of the Thirty-eighth Legislature, 1417; Vernon's Annotated Penal Code of the State of Texas, III, 57; General Laws of the State of Texas Passed by the Thirty-eighth Legislature at the Regular Session, 270.

Texas Forestry Association members requested funds and enabling legislation from the same legislature for the purchase of 100,000 acres of logged-over areas for the first state forests.[10] With the support of lumbermen, the Texas Forestry Association achieved its goal, and the legislature approved the purchase of two state forests where trained foresters could study and teach forest renewal and protection.[11]

In response to this action, Lynch Davidson, former lieutenant-governor, voiced his objections to the state's engaging in reforestation, which he thought should be a function of private business. "Government interference in private affairs, or its invasion of property rights," he contended, "is contrary to the purpose of government. . . ." He proposed instead a redrafting of the Texas forestry code to induce owners of cutover lands to declare that their property was under the control and supervision of a reorganized state forestry department. He suggested further that the state assess taxes and a small sum in payment for the state's supervisory work when lumbermen logged their timber. He also recommended that lumbermen agree not to cut their timber below a certain diameter. Any other programs which the state pursued, Davidson added, meant money thrown

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[10] "Plan to Carry Out Forestry Program in Texas," Gulf Coast Lumberman, X (November 1, 1922), 73.

[11] Eleventh Annual Report, Texas Forest Service, Bulletin 18 (College Station, 1926), 40-50; Thirteenth Annual Report, Texas Forest Service, Bulletin 21 (College Station, 1928), 8.

away and only a plan as comprehensive as the one proposed would adequately solve the reforestation problem.[12]

Davidson's proposals fell on deaf ears, but not without some justification. A constitutional amendment to adjust taxes, apparently the most important prerequisite for encouraging reforestation, could not win enough public support in Texas, a situation which precluded the adoption of a forestry program dependent on private initiative in the renewal of forests.[13] Also at this time the cooperation of lumbermen in fire protection and timber regrowth with state foresters proved the exception rather than the rule, indicating that private landowners would not implement programs to save the forests under existing circumstances. State forests modeled

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[12]"Address of Hon. Lynch Davidson," Gulf Coast Lumberman, XXII (April 15, 1924), 49, 54.

[13]The Texas Forestry Association attempted several times to pass a severance tax but always failed. The taxation system in Texas has never been changed to satisfy the needs of timber land owners. In 1969 the legislature passed a proposed constitutional amendment which based the taxation of farm, ranch, and timberland on a productivity basis. Texans defeated it in November 1970 by 200,000 votes, mainly because there was no enabling legislation accompanying the amendment. To overcome that, the legislature received a revised version of the amendment in the 1971 session of the legislature, including enabling legislation. Although it passed the Senate and there appeared to be enough House members favorable to approve it, because of the battle of House members and the Speaker over the stock and insurance frauds, there was never the required two-thirds majority on the floor in the closing hours of the session. Governor Preston A. Smith agreed to include the enabling legislation in subjects to be considered by the legislature at the 1972 special session. If it passes, the constitutional amendment will be presented before the 1973 legislature, and if approved will go before Texas voters. (E. R. Wagoner to Author, November 30, 1971).

after national forests offered the most realistic alternative, and subsequently on July 21, 1924, Governor Pat Neff appointed a reforestation board to select the East Texas cutover pine lands best suited for the state's experimental work.[14] In August, the committee selected as State Forest #1, 1701 acres of cutover longleaf pine land in Newton County, five miles east of Kirbyville, which the state later renamed for retired forester Siecke. Later that month a tract of 1633 acres of loblolly pine five miles south of Conroe in Montgomery County became State Forest #2, dedicated to W. Goodrich Jones.[15]

Within the next few years the state acquired three more state forests. The Thirty-ninth Legislature in 1925 transferred 2360 acres of shortleaf pine land in Cherokee County from the prison land system to the forestry department.[16] In 1928, John Henry Kirby donated 600 acres to A & M College for the scientific development of forestry and production of a timber crop, the proceeds from which would go into a scholarship fund, preferably for those students studying forestry.[17] State Forest #5, currently known

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[14]"Reforestation Board to Meet in Beaumont," Gulf Coast Lumberman, XII (July 15, 1924), 61.

[15]Eleventh Annual Report, 49-50; Thirteenth Annual Report, 8; "Additional Lands Acquired for Texas Reforestation Experiments," Gulf Coast Lumberman, XIV (July 15, 1926), 31; State Forests of Texas, Texas Forest Service, Circular 87 (n.p., 1964), 4, 6.

[16]Eleventh Annual Report, 40-50; Thirteenth Annual Report, 8; State Forests of Texas, 12.

[17]"John Henry Kirby Donates East Texas Forest Lands to A & M College," Gulf Coast Lumberman, XV (January 15, 1928), 46; State Forests of Texas, 10.

as the San Francisco Mission in the state's park system, included 117 acres near Neches in Houston County.[18] Foresters conducted experiments and demonstrations on these lands to insure, through practical forestry methods, the growth of the most valuable timber products in the shortest period of time. Most significantly, these activities played a definite role in convincing the public that forest protection and management were economically feasible and conducive to the replenishment of Texas' timber resources.[19]

The Thirty-eighth Legislature, in addition to passage of regulatory fire laws and the purchase of two state forests, also approved the appointment of a Legislative Committee on Forestry to conduct an inquiry into Texas' timber supply and to submit recommendations for a concerted forestry policy.[20] In its report before the Thirty-ninth Legislature, the committee emphasized Texas' lag in forestry programs in comparison to other states. With the funds available, the report stated, the department did little more than maintain an inadequate forest protection system, collect information on forest conditions, and cooperate with farmers on their woodlots. To rectify this situation, the members recommended the cooperation

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[18] Twentieth and Twenty-first Annual Reports 1935-1936, Texas Forest Service, Bulletin 26 (College Station, 1936), 4.

[19] Thirteenth Annual Report, 21-22.

[20] Journal of the Senate of the State of Texas Being the Regular Session of the Thirty-eighth Legislature (Austin, 1923), 1103.

of the state and federal government in forest protection and reproduction, acquisition of as much as 100,000 acres of state forests, adoption of a constitutional amendment to redress the inequitable tax situation, and creation of a new forestry code. The code which they proposed established a non-salaried State Board of Forestry to direct the state forester's work and empowered it to accept the registration of private lands used for timber regrowth. The board would also determine a just valuation of lands registeredwith the state for taxes, provide for the collection of deferred taxes on lands withdrawn from state registration before maturation of the crop, and prescribe conditions for public and private cooperation in fire protection.[21]

The report eloquently appealed to legislators and private citizens alike to protect their timber resources. Destruction of forest wealth by commercial interests without a prescribed policy of timber conservation and reproduction, the report declared, "represents a government dereliction destined to become colossal in the magnitude of its cost to the citizens of the State. . . ." The continuation of this devastation was also indicative "of the characteristic indifference of the American people toward the

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[21] Journal of the Senate of the State of Texas Being the Regular Session of the Thirty-ninth Legislature (Austin, 1925), 339-345; Journal of the House of Representatives of the State of Texas at the Regular Session of the Thirty-ninth Legislature (Austin, 1925), 492-499; "Report of the Legislative Committee on Forestry," Jones Papers, 1-16; Thirteenth Annual Report, 35-42.

destructive waste of the great sources of wealth with which nature endowed our country, and of the lack of constructive foresight among the people in protecting their future economic well-being."[22]

The legislature did not reorganize the department as the committee intended nor did it remedy the tax situation, but the emergency conditions which the report presented, fostered greater support for forest conservation in the state. In 1926, the Board of Directors at A & M recognized forestry as one of the four main divisions of the college, an indication of the increased importance attached to the department at this time. The bureau also changed its name to the Texas Forest Service and designated Siecke as director.[23]

Texas' position in forest protection programs did not change immediately. One observer of Texas' ill-funded, ill-manned, and ill-equipped fire prevention and suppression system remarked on the "rank stupidity . . . in the insufficiency of the protection provided."[24] Siecke wrote in 1930 that "available funds for fire prevention and suppression work have never been more than one-sixth of the total considered necessary

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[22]Thirteenth Annual Report, 37.

[23]Eleventh Annual Report, 22; Thirteenth Annual Report, 6; The Texas Forest Service, 4; Siecke, "Timber and Commercial Woods Reforestation," 288.

[24]George P. Ahern, Forest Bankruptcy in America, Each State's Own Story (Washington, 1933), 256.

to give adequate protection."[25] In 1927, Texas had 14.3 million acres requiring protection, but only 8.3 under the Forest Service's policing. Of $359,200 needed to protect Texas forests, the service could allot only 17.5 per cent, or $62,795.[26] Although the Clarke-McNary Act of 1924 provided for cooperative fire protective work on private lands, owners contributing one-half the cost and state and federal services the rest, no landowners provided any funds before 1927.[27]

As early as 1917, J. H. Foster, in a letter to John Henry Kirby, expressed a desire to cooperate with private owners in forest protection, using public and private patrolmen on large holdings as did many northwestern states.[28] Kirby thought the suggestion important but had no advice as to how to achieve the cooperation of East Texas landowners in establishing fire patrols.[29] When E. O. Siecke replaced Foster, he also conveyed the hope for creation of an association of timber owners to cooperate with the forestry department.[30] Nothing developed from these

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[25]E. O. Siecke, "Texas and Her Timber," Nature Magazine, XVI (December, 1930), 382.

[26]Woods, "Texas Timberland and State Forestry," 305.

[27]Bruner, "Progress in Forest Protection in the South," 307.

[28]J. H. Foster to John Henry Kirby, May 30, 1916, Kirby Papers.

[29]John Henry Kirby to J. H. Foster, June 5, 1917, ibid.

[30]"Texas Has New State Forester," 38.

proposals immediately, although some lumber companies, notably the Long-Bell Company in Alabama, Arkansas, Louisiana, Mississippi, and Texas, utilized private forest patrols to afford proper protection on their lands.[31]

Greater cooperation was forthcoming with the passage of the Clarke-McNary Act in 1924. Lumber industry leaders hailed it as "the Congressional declaration of a new era in practical forestry." Wilson Compton, Secretary and Manager of the National Lumber Manufacturers Association, termed the bill "the most important legislative action yet taken to encourage private reforestation enterprise by the establishing of fundamental economic conditions in fire protection and tax adjustment necessary to its success."[32]

Basically, the Clarke-McNary Act extended state and federal cooperation which began with the 1911 Weeks Law. It authorized federal aid for the protection of forested and cutover lands used for timber production whether on navigable streams or not and reaffirmed the federal government's policy of acquiring national forests. The act also substantially increased federal appropriations, which stimulated greater disbursements by the states.

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[31]"How Long-Bell Combats Forest Fire Evil," Gulf Coast Lumberman, XVI (April 15, 1928), 74; "Long-Bell Institutes Forest Protection in Arkansas, Louisiana, and Texas," ibid., XIII (June 1, 1925), 62.

[32]"McNary-Clarke Law Opens New Era in Practical Forestry," ibid., XII (June 15, 1924), 62.

Because most of the nation's forested land remained in private hands, the act made private participation in reforestation and forest management a primary objective. Through the study of forest taxation to remove the obstacle of high annual assessments on timber land and financial aid to timbered states, the federal government thus hoped to make conditions favorable for the utilization of practical forestry methods on private lands. Under provisions of the law, the federal government would contribute, along with the individual states, one-fourth the cost of forest fire prevention and control work on private lands, the owners paying the other half.[33]

Until the fall of 1927, Texas' forest fire expenditures came solely from state and federal coffers. With the beginning of the fall fire season in 1927, however, large land owners shared the costs of forest protection on established protection units with the state and federal governments.[34] The average protection unit consisted of a tract of approximately 100,000 acres of privately owned timber lands lending itself to thorough fire protection supervised by the Texas Forest Service. Usually each area contained one steel detection tower, and fifteen appointed forest guards policed the block of land. All other areas under state protection received a

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[33] Eleventh Annual Report, 18-21; Report of the Chief of the Forest Service, United States Department of Agriculture (Washington, 1950), 5.

[34] Eleventh Annual Report, 47.

less concentrated policing known as blanket control.[35]

The Southern Pine Lumber Company and Temple Lumber Company first extended financial aid in 1927, followed by the Houston Lumber Company and Gilmer Lumber Company in the spring and fall of 1928. Private contributions of $7,294 in the fifteen months after the creation of the first unit added 395,000 acres owned by the companies and thousands of acres adjoining them to state protected areas. Private funds also enabled the division to erect three eighty-five foot steel observation towers to add to the first one constructed in 1926.[36]

In this same two-year period railroad and lumber companies initiated other forms of cooperation. The Baldwin Locomotive Works, in conjunction with the Texas Forest Service, carried on free fire prevention work, where a Baldwin employee instructed mechanics on making the necessary adjustments for the proper operation of locomotive spark arresters. Lumber company employees as well as farmers, stockmen, and railroad employees also volunteered to aid the service in fire fighting. In addition, in January, 1929, two lumber companies planted pine seedlings on fifty acres of cut-over land, the first commercial forest planting by private land owners in Texas.[37]

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[35] Fifteenth Annual Report 1930, Texas Forest Service, Bulletin 22 (College Station, 1930), 10-13.

[36] Thirteenth Annual Report, 6, 10-11.

[37] Ibid., 18, 23.

Despite the onslaught of the Depression as the decade of the 1930's approached, the Texas Forest Service made some progress toward greater financial assistance from private landowners and the federal government. By 1930, large landowners had listed 775,033 acres with the state for protection, thus relegating 18.7 per cent of the total area protected by the forestry agency to intensive policing.[38] In 1932, land owners, under the pressure of depressed economic conditions, withdrew 12 per cent of the total acreage previously contributed, but in the next few years they renewed cooperation with the state through the creation of more protection units and the contribution of more private funds to burgeoning state and federal expenditures.[39] For the fiscal year 1940, for forest protection alone the state contributed more than $117,000, while private allocations reached $12,474.58.[40] State officials recognized this as a decided advance compared to the forest department's meager beginnings in 1915.

Several significant achievements in both national and state forest policy emanated from the government's response to a depressed economy. The 1933 National Industrial Recovery Act, authorizing business leaders to

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[38] Fifteenth Annual Report, 11.

[39] Seventeenth Annual Report 1932, 13-14.

[40] Twentieth and Twenty-first Annual Reports, 3; Twenty-fourth and Twenty-fifth Annual Reports, 1939-1940, Texas Forest Service, Bulletin 30 (College Station, 1940), 14; John A. Haislet to author, March 6, 1972.

promulgate industry-wide codes to insure fair business practices, included an article for conservation in the lumber industry. The Associated Lumber Mutuals submitted Article X entitled "Conservation and Sustained Production of Forest Resources" under which those companies following the code's stipulations would, in cutting timber land, leave the terrain in a favorable condition for regrowth. It also required these companies to safeguard small trees from injury by fires and restock the land after logging if some timber growth did not remain. Although the Supreme Court declared the NIRA unconstitutional in 1935, Article X made a distinct contribution to forestry by creating a "conservation consciousness" in many citizens who had never recognized it before. It also engendered public recognition of the problems which lumbermen had to confront and overcome and resulted in the voluntary adoption of forestry measures for the first time by hundreds of companies.[41]

The passage of the Emergency Conservation Work Act, with its more commonly known Civilian Conservation Corps, in 1933 initiated one

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[41] Heyward, "History of Industrial Forestry in the South," 33; "Code of Forestry Practice Drafted at Conservation Conference," Gulf Coast Lumberman, XXI (February 1, 1934), 22; "New Forestry Provisions of Lumber Code Scheduled to Become Effective June 1," ibid. (February 15, 1934), 14; "Lumbermen and Foresters to Confer on Rules for Conservation," ibid. (October 1, 1933), 22; "A Code of Fire Prevention for the Lumber Industry," ibid., 24-25; Eighteenth and Nineteenth Annual Reports, Texas Forest Service, Bulletin 25 (College Station, 1934), 6.

of the greatest offerings to forest conservation in the history of the nation's forestry movement. The brainchild of President Franklin D. Roosevelt, the CCC intended to alleviate the unemployment problem as well as "advance works of a public nature in connection with the forestation of land," in part by preventing and suppressing fires and constructing and maintaining facilities necessary for forest protection.[42] Under the direction of Robert Fechner the CCC sought participants from the ranks of unemployed physically fit youths, eighteen to twenty-five years of age and preferably with dependents. Although the War Department administered the camps, state agencies directed their activities.[43]

In Texas, forestry officials were apprehensive that the plan would place burdens on the small personnel force in the Texas Forest Service, but they welcomed the opportunity to receive federal funds and the CCC crews, which they hoped would greatly further the state's forestry program. Governor Miriam "Ma" Ferguson pledged full support of the activities, and the legislature appropriated $40,000 to render assistance in the establishment of the camps.[44]

By 1934, the CCC reached its peak in the state with seventeen

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[42] First Report of the Director of Emergency Conservation Work (April 5, 1933-September 30, 1933), (Washington, 1934), 1.

[43] Ibid., 2, 4, 15.

[44] Eighteenth and Nineteenth Annual Reports, 6.

camps and nearly 18,000 participants conducting forest conservation work. Most of the activities directed by the group centered on private forest lands and state and national forests, with some work performed on soil erosion projects and state parks. Basically, the work accomplished fell into two classes. Camps near the state forests experimented with timber stand improvement, built roads and tree nurseries, and reforested a large part of the cutover acreage. On private lands the CCC boys cooperated in fire protection operations, as specified under the Clarke-McNary Act, through the construction of fire towers, telephone lines, fire lanes, bridges, and culverts and fire control and suppression.[45]

An inspection trip by John D. Guthrie to several southwestern CCC camps, including a number in Texas, produced the glowing remarks that the CCC boys were "doing a great job with no loafing, turning out a lot of really permanent work in the improvement of the forests, in protection of the woods, and in checking soil waste."[46] In terms of material gains, Texas forestry officials in 1940 noted a decrease in forest fires resulting from the establishment of specially trained fire patrols to work out of each camp. They also pointed to decided gains from the construction of 2,833 miles of forest roads, 81 lookout towers, 2,238 miles of telephone lines,

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[45] Ibid., 10, 12.

[46] John D. Guthrie, "With the Texas Forest Army," American Forests, XXXIX (December, 1933), 548.

stand improvement on 5,326 acres, and the planting of millions of seedlings on state forests.[47] In addition, federal funds helped purchase much needed fire fighting equipment such as half-ton trucks, tractors, graders, and fire towers.[48] Through their dedicated service, the "Texas Forest Army" advanced forestry by ten years in the state.[49]

Beyond material acquisitions, the CCC also produced on a national level a new appreciation of conservation work. In 1942 when the government ordered the liquidation of the remaining camps, CCC officials counted among their contributions the education of many citizens to the value of the conservation of natural resources and the joining of many governmental agencies in the realization that the protection of the nation's natural resources was common to them all.[50] More significantly, the CCC experience presented "foresters—both Federal and State—their greatest conservation opportunity in a generation."[51]

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[47]"When These CCC Boys Plant Trees in East Texas, They Really Plant 'Em," Gulf Coast Lumberman, XXIV (January 15, 1937), 9; Twenty-fourth and Twenty-fifth Annual Reports, 6.

[48]"Large Returns to Texas from Operations of CCC Camps, Gulf Coast Lumberman, XXI (November 15, 1933), 27.

[49]Eighteenth and Nineteenth Annual Reports, 9; Twentieth and Twenty-first Annual Reports, 9, 11.

[50]Eighteenth and Nineteenth Annual Reports, 9; Conrad L. Wirth, Civilian Conservation Corps Program of the United States Department of the Interior (Washington, 1944), 1-2.

[51]Report of the Director of Emergency Conservation Work, (April 5, 1933 through June 30, 1935)(Washington, 1935), 5.

Depression problems also contributed to the ultimate purchase of four national forest units in Texas. In 1933 as East Texas fell into the throes of an ailing economy, the Forty-third Legislature adopted a resolution introduced by Senator John Redditt of Lufkin, requesting the creation of national parks and forests in Texas to help the unemployment situation.[52] Despite concern over the effects federal purchases of private land might have on county tax rolls, Governor Ferguson approved the resolution May 27, 1933, and plans proceeded for the government to acquire land for national forest reserves.[53] In 1936, the legislature authorized the purchase of 1,714,000 acres to be divided among the Sam Houston, Sabine, Crockett, and Angelina National Forests.[54] As on the state forests, experimental and demonstration work as well as income from timber crops grown there greatly nurtured forestry work in the state.

Progress in forest protection throughout the decades of the 1920's and the 1930's also included better fire law enforcement. State forester

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[52]Jack McElroy, "Here's Story of National Forests in Texas," Texas Forests and Texans (May-June, 1964), 8; Journal of the Senate of Texas Being the Regular Session of the Forty-third Legislature (Austin, 1935), 1935.

[53]"Forestry Committee of Texas Planning Board Met," Gulf Coast Lumberman, XXIII (September 1, 1935), 29; "Government Approves Purchase of East Texas Cutover Land," ibid., XXII (December 1, 1934), 30; Eighteenth and Nineteenth Annual Reports, 6.

[54]"Four New National Forests in Texas," Gulf Coast Lumberman, XXIV (November 1, 1936), 24-25.

Siecke related in 1936 that from 1915 to 1935 the department did little to enforce forest fire laws, but rather emphasized educational activities. However, after a season with an appalling number of incendiary fires which destroyed thousands of forested acres in 1935, the Texas Forest Service realized that the "good will system" was not operating successfully. As a result, the service appointed a Texas Ranger to investigate fire law violations. When a fire believed to be incendiary occurred, forest patrolmen collected all information available, and if the case showed promise, called in the enforcement officer. To aid him, the service also organized a volunteer forest fire guard, which attracted 3000 assistants by 1938. Convictions for incendiarism reaped rewards for the service and signaled "a new era of forest protection . . . in the east Texas piney woods." This new era, Siecke defined as one where the "old method of fighting the flames by brawn and muscle is gradually being absorbed by the newer method of fighting the flames before they start."[55]

Throughout these years the number of fires and damage incurred by them steadily decreased on the protected areas. Reports of fires previously ignored by the news media appeared more frequently warning the public of the danger inherent in them both to timber and human lives.[56]

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[55]E. O. Siecke, "Getting Results by Law Enforcement," American Forests, XLV (April, 1939), 212.

[56]The Gulf Coast Lumberman offers a good example of increased fire reports. "Texas Forest Fire Loss Last Year Nearly Half Million," Gulf Coast Lumberman, XXI (May 15, 1933), 30; "Heavy Timber Damage from East Texas Forest Fires," ibid., XX (December 1, 1932), 22; "Heavy Losses Reported in Texas Forest Fires," ibid., XIII (August 15, 1925), 37.

An increase from time to time in the number of conflagrations can be attributed in part to extremely dry seasons and more efficient reporting of blazes.[57] A more sophisticated forest protection division, improved by a consistent increase in personnel and funds, proudly reported in 1940 that 94 per cent of the total area in East Texas received blanket protection by the state's forest service.[58]

The development of farm forestry, the establishment of tree nurseries, the initiation of a pulp and paper industry in Texas, and the establishment of community forests also paid tribute to a maturing forestry movement in the state. Among the other successes which the Department of Forestry enjoyed before the Thirty-eighth Legislature, the appropriation of funds for a farm forestry program to foster cooperation between farmers and foresters was equally important in furthering forest conservation. Legislators appropriated $4000 for farm forestry projects in 1923 to provide equipment, personnel, and funds for tree planting and cultivation on farm woodlots.[59] To achieve these purposes, an appointed farm forester examined woodlots on farms and recommended proper thinning methods, improvements in cutting, harvesting, and fire protection, and suggested means of

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[57] "Heavy Losses Reported in Texas Forest Fires," 37.

[58] Twenty-fourth and Twenty-fifth Annual Reports 1939-1940, 8.

[59] Ninth Annual Report of the State Forester, 38.

securing a profitable second growth crop. The service also developed demonstration tracts on the lands of those most interested in the work.[60]

In 1926, the Texas Forest Service, the Extension Service of A & M College, and the United States Department of Agriculture executed an agreement under provisions of the Clarke-McNary Act for closer cooperation in farm forestry activities. The agreement authorized the state forester to be responsible for the subject matter taught, the Extension Service for field activities of the farm forester, and county agents for the conduct of most of the field work.[61] The effort proved successful as farmers recognized the need for proper management practices, which resulted in fewer fires and less wasteful cutting on farm woodlots.[62]

Another cooperative farm forestry project began in Nacogdoches County in 1940. Projects of this type were unique in the state, since the economies of the areas chosen rested primarily on field crops, with forest products secondary. Forestry and agricultural officials hoped farmers on these projects could take advantage of nonharvesting seasons to produce timber crops.[63]

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[60] Ibid., 43-44.

[61] Eleventh Annual Report, 60-61.

[62] Fifteenth Annual Report, 32-33.

[63] Twenty-fourth and Twenty-fifth Annual Reports, 19-20; "Farm Forest Project Planned," Gulf Coast Lumberman, XXVII (March 1, 1940), 26.

The service's Division of Forest Management built the first tree nursery in the state on the Siecke State Forest in 1926. These sixty-five acres of longleaf pine seedlings represented the first large scale tree planting in Texas. In 1930 the division established a second nursery on Jones State Forest, but lack of demand closed it from 1931-1932. By 1940, requests for seedlings increased enough to require the acquisition of another nursery at Alto, Texas. Funds procured under provisions of the Clarke-McNary Act and the Norris-Doxey Farm Forestry Law purchased the site.[64]

In the last years of the 1930's the Texas Forest Service proved in numerous experiments that logged pine tops could be successfully utilized for chemical pulp. Foresters called this development one of the most far-reaching forest conservation practices developed in East Texas in the Thirties and applauded the construction of a paper pulp mill near Houston by Champion Paper and Fibre Company in 1937.[65] In 1939, the service also reported the building of a newsprint mill by Southland Paper Mills, Inc., near Lufkin—the first of its kind in the South.[66] Demonstrating that wasteful logging was no longer necessary, the paper and pulp

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[64]Eleventh Annual Report, 51; Haislet, "Texans Evolve a State Forestry Agency," 7; Twenty-fourth and Twenty-fifth Annual Reports, 3.

[65]Twenty-second and Twenty-third Annual Reports, 1937-1938, Texas Forest Service, Bulletin 27 (College Station, 1938), 3.

[66]Ibid., 3.

industry contributed much to Texas' forest conservation program.

By the end of 1940, several communities adopted the practice common in many European nations of establishing community forests. From forest property owned by towns, counties, or civic groups the state authorized the establishment of these forests at Luling, Lufkin, Port Arthur, and Texarkana. In addition to producing a timber crop and serving demonstration and education functions, these forests, like the state and national forests, provided recreational facilities for the state's citizens.[67]

From all indications the eighteen-year period from 1922 to 1940 witnessed a veritable coming of age for forestry in Texas. A department originally forced to center its activities around educational endeavors ripened under the impetus of increased funds and greater public interest. The successes it enjoyed in this period should have come earlier, but the state still made inroads necessary for the proper functioning of forestry practices. Progress in the next ten years complemented these progressive steps and proved that a concerted forestry policy provided countless benefits to the state's citizenry.

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[67] Twenty-fourth and Twenty-fifth Annual Reports, 4, 35; "Plan of Community Forests for Texas Merits Consideration," Gulf Coast Lumberman, XXVI (March 15, 1939), 34; Community Forests for East Texas, Texas Forest Service, Bulletin 28 (College Station, 1940), 1-15; Nelson C. Brown, "Community Forests: their Place in the American Forestry Program," Journal of Forestry, XXXIX (February, 1941), 171-179.

CHAPTER V

FORESTRY REACHES THE HALF-CENTURY MARK

Forest conservation activities in the 1940's freed from the controversial status relegated to them in the early years of the movement's existence, significantly reinforced forestry's improved position in the state. In 1942 Forester Siecke, who directly contributed to the Forest Service's numerous successes in twenty-four years of service, resigned his position, and William E. White, former head of the agency's Division of Forest Protection, replaced him. Under his leadership for the next six years until Alfred D. Folweiler became director in 1949, the Forest Service achieved greater prominence among other southern states for its advancement of practical forestry.[1]

The problem of wartime timber needs immediately confronted White in his new duties. Lumber demands necessarily increased timber cuts to over two billion board feet in 1941 and 1942, the greatest since 1917.[2] In a speech before concerned citizens, Siecke voiced his opinion that the

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[1] The Texas Forest Service, 4; "E. O. Siecke Resigns as Director of Texas Forest Service—W. E. White Appointed," Gulf Coast Lumberman, XXX (October 15, 1942), 24, 38.

[2] Texas Forestry Progress 1941-1942, Twenty-sixth and Twenty-seventh Annual Reports, Texas Forest Service, Bulletin 31 (College Station, 1942), 4.

1941-1942 overcut would not exceed drastically the amount of timber replenished during the Depression. Regardless of the danger to the forests, he asserted, "if wood fiber is helping win the war, it is better to cut all the wood fiber we need than to have Germany or Japan dictate the forestry policy of Texas in the future."[3] To assist the war effort the Texas Forest Service instituted a program directed by Allen F. Miller, Texas' national forest supervisor, to promote timber production.[4] In addition, the service enlisted its lookout towers and telephone communications to report any enemy aircraft movements, a function which lasted until 1943 when the government relieved this makeshift aircraft warning service of its duties.[5] Under the emergency conditions of wartime, the state also inaugurated a Forest Fire Fighters Service under White's direction to augment regular protection activities. Governor Coke Stevenson chaired the organization of 7000 well-equipped and trained volunteers, which operated as a branch of the Civilian Defense system.[6]

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[3]"Utmost Aid to War Effort Pledged at Forestry Convention," Gulf Coast Lumberman, XXX (July 15, 1942), 24.

[4]"Forest Service to Help Push Timber Production in Texas," ibid., XXXI (September 1, 1943), 26.

[5]Texas Forestry Progress 1941-1942, 7; Texas Forestry Progress 1943-1944, Twenty-eighth and Twenty-ninth Annual Reports, Texas Forest Service, Bulletin 32 (College Station, 1944), 16.

[6]"Organize Forest Fire Fighters," Gulf Coast Lumberman, XXX (March 1, 1943), 35; Texas Forestry Progress 1941-1942, 13.

Aerial forest protection under the auspices of the Texas Forest Service and the Civil Air Patrol also commenced in the state as a result of wartime conditions. Lieutenant-Colonel D. Harold Byrd, Texas Wing Commander of the Civil Air Patrol, headed the CAP Forest Unit, which functioned with funds from the Forest Service, private landowners, and East Texas forest industries.[7] As a supplement to lookout tower fire detection, the Forest Unit reported blazes via radio communications to trained personnel at ground stations and mobile units. As the central office received fire data from the unit, forestry officials plotted the area under alert on a fire control map and then dispatched ground crews to the site. Where practical, these ground fire fighters operated according to fire fighting and movement instructions provided by hovering aircraft.[8] If an air crew spotted a fire being used to clear land, the plane dropped a message wrapped in a red bag with yellow streamers warning the landowner to keep the flames in check. During off seasons, the aerial patrol also conducted timber surveys and reported on timber

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[7]"Forest Service Gets Airplane to Combat Fires," Gulf Coast Lumberman, XXXV (December 1, 1947), 14; Texas Forestry Progress 1943-1944, 18-20.

[8]"New Texas Forest Air Patrol Serves in Fire Protection Work," Gulf Coast Lumberman, XXXI (May 1, 1944), 28-29; S. L. Frost, "An 'Air-Arm' For Forestry," American Forests, LI (February, 1945), 56-59.

growth.[9]

During its wartime service, the CAP Forest Unit flew 122,000 miles on 474 missions and reported 1,704 fires, providing a valuable contribution to the department's forest protection program. After the war the Forest Service continued operation of the aerial policing, acquiring three planes by 1948.[10] With this addition to its forest protection division, Texas became one of the first southern states to make extensive use of planes for detecting forest fires.[11]

Increased logging resulting from wartime needs naturally promoted anxious queries as to the effect on the nation's timber supply. In 1944 Texas Forest Service officials allayed some fears in reporting that timber was being grown at the rate of 156 board feet per acre and used at the rate of 154 board feet per acre in the state. Although this suggested that the East Texas forests were "holding their own . . . " foresters recommended no relaxation in conservation projects, particularly reforestation.[12] Subsequently, timber growing projects on private holdings actively multiplied.

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[9]"New Texas Forest Air Patrol Serves in Fire Protection Work," 28-29; Frost, "An 'Air-Arm' for Forestry," 92.

[10]"TFS Now Operates Its Own Air Patrol," Texas Forest News, XXVII (January, 1948), 10.

[11]Haislet, "Texans Evolve a State Forestry Agency," 7.

[12]S. L. Frost, "What's Happening to Texas Forests," Texas Forest News, XXVII (February, 1948), 3.

Forester White reported the most widespread participation of the forest industries in forest conservation in the 1940's than ever before.[13] Several companies, notably the Kirby Lumber Company, Southland Paper Mills, and Angelina County Timber Company, planted millions of pine seedlings on company lands. Foresters predicted that two-thirds of Texas' forest industries practiced some kind of forest management and aided small landowners in reforestation by offering them the services of their foresters and providing them with millions of small pines. Throughout the 1940's many of these companies increased their contributions to forest protection funds, so by the end of the decade nearly $120,000 of private funds supplemented the service's expenditures.[14] Much of this money enabled the agency to mechanize its protection division with tractors, plows, and jeeps equipped with special fire fighting devices.[15]

Despite these advances, the United States Forest Service reported a million-acre increase in poorly stocked and denuded areas in Texas between 1935 and 1945, a situation which many foresters attributed to poor

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[13] Texas Forestry Progress 1941-1942, 18-19.

[14] "Intense Reforestation Program Under Way in East Texas," Gulf Coast Lumberman, XXXV (November 1, 1947), 36; Texas Forestry Progress 1941-1942, 18-19; "Two-thirds of Texas Industrial Forest Lands Under Management," Gulf Coast Lumberman, XXIX (February 15, 1942), 33.

[15] "Private Monies to Help Double TFS Fire Fighting Equipment," Texas Forest News, XXVII (July-August, 1948), 3; Texas Forestry Progress 1941-1942, 5-6; Texas Forestry Progress 1943-1944, 13-14; Texas Forestry Progress 1945-1946, Texas Forest Service, Bulletin 40 (College Station, 1946), 3; "Special Tractor Aids Texas Fire Fighting Service," Gulf Coast Lumberman, XXXII (March 15, 1945), 42; "New Equipment and Machinery on Display at Texas Forest Festival," ibid., XXXV (September 1, 1947), 4.

cutting practices by small landowners.[16] Before his retirement Siecke suggested that improving the forestry methods of the small landowner had to be a primary concern of the Forest Service in the 1940's.[17] Through cooperative endeavors such as the farm forestry project and assistance from large private land holders, the service made some progress, but a new program, the Tree Farm System, provided a greater impetus to reforestation by both large and small landowners.

The Weyerhaeuser Timber Company first conceived the name "tree farm" in 1941 on its Clemons Tree Farm in Washington State where foresters applied proper management to demonstrate the possibility of continuous production of forest crops to the public. After the concept attracted favorable nationwide attention, the National Lumber Manufacturers Association in November, 1941, proposed the development of an extensive tree farm movement. In 1943 the association's executive committee approved the proposal and initiated the plan under which land owners in states sponsoring tree farms could register their lands with the organization as American Tree Farms.[18] The American Forest Products Industries Inc., which currently

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[16] Frost, "What's Happening to Texas Forests," 3.

[17] "Utmost Aid to War Effort Pledged at Forestry Convention," 24.

[18] "Certified Tree Farms," Journal of Forestry, XLIV (February, 1946), 127; T. P. Stevens, "Tree Farms Versus Regulation," Annals of the American Academy of Political and Social Science, CCLXXXI (May, 1952), 102.

coordinates the movement, has continued the goal of tree farms by encouraging "the protection and permanent productive use of private forest lands."[19]

Under the sponsorship of the Texas Forest Service, the East Texas Chamber of Commerce, and the Southern Pine Association, state foresters inaugurated the system in Texas in July, 1943, hoping through it to attract private cooperation and aid in proper forestry methods.[20] Described simply as "an area which is managed by the continuous production of timber of commercial value," the Tree Farm had to include at least five acres of either natural or planted forest land where owners practiced forest management, including proper cutting practices and adequate protection.[21] By 1948, the program had been so successful that Texas ranked second only to Arkansas in tree farm acreage with 2,401,613 acres.[22]

The fruition of the Tree Farm System offered a particularly fitting finale for fifty years of forestry activity in Texas. By enabling private

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[19]Stevens, "Tree Farms Versus Regulation," 102.

[20]"Forestry Association Meeting Inaugurates a Texas Tree Farming Program," Gulf Coast Lumberman, XXX (August 1, 1943), 14; Nort Baser, "The Tree Farm's Place in the Texas Forestry Program," Texas Forest News, XXVII (May-June, 1948), 3-4; Texas Forestry Progress 1943-1944, 65; "Tree-Farm Program Marks Important Step in Texas Forestry," Gulf Coast Lumberman, XXXII (November 1, 1944), 18, 22, 26.

[21]Texas Tree Farms System, Texas Forest Service, Circular 27 (n.p., 1942).

[22]"Second Largest Tree Farm Acreage in Texas," Gulf Coast Lumberman, XXXV (January 1, 1948), 37.

groups on both commercial and farm woodlots to reforest, the movement achieved a primary goal of conservationists, who as early as the turn of the century argued that because forest resources were renewable, public and private landowners should replenish them for generations to follow. If properly protected from fire and over-cutting and renewed where logging had denuded the land, these woodlands, citizens discovered, could provide a perpetual supply of timber.

The acceptance of forestry practices as beneficial developed slowly in Texas largely because of public belief that the seemingly undestructive surface fires were useful or inevitable, legislative indifference compounded by agricultural and business-oriented representation, and a conservative lumber establishment. Although the forestry department spent thousands of dollars to educate citizens on the destructiveness of annual burnings, as late as 1946 a district forester complained of persons using fire to clear their ranges and pasturelands of brush. The attitude that such fires without proper supervision could be helpful naturally moderated private interest and cooperation in forest protection activities and lessened their effectiveness. Despite this handicap, the service progressed decidedly in fire prevention and suppression in the fifty-year period. As private owners became more aware of the diminishing forest area which provided their livelihood, the possibility of strict governmental regulation if cooperation lagged, and the profitability of replenishing timber as it

was cut, they contributed larger amounts of private monies.[23] Although this cooperation developed comparatively late in Texas because of public indifference and the quest for financial gain by a rapidly maturing lumber industry, the collaboration of private and public entities occurred soon enough to bolster the struggling forestry agency into an effective position. Control activities conducted during the destructive 1947 conflagration near Conroe attested to the worth of a mature organization which commenced its operation virtually powerless thirty-two years earlier.

The lack of legislative awareness of the need for a concerted forest program also deterred the advancement of the forestry movement in its formative years despite the efforts of such able and dedicated conservation lobbyists as W. Goodrich Jones and Eric O. Siecke. Representatives of West Texas farmers and ranchers generally exhibited little real sympathy with East Texas landowners concerned over timber depletion. Business-minded legislators, fearful that a progressive forest policy might threaten an industry which poured so much money into the state, grudgingly approved only the minimal requests of forestry officials in the early years of the department's existence. The close vote on the creation of the agency in 1915, niggardly appropriations and threats to suspend them, and opposition to the severance tax provide excellent cases in point. Legislative

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[23] Stevens, "Tree Farms Versus Regulation," 101.

squabbles and inactivity continue to plague the Forest Service, as seen in the failure to amend the tax situation after more than fifty years of active concern over its effect on reforestation in the state.

The lumber industry itself also greatly affected the ultimate position which the forestry movement would acquire in Texas. The department owed its very existence in part to the "cut-out and get-out" policy pursued by lumbermen throughout the first twenty years of the twentieth century. Subsequent legislation often thrived or failed depending on the industry's response to it. Having learned its lesson in alienating lumber interests during the severance tax controversy, the Forest Service rapidly perceived the need to coordinate its activities with the lumber sector of the economy to achieve its goals.

Although lumbermen, not only in Texas but throughout the country, exploited and devastated forest lands, they also fostered the development of the nation. Unfortunately, lumber interests, like many groups in the pursuance of monetary gain, did not embrace the concept of foresight until timber resources faced depletion. Theodore Roosevelt once discussed the absence of concern for future generations demonstrated by lumbermen and other forest users. "In utilizing and conserving the natural resources of the Nation," he wrote, "the one characteristic more essential than any other is foresight." Unfortunately, he continued, "foresight is not usually characteristic of a young and vigorous people, and it is obviously not a

marked characteristic of us in the United States." As a result, "we have tended to live with an eye single to the present, and have permitted the reckless waste and destruction of much of our natural wealth."[24] Nevertheless, Roosevelt responded negatively to nonuse or nondevelopment of resources as a solution to the problem. He defined conservation as the use of resources under enough regulation to prevent "waste, extravagance, and monopoly," but at the same time recommended permitting and encouraging their development as required to serve the needs of the general public.[25] With this concept in mind, Texas conservationists directed a statewide forestry movement which in fifty years attacked and approached a realistic solution to the fundamental problem of forest depletion.

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[24] Theodore Roosevelt, Presidential Addresses and State Papers (New York, 1910), VI, 1310-1311.

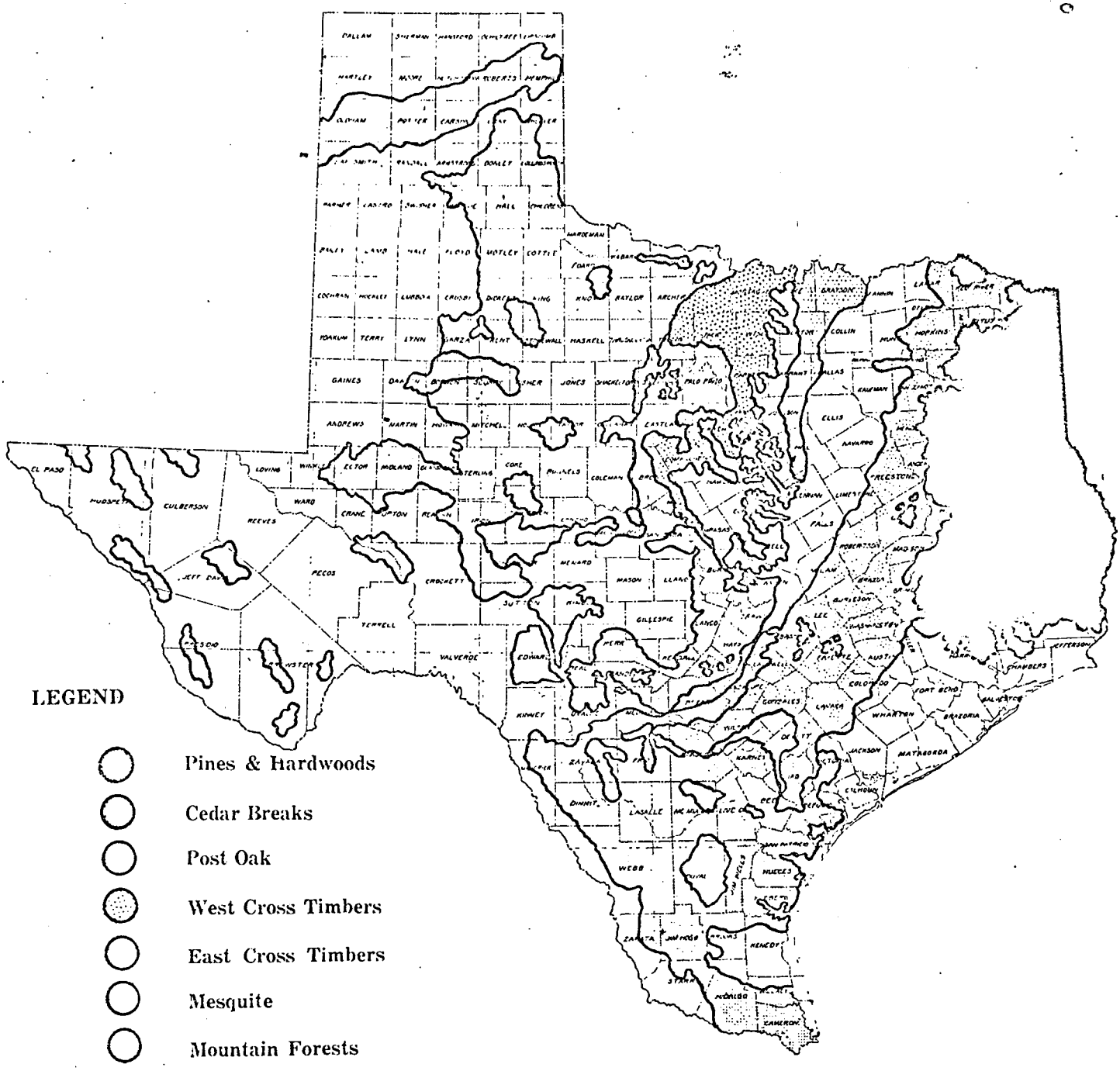
[25] "Roosevelt's Definition of Conservation," Southern Industrial and Lumber Review, XVIII (September, 1910), 62.

APPENDIX

Forest Regions of Texas

Texas Forests and Texans, Texas Forest Service, Circular 24 (College Station, Texas, April, 1956), 1.

FOREST REGIONS OF TEXAS



LEGEND

- Pines & Hardwoods
- Cedar Breaks
- Post Oak
- West Cross Timbers
- East Cross Timbers
- Mesquite
- Mountain Forests

This map represents the combined efforts of the United States Forest Service, the Soil Conservation Service and the Texas Forest Service. It is the best available at this time, but lacks details on a number of areas in the State which are known to bear tree growth. Because these areas have not been accurately mapped they were not included on this reproduction.

BIBLIOGRAPHY

CRITICAL ESSAY ON SOURCES

A comprehensive study of forestry in Texas required extensive research in contemporary sources, particularly periodicals and government publications. The Gulf Coast Lumberman, largely because of its function for many years as mouthpiece of the Texas Forestry Association, served as one of the best sources for bi-monthly reports of forest conservation activities. As a trade journal, it also provided a reliable picture of the lumber industry's position on forestry. Another trade journal, the Southern Industrial and Lumber Review, reported extensively on forest conservation efforts prior to 1915. Had a complete run of the journal been available, it would have been of greater value.

Circulars and bulletins issued by the Texas Forest Service are available in a complete set only at the service's library in College Station, but individual copies may be found at several university libraries. These publications, consistent on a yearly basis after 1924, were invaluable in determining the problems faced and successes enjoyed by the department from 1915 to 1950. The inclusion of specific figures relating to various aspects of the service's operations also enhanced the value of the records.

The papers of W. Goodrich Jones added much to the study of the forestry movement, particularly in its formative years. Speeches and

letters written by Jones also indicated the approach which conservationists took and the intensity of concern which they felt in efforts to save the state's forest resources. Newspaper clippings from various scrapbooks, which Jones and the members of his family compiled, led to a number of discoveries and gave some indication of public response to forestry work.

The John Henry Kirby Papers complemented Jones' papers and contributed real insight into the lumber industry's attitude toward forestry efforts. Several letters in the collection filled in a number of significant gaps in information concerning the actual steps toward creation of a Department of Forestry.

Several secondary works facilitated the search for materials by providing leads to primary sources. James W. Martin's "The Forest Conservation Movement in Texas, 1900-1935," approached the subject from a more technical point of view and did not utilize the Kirby Papers or a great deal of material from the Gulf Coast Lumberman or the Southern Industrial and Lumber Review. A pamphlet written by Martin and Robert W. Maxwell briefly traces forest conservation in the state over a sixty-year period but does not attempt an in-depth study. Several recent articles in Texas Forests and Texans were also worthwhile for discussions of the more significant accomplishments of Texas' forest conservationists.

Much of the material utilized had to be borrowed from other libraries. However, the University of Houston library contains three

important sources consulted: the Texana collection containing early travel accounts cited, the John Henry Kirby papers, and an incomplete but extensive run of the Gulf Coast Lumberman. Those copies of the journal which the library lacked were supplied by the Gulf Coast Lumberman's Houston office and the Houston Public Library.

BIBLIOGRAPHY

PRIMARY SOURCES

Manuscripts and Manuscript Collections

W. Goodrich Jones Papers. East Texas Collection, Stephen F. Austin State University Library, Nacogdoches, Texas.

John Henry Kirby Papers. Texas Gulf Coast Historical Association Collection, University of Houston Library.

Government Publications

Annual Reports of the Director of the Civilian Conservation Corps, 1938-1941. Washington, 1938-1941.

Annual Reports of the Director of Emergency Conservation Work, 1936-1937. Washington, 1936-1937.

Bray, William L., Forest Resources of Texas. U. S. Department of Agriculture, Bulletin 47. Washington, 1904.

Cleveland, Treadwell, The Status of Forestry in the United States. U. S. Department of Agriculture, Circular 167. Washington, 1909.

Community Forests for East Texas. Texas Forest Service, Bulletin 28. College Station, 1940.

Eighteenth and Nineteenth Annual Reports. Texas Forest Service, Bulletin 25. College Station, 1934.

Eleventh Annual Report. Texas Forest Service, Bulletin 18. College Station, 1926.

Fifteenth Annual Report 1930. Texas Forest Service, Bulletin 22. College Station, 1930.

First Annual Report of the State Forester. Agricultural and Mechanical College of Texas, Bulletin 4. College Station, 1917.

First Report of the Director of Emergency Conservation Work (April 5, 1933-September 30, 1933). Washington, 1934.

Forbes, R. D., Timber Growing and Logging and Turpentining Practices in the Southern Pine Region. U. S. Department of Agriculture, Technical Bulletin 204. Washington, 1931.

Foster, J. H., Grass and Woodland Fires in Texas. Agricultural and Mechanical College of Texas, Bulletin 1. Austin, 1916.

_____, H. B. Krausz, George W. Johnson, Forest Resources of Eastern Texas. Agricultural and Mechanical College of Texas, Bulletin 5. Austin, 1917.

_____, H. B. Krausz, A. H. Leidigh, General Survey of the Texas Woodlands including a Study of the Commercial Possibilities of Mesquite. Agricultural and Mechanical College of Texas, Bulletin 3. College Station, 1917.

_____, and F. H. Millen, Forest Fire Prevention in Cooperation with the Federal Government. Agricultural and Mechanical College of Texas, Bulletin 6. College Station, 1917.

Graves, Henry S., Protection of Forests from Fire. U. S. Department of Agriculture, Bulletin 82. Washington, 1910.

Mohr, Charles Theodore, The Timber Pines of the Southern United States. U. S. Department of Agriculture, Bulletin 13. Washington, 1896.

Ninth Annual Report of the State Forester. Agricultural and Mechanical College of Texas, Bulletin 17. College Station, 1924.

Peters, J. Girvin, Forest Fire Protection by the States. U. S. Department of Agriculture. Washington, 1914.

_____, Forest Fire Protection Under the Weeks Law in Cooperation with States. U. S. Department of Agriculture, Circular 205. Washington, 1912.

1950 Report of the Chief of the Forest Service. U. S. Department of Agriculture. Washington, 1950.

Report of the Director of Emergency Conservation Work (April 5, 1933-June 30, 1935). Washington, 1935.

Second Annual Report of the State Forester. Agricultural and Mechanical College of Texas, Bulletin 8. College Station, 1917.

Second Report of the Director of Emergency Conservation Work (April 5, 1933-September, 1933 and October 1, 1933-March 31, 1934). Washington, 1934.

Seventeenth Annual Report 1932. Texas Forest Service, Bulletin 23. College Station, 1932.

State Forests of Texas. Texas Forest Service, Circular 87. n.p., 1964.

The Texas Forest Service: Its History, Objectives, and Activities. Texas Forest Service, Circular 100. College Station, 1965.

Texas Forestry Progress 1945-1946. Texas Forest Service, Bulletin 40. College Station, 1946.

Texas Forestry Progress 1943-1944, Twenty-eighth and Twenty-ninth Annual Reports. Texas Forest Service, Bulletin 32. College Station, 1944.

Texas Forestry Progress 1941-1942, Twenty-sixth and Twenty-seventh Annual Reports. Texas Forest Service, Bulletin 31. College Station, 1942.

Texas Forests and Texans, Texas Forest Service, Circular 24. College Station, 1956.

Texas, General Laws of the State of Texas Passed by the Thirty-Eighth Legislature at the Regular Session. Austin, 1923.

Texas, Journals of the House of Representatives. Austin, Texas, 1915-1933.

Texas, Journals of the Senate. Austin, Texas, 1915-1933.

The Texas Planning Board, A Review of Texas Forestry and Its Industries. Austin, 1937.

The Texas Tree Farms System. Texas Forest Service, Circular 27. College Station, 1952.

Thirteenth Annual Report. Texas Forest Service, Bulletin 21. College Station, 1928.

Twentieth and Twenty-first Annual Reports 1935-1936. Texas Forest Service, Bulletin 26. College Station, 1936.

Twenty-fourth and Twenty-fifth Annual Reports 1939-1940. Texas Forest Service, Bulletin 30. College Station, 1940.

Twenty-second and Twenty-third Annual Reports 1937-1938. Texas Forest Service, Bulletin 27. College Station, 1938.

Wirth, Conrad L., Civilian Conservation Corps Program of the United States Department of the Interior, March, 1933 to June 30, 1943. Washington, 1944.

Wyman, Lenthall and W. Goodrich Jones, Forest Fire Prevention in East Texas. Agricultural and Mechanical College of Texas, Bulletin 9. College Station, 1919.

Printed Diaries, Reminiscences, Collections of Letters, and Travel Accounts

De Cordova, Jacob, Texas Her Resources and Her Public Men. Philadelphia, 1858.

Gaillardet, Frédéric, Sketches of Early Texas and Louisiana. James L. Shepherd III (tr.). Austin, 1966.

Holley, Mary Austin, Texas Observations, Historical, Geographical and Descriptive, In a Series of Letters. Baltimore, 1833.

Ikin, Arthur, Texas; Its History, Topography, Agriculture, Commerce, and General Statistics. London, 1841.

Kennedy, William, Texas: The Rise, Progress, and Prospects of the Republic of Texas, 2 vols. London, 1841.

Lang, William W., A Paper on the Resources and Capabilities of Texas. New York, 1881.

Olmstead, Frederick Law, A Journey Through Texas. New York, 1857.

Roosevelt, Theodore, Presidential Addresses and State Papers, 8 vols. New York, 1910.

Newspapers

Austin Statesman, February, 1890.

Beaumont Enterprise, 1899-1900.

Dallas Morning News, April, 1910, August, 1914, May-December, 1920, March-May, 1921.

East Texas Register, November 1914-October, 1915.

Galveston News, March, 1921-May, 1921.

Houston Chronicle, March, 1921-May, 1921.

Upshur County Echo, September, 1908.

Contemporary Periodicals

"Additional Lands Acquired for Texas Reforestation Experiments," Gulf Coast Lumberman, XIV (July 15, 1926), 31.

"Address of Hon. Lynch Davidson," Gulf Coast Lumberman, XII (April 15, 1924), 49, 54.

"Address of W. Goodrich Jones before the Texas Lumbermen's Association, Gulf Coast Lumberman, III (April 15, 1915), 43-45.

Baser, Nort, "The Tree Farm's Place in the Texas Forestry Program," Texas Forest News, XXVII (May-June, 1948), 3-4.

"Big Cutover Land Potato Crop," Gulf Coast Lumberman, IV (May 1, 1916), 39.

Bond, W. E., "Timber Growing Possibilities of East Texas," Gulf Coast Lumberman, XV (December 1, 1927), 44, 46.

Brown, Nelson C., "Community Forests: Their Place in the American Forestry Program," Journal of Forestry, XXXIX (February, 1941), 171-179.

Bruner, E. Murray, "Progress in Forest Protection in the South," Journal of Forestry, XXVI (March, 1928), 299-314.

"Building Yellow Pine Ships," Gulf Coast Lumberman, IV (January 1, 1917), 26-29.

"A Bulletin on Forest Fires," Southern Industrial and Lumber Review, XX (December, 1912), 72.

"Business After the War," Gulf Coast Lumberman, IV (October 15, 1916), 33.

"Campaigning for Texas Forester," Gulf Coast Lumberman, II (May 15, 1914), 23.

"Certified Tree Farms," Journal of Forestry, XLIV (February, 1946), 127.

Chambers, William T., "Pine Woods Regions of Southeastern Texas," Economic Geography, X (July, 1934), 302-318.

"A Code of Fire Prevention for the Lumber Industry," Gulf Coast Lumberman, XXI (October 1, 1933), 24-25.

"Code of Forestry Practice Drafted at Conservation Conference," Gulf Coast Lumberman, XXI (February 1, 1934), 22.

"Condemns the Burning of Forest Lands," Southern Industrial and Lumber Review, XVI (March, 1909), 73.

"Conservation and Reforestation," Southern Industrial and Lumber Review, XX (July, 1913), 77.

"A Continent Despoiled," Southern Industrial and Lumber Review, XVI (May, 1909), 20.

"Cut-over Land Activities Begin," Gulf Coast Lumberman, V (July 1, 1917), 50-51.

"The Cut-over Lands Again," Southern Industrial and Lumber Review, XXV (August, 1916), 47.

"Cut-over Lands—Their Marvelous Productiveness," Southern Industrial and Lumber Review, XVIII (December, 1910), 36-37.

"Cut-over Pine Lands a Success," Southern Industrial and Lumber Review, XXVI (June 30, 1917), 56.

Dana, Samuel T., "Farms, Forests,and Erosion," Southern Industrial and Lumber Review, XXVI (April, 1917), 52-53.

Demmon, E. L., "Fires, and Forest Growth," American Forests and Forest Life, XXXV (May, 1929), 273-276.

"Developing and Colonizing Cut-over Lands," Southern Industrial and Lumber Review, XXI (August, 1913), 23.

Dionne, Jack, "The Texas Forestry Association, the Texas Lumbermen and the Proposed Forestry Legislation," Gulf Coast Lumberman, IX (June 1, 1921), 68, 70, 73.

_____, "Yale Foresters in Texas," Southern Industrial and Lumber Review, XVI (April, 1909), 44-45.

"East Texas Cut-over Lands," Southern Industrial and Lumber Review, XXI (August, 1913), 29.

Edmiston, Dorothy, "Tragedy of Trees," The Texas Monthly, V (June, 1930), 576-585.

Emerson, F. V. "The Southern Longleaf Pine Belt," The Geographical Review, VII (February, 1919), 81-90.

"E. O. Siecke Resigns as Director of Texas Forest Service—W. E. White Appointed," Gulf Coast Lumberman, XXX (October 15, 1942), 24, 38.

"Farm Forest Project Planned," Gulf Coast Lumberman, XXVII (March 1, 1940), 26.

Fernow, B. E., "Forestry and the War," Journal of Forestry, XVI (February, 1918), 149-154.

"Fire Prevention Work in East Texas," Gulf Coast Lumberman, IV (September 15, 1916), 30.

"Fire Protection and Patriotism," Gulf Coast Lumberman, VI (April 1, 1918), 9.

"The Forest and the State," Southern Industrial and Lumber Review, XVI (September 20, 1908), 20.

"Forester Foster and the Legislative Committee," Southern Industrial and Lumber Review, XXVII (April 30, 1918), 11.

"Forestry Association Meeting Inaugurated a Texas Tree Farming Program," Gulf Coast Lumberman, XXX (August 1, 1943), 14, 26-27.

"Forestry Committee of Texas Planning Board Met," Gulf Coast Lumberman, XXIII (September 1, 1935), 29.

"The Forestry Law Needs Help," Gulf Coast Lumberman, II (April 1, 1915), 3.

"Forestry Laws of Texas," Gulf Coast Lumberman, II (November 15, 1914), 34.

"Forest Service Gets Airplane to Combat Fires," Gulf Coast Lumberman, XXXV (December 1, 1947), 14.

"Forest Service to Help Push Timber Production in Texas," Gulf Coast Lumberman, XXXI (September 1, 1943), 26.

"For Texas Forestry Law," Gulf Coast Lumberman, II (November 1, 1914), 9.

Foster, J. H., "Forest Fire Prevention," Gulf Coast Lumberman, V (January 1, 1918), 14.

"Four New National Forests in Texas," Gulf Coast Lumberman, XXIV (November 1, 1936), 24-25.

Frost, S. L., "An 'Air-Arm' for Forestry," American Forests, LI (February, 1945), 56-59.

_____, "What's Happening to Texas Forests," Texas Forest News, XXVII (February, 1948), 3-7.

"Government Approves Purchase of East Texas Cut-over Lands," Gulf Coast Lumberman, XXII (December 1, 1934), 30.

Guthrie, John D., "With the Texas Forest Army," American Forests, XXXIX (December, 1933), 547-548, 576.

"Heavy Losses Reported in Texas Forest Fires," Gulf Coast Lumberman, XIII (August 15, 1925), 37.

"Heavy Timber Damage from East Texas Forest Fires," Gulf Coast Lumberman, XX (December 1, 1932), 22.

"How Fires Retard the Growth of Young Timber," Gulf Coast Lumberman, XVII (November 1, 1929), 52.

"How Long-Bell Combats Forest Fire Evil," Gulf Coast Lumberman, XVI (April 15, 1928), 74.

"An Important Conference," Southern Industrial and Lumber Review, XXVI (April, 1917), 49.

"Intense Reforestation Program Under Way in East Texas," Gulf Coast Lumberman, XXXV (November 1, 1947), 36.

"J. L. Thompson Writes on Forest Fire Losses—Some Reflections," Gulf Coast Lumberman, XIII (November 1, 1925), 13.

"John Henry Kirby Donates East Texas Forest Lands to A & M College," Gulf Coast Lumberman, XV (January 15, 1928), 46.

Jones, W. Goodrich, "Campaigning for Forestry in Texas," American Forests, XXXIII (January, 1927), 42-43.

Kendall, Harry T., "The Lumberman's Attitude Toward Forestry," Journal of Forestry, XVII (October, 1919), 647-649.

"Large Returns to Texas from Operation of CCC Camps," Gulf Coast Lumberman, XXI (November 15, 1933), 27.

"Long-Bell Institutes Forest Protection in Arkansas, Louisiana, and Texas," Gulf Coast Lumberman, XIII (June 1, 1925), 62.

"Lumbermen and Foresters to Confer on Rules for Conservation," Gulf Coast Lumberman, XXI (October 1, 1933), 22.

"McNary-Clarke Law Opens New Era in Practical Forestry," Gulf Coast Lumberman, XII (June 15, 1924), 62.

"Mature Southern Pine Seldom Fire Damaged," Gulf Coast Lumberman, XIII (October 1, 1925), 54.

Mayo, H. M., "East-Southeast Texas—the 'Cut-over' Empire," Gulf Coast Lumberman, I (January 1, 1914), 28.

Moore, Barrington, "French Forests in the War," American Forestry, XXV (June, 1919), 1113-1120.

"Mr. Pinchot in Texas," Southern Industrial and Lumber Review, XVI (May, 1909), 60.

"New Equipment and Machinery on Display at Texas Forest Festival," Gulf Coast Lumberman, XXXV (September 1, 1947), 4.

"New Forestry Provisions of Lumber Code Scheduled to Become Effective June 1," Gulf Coast Lumberman, XXI (February 15, 1934), 14.

"The New Forestry Regiment," Gulf Coast Lumberman, V (October 15, 1917), 36, 39.

Newning, Charles A., "Conservation's Requirements," Southern Industrial and Lumber Review, XX (January, 1913), 76-77.

"New Texas Forest Air Patrol Serves in Fire Protection Work," Gulf Coast Lumberman, XXXI (May 1, 1944), 28-29.

"An Opinion on the Severance Tax," Gulf Coast Lumberman, IX (April 1, 1921, 17-18.

"Organization of 20th Engineers (Forestry)," American Forestry, XXV (June, 1919), 1110.

"Organize Forest Fire Fighters," Gulf Coast Lumberman, XXX (March 1, 1943), 35.

"Passing of the Pine Woods," Southern Industrial and Lumber Review, XXVII (March 31, 1918), 11.

"Patrolling Southern Forests," Gulf Coast Lumberman, V (November 1, 1917), 30.

Peters, J. G., "A Forestry Policy for Texas," Gulf Coast Lumberman, II (January 15, 1915), 25, 27.

Peters, J. G., "A Program of Forest Conservation for the South," Journal of Forestry, XVII (April, 1919), 364-370.

"Plan of Community Forests for Texas Merits Consideration," Gulf Coast Lumberman, XXVI (March 15, 1939), 34.

"Plan to Carry Out Forestry Program in Texas," Gulf Coast Lumberman, X (November 1, 1922), 73.

"Preserve the Timber Resources," Southern Industrial and Lumber Review, XXVI (February, 1917), 14.

Price, Overton, "Saving the Southern Forests," World's Work, V (March, 1903), 3207-3222.

"Private Monies to Help Double TFS Fire Fighting Equipment," Texas Forest News, XXVII (July-August, 1948), 3.

"Propose Severance Tax on Lumber," Gulf Coast Lumberman, VIII (January 1, 1921), 69, 72.

"Reforestation Board to Meet in Beaumont," Gulf Coast Lumberman, XII (July 15, 1924), 61.

Report of the Committee for the Application of Forestry to the Society of American Foresters entitled "Forest Devastation; A National Danger and a Plan to Meet It," Journal of Forestry, XVII (December, 1919), 911-945.

"Roosevelt's Definition of Conservation," Southern Industrial and Lumber Review, XVIII (September, 1910), 62.

"Second Largest Tree Farm Acreage in Texas," Gulf Coast Lumberman, XXXV (January 1, 1948), 37.

E. O. Siecke, "Service of CCC Forestry Camps in Texas Over Four Year Period," Gulf Coast Lumberman, XXIV (February 1, 1937), 14-15.

_____, "Getting Results by Law Enforcement," American Forests, XLV (April, 1939), 212.

_____, "Texas and Her Timber," Nature Magazine, XVI (December, 1930), 381-383.

"Some Cut-over Land Examples," Southern Industrial and Lumber Review, XXVII (November 30, 1917), 49.

"Southern Cut-over Pine Land Association," Gulf Coast Lumberman, V (June 1, 1917), 42.

"Southwest Mill Men on Reforestation," Southern Industrial and Lumber Review, XVI (August 20, 1908), 44-45.

"Special Tractor Aids Texas Fire Fighting Service," Gulf Coast Lumberman, XXXII (March 15, 1945), 42.

"State Forester Hands Out a Needed Roast," Southern Industrial and Lumber Review, XXVII (March 31, 1918), 16.

"Strawberries on Cut-over Lands," Gulf Coast Lumberman, I (September 1, 1913), 11.

"Texas Forest Fire Loss Last Year Nearly Half Million," Gulf Coast Lumberman, XXI (May 15, 1933), 30.

"Texas Forestry Appropriation Should Be Doubled," Gulf Coast Lumberman, VI (November 1, 1918), 32.

"Texas Forestry Association," Gulf Coast Lumberman, II (November 15, 1914), 29.

"Texas Forestry Engineers Abroad," Gulf Coast Lumberman, V (February 1, 1918), 42.

"Texas Forestry Law," American Forestry, XXI (May, 1915), 615-616.

"Texas Forestry Work a Splendid Success," Gulf Coast Lumberman, IV (March 1, 1917), 20.

"Texas Forestry Work Commendable," Gulf Coast Lumberman, V (May 15, 1917), 45.

"Texas Has New State Forester," Gulf Coast Lumberman, VI (April 1, 1918), 38.

"Texas Proposes Strange Lumber Tax," Gulf Coast Lumberman, VIII (January 1, 1921), 32.

"Texas State Forester Begins Work," Gulf Coast Lumberman, III (November 1, 1915), 16.

"TFS Now Operates Its Own Air Patrol," Texas Forest News, XXVII (January, 1948), 10.

"Thompson, J. Lewis, "Forestry Needs of Texas," Gulf Coast Lumberman, XIII (April 15, 1925), 36, 38.

"Tree-Farm Program Marks Important Step in Texas Forestry," Gulf Coast Lumberman, XXXII (November 1, 1944), 18, 22, 26.

"Tremendous Demand for Yellow Pine," Gulf Coast Lumberman, IV (February 1, 1917), 20.

"Twentieth Forestry Engineers," Gulf Coast Lumberman, V (December 15, 1917), 39.

"Two-thirds of Texas Industrial Forest Lands Under Management," Gulf Coast Lumberman, XXIX (February 15, 1942), 33.

"Utmost Aid to War Effort Pledged at Forestry Convention," Gulf Coast Lumberman, XXX (July 15, 1942), 18, 20, 22, 24.

"W. Goodrich Jones of Texas," American Forestry, XXI (June, 1915), 738-739.

"When these CCC Boys Plant Trees in East Texas, They Really Plant 'Em," Gulf Coast Lumberman, XXIV (January 15, 1937), 9.

Wier, R. W., "Some Problems of Reforestation," Gulf Coast Lumberman, XI (November 1, 1923), 30, 32.

Woods, J. B., "Industrial Forestry in the South and West: What Lessons Each Can Teach the Other," Journal of Forestry, XXVI (February, 1928), 213-221.

_____, "Texas Timberlands and State Forestry," American Forests, LII (June, 1946), 270-273, 278, 295-296.

"Would Prevent Texas Forest Fires," Gulf Coast Lumberman, IV (April, 1916), 11.

Proceedings

Blanchard, Newton C. and others., Proceedings of a Conference of Governors in the White House, Washington D.C., May 13-15, 1908. Washington, 1909.

Interviews and Letters

Interview with E. O. Siecke, December 8, 1971, Galveston, Texas.

Anderson, D. A. to author, October 19, 1971.

Haislet, John A. to author, March 6, 1972.

Wagoner, E. R. to author, November 30, 1971.

Published Documents

Gammel, H. P. N. (compiler), The Laws of Texas 1822-1897, 10 vols. Austin, 1898.

Vernon's Annotated Penal Code of the State of Texas, 3 vols. Kansas City, Mo., publication dates vary.

Vernon's Annotated Revised Statutes of the State of Texas, 23 vols. Kansas City, Mo., publication dates vary.

Willson, Sam A., Revised Penal Code and Code of Criminal Procedure and Penal Laws Passed by the 16th, 17th, 18th, 19th, 20th Legislatures of the State of Texas. St. Louis, 1888.

Winkler, Ernest, Platforms and Political Parties in Texas. Austin, 1916.

SECONDARY SOURCES

Biographies

Morgan, George T., Jr., William B. Greeley, A Practical Forester 1879-1955. St. Paul, Minnesota, 1961.

Periodical Articles

Anderson, D. A., "Conservation—A Way of Life," Texas Forest News, XLII (January-February-March, 1963), 2, 8.

Boyd, James, "Fifty Years in the Southern Pine Industry," Part I, Southern Lumberman, CXLV (December 15, 1931), 59-67.

_____, "Fifty Years in the Southern Pine Industry," Part II, Southern Lumberman, CXLV (January 1, 1932), 23-34.

Compton, Wilson, "Looking Ahead from Behind at American Forestry," Southern Lumberman, CCI (December 15, 1960), 123-127.

"Fortieth Anniversary of the Texas Forest Service," Texas Forest News, XXXIV (March, April, 1955), 4-7.

Haislet, John A., "Texans Evolve a State Forestry Agency," Texas Forests and Texans (May-June, 1964), 6-7.

"History of Jones' Life, Works Told," Texas Forests and Texans (May-June, 1964), 1-2.

McElroy, Jack, "Here's Story of National Forests in Texas," Texas Forests and Texans (May-June, 1964), 8.

Ramsdell, Charles, "Memories of a Texas Land Commissioner, W. C. Walsh," Southwestern Historical Quarterly, XLIV (April, 1941), 481-497.

Stevens, T. P., "Tree-Farms Versus Regulation," Annals of the American Academy of Political and Social Sciences, CCLXXXI (May, 1952), 99-104.

"T. F. A.—50 Years of Continuous Service," Gulf Coast Lumberman, LII (February 15, 1964), 19-20, 23.

"W. Goodrich Jones, Father and Friend of Texas Forestry, Succumbs at 89," Gulf Coast Lumberman, XXXVIII (August 15, 1950), 18.

Unpublished Dissertations

Easton, Hamilton Pratt, "The History of the Texas Lumbering Industry," Unpublished Ph.D. dissertation, University of Texas at Austin, 1947.

Fickle, James, "The Origins and Development of the Southern Pine Association, 1883-1954," Unpublished Ph.D. dissertation, Louisiana State University, 1970.

Hyman, Carolyn Francis, "A History of the Texas National Forests," Unpublished M. A. thesis, University of Texas at Austin, 1948.

Knolle, Katherine, "A History of the Movement for the Conservation of Forest Resources in Texas," Unpublished M. A. thesis, University of Texas at Austin, 1934.

Martin, James W., "History of Forest Conservation in Texas 1900-1935," Unpublished M. A. thesis, Stephen F. Austin State University, 1970.

General Histories and Monographs

Ahern, George P., Forest Bankruptcy in America, Each State's Own Story. Washington, 1933.

Allen, Ruth A., East Texas Lumber Workers: An Economic and Social Picture 1870-1950. Austin, 1961.

Collins, John M., The First 50 Years of the Southern Pine Association 1915-1965. New Orleans, 1965.

Dana, Samuel Trask, Forest and Range Policy, Its Development in the United States. New York, 1956.

Heyward, Frank, "History of Industrial Forestry in the South," The Colonel William B. Greeley Lectures in Industrial Forestry #2. Seattle, 1958.

Kylie, H. R., G. H. Hieronymus, A. G. Hall, CCC Forestry. Washington, 1937.

McKitrick, Reuben, "The Land Policy of Texas," Bulletin of the University of Wisconsin Economics and Political Science Series. Madison, Wisconsin, 1918, XIV, 1-109.

Maxwell, Robert S. and James W. Martin, A Short History of Forest Conservation in Texas 1880-1940, Bulletin 20, School of Forestry Stephen F. Austin State University. Nacogdoches, Texas, 1970.

Miller, Edmund T., "A Financial History of Texas," Bulletin 37 of the University of Texas. Austin, 1916.

Richardson, T. C. East Texas: Its History and Its Makers, 4 vols. New York, 1940.

Salmond, John A., The CCC, 1933-1942, A New Deal Case Study. Durham, North Carolina, 1967.

Siecke, E. O., "Timber and Commercial Woods Reforestation," in Arthur Waldo Stickle (ed.), State of Texas Book; One Hundred Years of Progress. Austin, 1937.