## THE TREE FARM MOVEMENT: ITS ORIGIN AND DEVELOPMENT

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The American lumbering industry has witnessed three striking, even revolutionary, changes since 1900.<sup>1</sup> Inforest products laboratories the chemist's magic has opened vast new fields in wood utilization, thus creating new products and expanding areas of investment undreamed of during the nineteenth century. Changes in labor-management relations and the mechanization of lumbering equipment have altered the appearance of the modern lumbering camp. Finally, a changing attitude toward the resource itself has spread throughout the industry, transforming the forest from a "timber mine" into a "tree farm."

Lumbermen have welcomed innovations in wood utilization and advances in mechanization as new sources of profit but have accepted the other changes with manifest reluctance, marking as they do a clear break with the extractive, impermanent, and migratory industry of the nineteenth century. From earliest days the industry has been concerned with the harvesting, transporting, manufacturing, and marketing of forest products. The rapid decline of America's saw-timber in mature virgin stands has forced upon the industry the additional responsibility of growing its raw material. The tree farm movement is the latest effort by progressive timberland owners to meet this imperative need.

Tree farming is actually a popularized term for forest management as applied on privately owned lands. Its sponsors very early defined it as "privately owned forest-land dedicated to the growing of forest crops for commercial purposes, protected and managed for continuous production of forest products."<sup>2</sup>

Though forestry practices have been applied on

<sup>1</sup> This article was presented at the joint session of the Agricultural History Society, the Economic History Association, and the Missippi Valley Historical Association at Rock Island, Illinois, on April 23, 1948. It is a summary of a research project sponsored by the Forest Products History Foundation at the Minnesota Historical Society.

<sup>2</sup> American Forest Products Industries, *Tree Farms: Planning a Program* (Washington, 1947), 2. public and private lands for many years, the tree farm movement had its origins in the Pacific Northwest as recently as 1940 when the Weverhaeuser Timber Company shrewdly designated one of its reforestation projects as a "tree farm." Company foresters estimated that if the project were to be a profitable investment, fire losses must be held to less than one-quarter of 1 percent a year on the 120,000-acre tract.3 The movement was conceived primarily as an effort to prevent fire losses by applying accepted fire protection techniques and by stirring public imagination through the adoption of an expression which conservationists had used for many years. Since a careless public has been chiefly responsible for fire losses in American timberlands, this was an inspired move and quickly accomplished its immediate purpose. The project was further dramatized by formal dedication ceremonies in which the forest was named in honor of a pioneer Washington logger, Charles H. Clemons. The Clemons Tree Farm thus set the pattern for the movement which was soon to sweep through the industry.

The immediate and widespread publicity lavished upon the new enterprise awakened the industry to the possibilities of tree farming. Less than six months after the dedication of the Clemons Tree Farm in June 1941, the National Lumber Manufacturers Association launched a nationwide campaign among timberland owners under the title, "American Tree Farms System."4 The response was spectacular as forest owners rushed to place their lands under certification and to placard their holdings as tree farms. From the initial tree farm of 120,000 acres in 1941 tree farm acreage grew to 5 million during 1942, to nearly 71 million by 1943, and to over 17 million by January 1949. During its infancy, the tree farm movement made its chief appeal to large timberland owners. After three years of operation, for

<sup>3</sup> Memorandum by J. C. McClellan of the American Forest Products Industries to the author, July 25, 1947. <sup>4</sup> Walker B. Tilley, "American Tree Farms," in

Journal of Forestry, 42: 796-799 (November 1944).

example, western tree farms averaged 40,000 acres in size and those in the South 10,000 acres. $^5$ 

This mushroomlike growth was not altogether wholesome nor did it always indicate the acceptance of sound forestry practices. The rapid growth was sometimes the result of hasty and unwise certification of lumbering enterprises which valued the favorable publicity. A growing criticism of the movement on this score led to a stiffening of the requirements and to a more adequate inspection of forest properties by foresters of the sponsoring agencies. Lyle F. Watts, chief of the United States Forest Service, cautioned the movement that if it would have real significance "high standards of forest practice must be maintained." Then he added: "Unfortunately, mediocre or lower performance has served to qualify some properties for the 'Tree Farm' designation."6 No doubt, there was substance to this charge. The Mississippi Valley Lumberman, though thoroughly sympathetic with the movement, later complained that tree farm certificates were sometimes "handed out high. wide and handsome" during the initial months.7

More fundamental explanations for the movement's rapid expansion exist. Many companies, especially the large lumber and pulp manufacturers, were already practicing forestry on their holdings. The United States Forest Service reported in 1938 that 14.2 percent of the 202,100,000 acres held by industrial and other nonfarm owners was under forest management.8 Somewhat later National Lumber Manufacturers Association statistics based on the reports of State foresters in 1942 claimed that 60 percent of the 346 million acres of privately owned forest land was in productive growth, 21 percent was under continuous forest production, and 8 percent was under intensive forest management.9 Thus many tree farm certificates were in recognition of manage-

<sup>5</sup> U. S. Forest Service, Report of the Chief of the Forest Service, 1945, p. 13.

6 Ibid., 1943, p. 13.

<sup>7</sup> Mississippi Valley Lumberman (Minneapolis), 77 (13): 5 (Mar. 29, 1946).

<sup>8</sup> Report of the Joint Committee on Forestry (77 Congress, 1 session, Senate Document 32, serial 10574, Washington, 1941), 25.

<sup>9</sup> Statement of Wilson Compton, secretary of the National Lumber Manufacturers Association, in the *Mississippi Valley Lumberman*, 74 (41): 25 (Oct. 8, 1943). ment practices already established on commercial lands.

Numerous other owners who previously had not practiced forestry were also encouraged to join the tree farm movement. An excellent market for forest products and a changing tax structure in many States induced forest owners to spend funds for silvicultural practices previously regarded as uneconomic. In the background, moreover, was the increasing recognition that timber resources were declining and the growing fear of the ominous demand for public regulation which had gained increasing strength with each passing year. This fear served as a powerful stimulant, for many owners were discovering that a favorable public opinion toward the industry was imperative to its survival.

The tree farm movement is the logical outgrowth of fifty years of agitation and propaganda for conservation. Industrial forestry has developed as early leaders in the conservation movement predicted it would. B. E. Fernow, Gifford Pinchot, Carl A. Schenck, J. T. Rothrock, Austin Cary, and others forecast very early that the decline of America's virgin stands would force lumbermen to adopt conservative forestry techniques. They cited the European experience as evidence. As early as 1903 Pinchot declared: "We understand now that forestry is a business, and that it will be applied only when it is worth while from a business point of view."<sup>10</sup>

In a similar vein, one of the earliest conservation journals in the United States, the *Forester*, expressed the view in 1898 that "Forests will be managed properly and reproduced when it pays to do so, and love of trees or zeal for the beautiful will have as little to do in this business of woodcropping, as love for the waving wheat field and the beauty of the tasseled corn is the incentive to the farmer to plow and sow."<sup>11</sup> The acceptance of sustained-yield practices by an increasing number of lumber companies in recent years is the fulfillment of these prophecies.

The dwindling supply of virgin saw-timber on private lands has compelled the lumberman to take thought of tomorrow's trees if he is to stay in business. Thus the tree farm movement and all

<sup>10</sup> Address entitled "The Forester and the Lumberman" before the Wholesale Lumber Dealers Association, Washington, D. C., Mar. 3, 1903, in *Forestry* and Irrigation, 9: 176 (April 1903).

<sup>11</sup> Forester, 4: 68 (April 1898).

other similar projects make a virtue of economic necessity. The Bureau of Corporations estimated the total stand of saw-timber in 1909 at 2,826 billion board feet. By 1946, this had declined to 1,601 billion board feet.<sup>12</sup> Even more striking is the revelation that this estimate is 9 percent less than that submitted to the Congressional Joint Committee on Forestry in 1938.<sup>13</sup>

This dwindling supply has threatened to leave numerous companies without raw materials to continue operations. To meet this challenge, leaders in the industry have turned to sustainedyield programs or to modified exploitation cutting. By 1946, Forest Service investigations revealed that only 8 percent of privately held timberlands were destructively cut, though 56 percent remained as yet under poor cutting management.14 The industry had thus emerged from a liquidation or exploitation era into a transition stage which acknowledged the essential truth of the frequent statistical warnings issued by the Forest Service. Its chief warned in 1946, for example, that without the adoption of intensive forestry practices, "Mills representing 60 percent of the present sawmill capacity of Washington and Oregon do not have private timber to operate more than 15 years."15 The purpose and promise of the tree farm movement is to prevent this decay of the industry.

The disaster which has threatened an entire industry is best illustrated through a case study of a single company. In 1934 the W. T. Smith Company of Chapman, Alabama faced the unhappy prospect of an early liquidation of its timber holdings. After fifty years of lumbering, only six or eight years remained if destructive cutting practices continued. The alternative to liquidation was clearly the adoption of a sustainedyield program which would keep growth and drain balanced through the years. The acceptance of this philosophy accomplished its purpose, and ten

<sup>12</sup> U. S. Forest Service, Gaging the Timber Resources of the United States (Washington, 1946), 49.

<sup>13</sup> Report of the Joint Committee on Forestry (77 Congress, 1 session, Senate Document 32, serial 10574, Washington, 1941), 39; U. S. Forest Service, Report of the Chief of the Forest Service, 1946, p. 3.

<sup>14</sup> U. S. Forest Service, The Management Status of Forest Lands in the United States (Washington, 1946), 4.

<sup>15</sup> U. S. Forest Service, Report of the Chief of the Forest Service, 1945, p. 12. years later the company was cutting annually less than its growth. Even more important, it now had plans for permanent operations as a tree farm.<sup>16</sup>

The tree farm movement appealed to progressive forest owners at this very point for it offered stability and permanence rather than the instability and impermanence of liquidation cutting. The resulting changes in the economic and social life of the lumbering communities stand in striking contrast to the ghost towns and rural slums left in the wake of the earlier "cut-and-get-out" operators. Leaders in the industry have wisely initiated perpetual tree-crop programs while virgin holdings yet remained to sustain them until the managed forests ripen for the harvest.

Fear of government regulation was also a motive in the creation of the American tree farms system. Lumbermen announced in unmistakable language their objections to any program emanating from a bureau in Washington. Industrial self-regulation rather than government control has been their plea. Though industry spokesmen admitted an unsatisfactory cutting situation, they vigorously contended that there has consistently been "more good forestry and less destructive cutting."<sup>17</sup>

The inauguration of the tree farm movement represented a major step toward self-regulation. Progressive lumbermen quickly discovered, however, that the greater their number who avoided the need of public regulation by joining the movement, the greater the demand for regulating the remaining owners.

The United States Forest Service has consistently preached a gospel of federal regulation. With increasing impatience it has announced that only two alternatives exit: "One is public ownership and management of more forest land.... The other is Nation-wide public regulation of cutting and other forest practices on privately owned forest land."<sup>18</sup> Officials of the Forest Service received the tree farm movement coolly, charging that its real purpose was to avoid federal regulation. Chief Watts voiced these suspicions by challenging the industry's motives. " 'I cannot escape the conclusion," "he announced, " 'that the

<sup>16</sup> Julian F. McGowin, "Pine Growers," in American Forests, 50: 222-223 (May 1944).

<sup>17</sup> Wilson Compton in the Mississippi Valley Lumberman, 74 (41): 9 (Oct. 8, 1943).

<sup>18</sup> U. S. Forest Service, *Report of the Chief of the Forest* Service, 1941, p. 13. real object of this campaign is to ward off public regulation. . . . ""19

Other professional foresters have not shared this harsh judgment. The official organ of the Society of American Foresters, the *Journal of Forestry*, did not consider this objection a serious one. "That one of its purposes is frankly to forestall federal regulation," wrote its editor, "... is certainly not to its discredit."<sup>20</sup> In its 1941 report the committee on private forestry of this professional organization implicitly rebuked the Forest Service with the comment, "Undue cynicism or distrust of the intentions or achievements of private owners is not conducive to cordial and pleasant relations between forest owners and foresters."<sup>21</sup>

To achieve these ambitions the tree farm movement was provided with the machinery of selfregulation. Under the auspices of the American Forest Products Industries, Inc., a subsidiary of the National Lumber Manufacturers Association, tree farm committees were created to sponsor the movement in each State. These committees were organized to represent the lumbermen's regional associations, the State forestry or conservation commissions, and the conservation societies. With the advice of technically trained foresters, they then prepared the standards for certification. The movement wisely sought to allow sufficient flexibility to meet the widely differing silvicultural demands of the diverse forest areas in the United States.

Widespread publicity accompanied the establishment of each new tree farm. Formal dedication ceremonies featuring speeches, barbecues, tree farm queens, and other accepted publicity techniques were devised to attract public attention. Newspapers were liberally supplied with information regarding the movement, movies were filmed to indoctrinate the public with the importance of America's forests, and a nation-wide campaign was launched to sell to a disinterested public the idea that trees are crops which must be protected, grown, and harvested as any other agricultural crop.

Overenthusiasm by partisans of the movement, however, gave many foresters the feeling that the

<sup>19</sup> Speech at Milwaukee, September 1943, quoted in *American Forests*, 49: 548 (November 1943).

20 Journal of Forestry, 40: 596 (August 1942).

<sup>21</sup> American Society of Foresters, Report of the Committee on Private Forestry, in *ibid.*, 39: 116 (February 1941). industry sought to create the opinion that the tree farm movement had made the initial discovery that trees grow and can be treated as a crop. Others pointed out that the movement disregarded important aspects of forestry such as prevention of soil erosion, conservation of wildlife and forage, and protection of water supply.

Tree farm publicity as a result came under considerable criticism. Frequent use of the slogans— Sustained Yield, Perpetual Forests, Selective Logging, Trees for Tomorrow, Lumbering Is Agriculture, and Trees Are Crops—in a loose or misleading fashion caused some consternation among professional foresters. Chief Watts of the Forest Service branded as misleading the publicity issued by the sponsoring agencies. In 1943 he condemned it as creating " the impression that little not already being done on private land is needed to assure the nation ample timber supplies for the future."<sup>22</sup>

These critics overlooked the fact, however, that the tree farm movement was accomplishing a feat of indoctrination unparalleled in conservation history. Ninety percent of America's forest fires are annually caused by a careless public. Previous efforts to arouse the public to this tragic waste had failed badly, though conservation organizations and the Forest Service itself had sponsored elaborate publicity drives. Tree farm committees, working with the "Keep Green" movement, performed a signally successful task of indoctrination in a field marked by previous failures.

The constant criticism leveled at the movement pointed out numerous weaknesses and stimulated many changes. The sponsors, for example, tightened the standards for certification and insisted on continued inspection of forest practices after certification. Tree farm certificates have been withdrawn from members failing to meet the required standards of forest management. The heavy concentration of certificates among large timberland owners prompted the sponsors to pay attention to the four million woodlot owners whose cutting practices have been of increasing concern in recent years.

A major change has been the shifting emphasis from fire protection as adequate forestry to a demand for silvicultural practices promoting sustained yield. Early publicity pictured fires, insects, and diseases as the "bank robbers" which

<sup>22</sup> Quoted in the Mississippi Valley Lumberman, 74 (41): 9 (Oct. 8, 1943).

destroyed America's timber supply. By 1944, however, the emphasis had shifted to growing more trees.<sup>23</sup> This was a significant change for the industry had previously placed the responsibility for forest depletion on fire, insects, windfall, or disease and seldom on the lumberman's axe.

Thus the tree farm movement grew in stature in its initial years. A growing concept of the industry's responsibilities kept pace with the expanding

<sup>23</sup> U. S. Forest Service, Report of the Chief of the Forest Service, 1946, p. 8.

acreage brought under forest management. In its origins and early years the movement was clearly a promising conservation development whose effectiveness must be measured by the standards of protection and forest practice required of its members. The challenge yet remaining to the tree farm movement is clear. The cutting practices on nearly two-thirds of America's forest land are yet poor to destructive, and 136 million acres of forest still lack any organized protection.<sup>24</sup>

24 Ibid., 1946, p. 9.