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IDEALS AND PURPOSES IN AMERICAN FORESTRY

by

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TO MEG

For this and  
lots more to come.

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From the early days of the settlement of this continent the predominating philosophy of our civilization has been the philosophy of business enterprise and material progress. As older civilizations have exalted the lover of wisdom, the creator of artistic beauty or the saintly man, so have we honored and envied the man of business and the man of science. While in other ages men have seen the chief interest and significance of life in a man's relation to other men or to God, in our own times the most compelling interest of men has been the extent of their control over the world's goods or the forces of nature. So thoroughly does this ideal pervade every area of life it is sometimes difficult for a person breathing the air of our culture to imagine that in other times the basic outlook of people on life could have been fundamentally opposed to our own.

For all the dominance of this business ideal in the western world generally, no less than in America, there has nevertheless been a stubborn tradition of opposition to it that has steadfastly denied the validity of this de-humanized, life denying ideal. If Franklin and the Puritans are representative Americans, so also is Henry Thoreau. Franklin might degrade time into money, but Thoreau at Walden Pond, hoeing his beans for an hour or two in the morning and spending the rest of the day in tramps

through the woods and contemplation, knew better. The romantic movement in the arts of the early nineteenth century, is also a part of this current which denied the pretensions of the economic philosophy of life. If the romantics in their enthusiasm sometimes were led to extremes, they were on the side of the angels in proclaiming that striving for artistic beauty and seeking a direct and personal experience of nature were more worthy of men's energies and devotion than struggling for money and industrial power.

A central article in the businessman's creed was the doctrine of enlightened self-interest. The individual enterpriser was obliged only to make his business decisions in accord with his own best self-interest; from the automatic workings out of the laws of economics would follow, as surely as the night the day, the greatest good to all society. This happy state of affairs relieved a man from troublesome moral questions that might otherwise have vexed him in the day-to-day conduct of his business. If market conditions dictated the employment of children in ill-lighted factories or the discharge of a number of faithful employees when a machine had been devised to do their work, it was all for the best. A farmer might, by a system of one-crop farming, destroy the fertility of his land and leave it gullied and worthless. A lumberman, in pursuit of his legitimate interest might lay waste a forest and leave fire in his wake, his only concern be-



ing to realize the maximum in immediate gain.

As time went on, the gap between the claims made for the principle of self-interest and its actual results became more and more evident. If religion and ethical standards of conduct had been on the decline steadily for several centuries and had been largely divorced from men's daily activities, there were still enough people, as we have suggested, who took them seriously to raise their voices in protest against the practices prevalent generally in society.

The American forestry movement is best understood as a part of this protest against the empire of business and the philosophy of life it generated. It is no accident that forestry came into its own in this country at a time when some of the evils of big business were being brought to light and effectively challenged by government for the first time. Of all the things that Gifford Pinchot and Theodore Roosevelt had in common, their frequently expressed desire to make private business serve the common good was not the least. As it first developed in this country, forestry offered the young men who chose it as their work a chance to realize their personalities in another world from that of the business man, a world in which human values and social needs were of primary importance, rather than the indirect consequences of profit motivated actions. In another, and related respect, forestry, and conservation generally, marked a departure from

existing ways of doing things. If in business affairs considerations of the immediate future were of necessity paramount, in the conservation philosophy the long-term consequences of methods of handling resources were given their rightful share of attention.

In The Fight for Conservation (8), a collection of articles and speeches made by Pinchot during the years when the new philosophy was first being put into action, we have a good picture of the prevailing spirit among foresters in those early days. Conservation, Pinchot forcibly asserts, is a great moral issue, and matters of economics, rather than being morally neutral as the business theorists have claimed, are on the contrary heavily charged with considerations of right and wrong:

The present economic order, with its face turned away from equality of opportunity, involves a bitter moral wrong, which must be corrected for moral reasons and along moral lines. (p. 69)

Conservation, as Pinchot sees it, adds another dimension to utilitarianism: the rightful aim of man and society becomes realizing the greatest good for the greatest number for the longest possible time. Over against the business man, seeking his own interest and gain Pinchot sets up the ideal of the devoted public servant:

Public spirit is patriotism in action; it is the application of Christianity to the commonwealth; it is effective loyalty to our country, to the brotherhood of man, and to the future. It is the use of a man by himself for the general good. (pp. 95,96)

Indeed, in many ways, Pinchot regarded big businessmen

and the "interests" as morally corrupt.

There are many men who believe, and always will believe in the divine right of money to rule. With such men argument, compromise, or conciliation is useless or worse. The only thing to do with them is to fight them and beat them. It has been done and it can be done again.

It was in the spirit of public service described by Pinchot that American forestry deserted the libraries and classrooms and at last made for the woods in 1905. The challenge of those first years was great and the obstacles many, but the foundations for the protection and administration of the National Forests were soundly and surely laid. It was a pioneer undertaking, and working together at a common task though often separated widely in space, that spirit of the first American foresters, so fondly recalled in recent years by some of them, developed and flourished. Walter Mulford, writing in 1925 spoke of it in this way:

In his early years, service--public service--was written on his heart in what it was hoped would be indelible characters. And the spirit of the pioneer was his. Without these two qualities, in those days, he would not have been. (47)

The devotion to human needs and the generous spirit of the first years of American forestry are emphasized by Raphael Zon:

The first period in the forestry movement may be characterized by great spiritual richness, the spirit of the proselyte and the missionary . . . The qualities that were most prominent were those of human understanding applied to the solution of a thousand human problems which arose as a result of a change in the national policy toward the public domain, and above all the spirit of public service. (22)

In addition to these retrospective judgments

there is contemporary evidence that bears witness to the life-directed emphasis of pre-war forestry. Thus, at the meeting of the Society of American Foresters in San Francisco in 1915, we find a young forester named Coert DuBois giving an interesting talk entitled "The American Forester: His Opportunities", which is worthy of some discussion. (23) The chief concern of a forester, DuBois holds, must be ministering to human needs:

There are foresters whose vision sticks in the woods and does not pierce through to the fact that the welfare of the people, not the welfare of a community of trees, must be the aim of the forester's endeavor. Forests are only the medium through which he works. The most successful forester is the one whose life and work contributes most fully to the necessity, convenience, and pleasure of the greatest number of people, - not necessarily the one who grows the most wood per acre in the shortest time.

DuBois does not stop at generalities. He speaks of the responsibilities of the forester to the backwoods dweller on his ranger district, of the opportunities he has to open the world of books to the children of these wilderness people, of his chance to help in settling feuds, in suggesting better farming methods:

Part of the training of every forester should be a course in chewing tobacco and whittling and sitting on corral fences in order to fit him for the responsible task of the after-supper talk with the great American nestor.

Another evidence of this spirit of social responsibility so strong in all this early period is to be seen in the response of foresters to unrest among woods workers widespread at the time of the war and for a while thereafter. They maintained that it was partly the result

of the organization of the destructive logging industry with its cut-out and get-out policy and that the remedy lay in permanent forests. As F. A. Silcox, later Chief of the Forest Service and at the time a skilled and successful conciliator of these labor difficulties put it:

The "womanless, voteless, and part of the year workless," "blanket stiff" lumberjack is just as much a product of forest exploitation by devastation as the community, home-owning citizen is of forest conservation. (60)

Benton MacKaye (45), since a leader in the Regional Planning movement, urged that the Forest Service take stable employment and community life into account in planning working circles, with self-government, adequate educational opportunities for children, and provision made for moving communities as a whole, if the requirements of management plans could be met only in that way.

## CHAPTER II

### TWO KINDS OF FORESTERS

The idealism, the spirit of public service and the unity of purpose that characterized American forestry in its period of development were deeply felt and shared by all the men who were associated with the early workings of the Forest Service. But even in the time of Pinchot's years as Forester in the golden day of American forestry a few voices of dissent were raised within the profession. This dissent took the form of an advocacy of the cause of the lumberman, a defense of his motives, morals and contribution to society.

One of the first to undertake this justification of the private owner in the councils of foresters was Austin Cary, who remained to the end of his life one of the most reasonable and effective spokesmen for this point of view. Cary could justly lay claim to being the oldest practicing forester in the country: in 1898 when Fernow was setting up the first school for technical training in forestry and when Pinchot was just taking over the reins of the landless Division of Forestry in the Department of Agriculture, Austin Cary was forester for a large lumber and pulpwood operation in his native state of Maine. He was an older man than Pinchot and the other leaders of the forestry movement and could look back to boyhood days spent in Maine lumber camps belonging to his uncles.

As early as 1908 we find Cary speaking his mind

at a gathering of the Society of American Foresters in Washington, perhaps on one of those celebrated Baked Apple evenings, when this favorite dish of Pinchot's topped off the evening's entertainment. Whether Cary's paper entitled "Influence of Lumbering upon Forestry" (12) was followed by that appetizing fruit dish or not, it must have made all of the young foresters assembled on that occasion pause and reflect. After acknowledging the great advance that had been made along some lines in the past 15 years, he warmed to his message of the evening:

In some other lines, foresters seem to me to have been surprisingly blind, and the record of their achievements extremely small. I refer now to the application of forestry ideas to the actual management of timber lands.

It seemed to Cary that the private owner would be brought to practice forestry only if he could be shown in concrete terms that it was a promising business undertaking:

Foresters up-to-date have been mainly interested in demonstrating forestry principles abstractly, not in using their knowledge for the benefit of forest-owners.

He chided his colleagues for their unrealistic approach to the problems of the lumberman:

They have not as a rule understood lumbering operations on the mechanical and financial side. A thing may be desirable in itself and yet cost so much that a man is better off without it.

This whole conception of a forester who is not also a lumberman as far as I know, is temporary and local. The German forest officer is not such a man.

There were a number of reasons, however, for foresters to feel hopeful about the future. The old-time lumberman,

he freely conceded, was hopeless. Economic forces and industrial developments seemed to be on the side of forestry. In the pulp and paper industry, the heavy capital investment in processing equipment that was required would give the owners an interest in insuring permanent supplies of raw material to keep their mills operating. The general interest rate seemed to be falling, making timber growing economically more attractive. And, generalizing on the basis of his New England experience, residence, family considerations and other property interests near-by tended to dispose owners to keep their lands in permanent productivity.

Austin Cary was by no means alone in his advocacy of lumbering and the private operator as the starting point for forestry. Early in the history of the profession men found their way into the employ of the private timbermen and under these circumstances they were chiefly engaged in harvesting virgin timber. As foresters they retained an interest in regenerating lands cut over under their direction, but in their daily work considerations of profit and loss had to be uppermost. A mutation had taken place: along side the forester there now stood the logging engineer. Judson Clark, author of the International Log Rule, justified this new calling at the Society meetings in San Francisco in 1915. The most promising approach to forestry in private industry lay in more efficient and better organized logging. As Clark put the whole matter in



concise terms:

Logging engineering is at present our best hope for the larger stumpage returns so necessary for the extension of forestry methods. (19)

Donald Bruce spoke to much the same effect with an added emphasis on improved marketing:

But if (the forester) lives in a state which at the present rate of cutting has a three hundred years' supply of mature timber in sight, surely he can be forgiven if for the moment he concentrates his greatest efforts on its economical logging and marketing. (11)

This point of view was not allowed to pass unchallenged. Olmsted insisted on the fundamental difference in aim of forestry and lumbering:

It must be granted without argument, I think, that forestry, as distinguished from lumbering, aims chiefly at providing trees for the future, for otherwise the forester would be simply a lumberman.

These first debates regarding the proper scope of forestry and the relation of lumbering to forestry bring out the reaction that was setting in against the high idealism of the first years. In one section of the profession the lumberman was fast regaining status and becoming the object of respectful consideration. In 1916 we find Austin Cary speaking up again, his subject significantly enough being "How Lumbermen in Following their Own Interests Have Served the Public." (13) Cary began by describing the democracy of the industry, drawing on his memories of the old New England logging camp and its traditions of hardihood and fellowship. He pointed to the moral values of the business struggle, to the "discipline of indus-

try:"

We know that business to-day attracts many of the ablest and strongest in this country. As I see it, those men congregate to it in part because of the vigor and test of it -- in other words, they crave as well to make good as to make money.

Industry, moreover, was good and necessary because it provided employment for workers and needed articles and materials for society. It had done its job pre-eminently well in the past and there was every reason for thinking that it would do so in the years to come:

This continent was conquered and civilized not under the direction of a despot or by a carefully planned system, but through individual initiative, by the push and energy of a free people.

Burt P. Kirkland, in a rejoinder (34), pointed to the shortcomings of unregulated private industry. The timber supply was being fast depleted and at the present rates of cutting only a 50 or 70 year supply was on hand.

The American people are turning quite definitely from the laissez-faire system of handling industry to control in the interest of the whole community . . . . The apparent freedom obtained by absence of any control means only freedom for the strong to over-run the rights of the weak.

A division, then, was taking form in the ranks of American forestry, a division that is in existence at the present day. The business point of view was too firmly ingrained in people's minds, the need for young foresters to find jobs and support themselves and their families too compelling for matters to be otherwise. For men with secure places in the Forest Service, for those with inherited wealth like Pinchot and Robert Marshall, idealism has been

an easy matter. The defection of many younger men to private industry and the point of view of private industry has been a partial result of the inability of government agencies to employ more than a small proportion of the graduates of the numerous forestry schools of the country. Franklin W. Reed (54) has well described this central cleavage in the ranks of American forestry:

We have, it would seem, in our profession two kinds of foresters: first, the forest idealist who sees things as they ought to be, and looks upon forestry as a cause to be worked for; and second, the forest pragmatist who takes things as they are, and looks upon forestry as a business to be worked at.

If a division had been building up in the ranks of American foresters in the years preceding entry into the war, it was widened to an open breach shortly after the peace was concluded. Early in 1919 Henry S. Graves, nearing the end of his term as forester initiated what was to be a long drawn out and bitterly contested fight to bring about the practice of forestry on privately owned timberlands. In a series of speeches Graves put forward a program that called for an attack on the problem from two directions. Destructive methods of cutting were to be prohibited by law; and at the same time energetic steps were to be taken to remove some of the major obstacles in the way of private forestry such as the serious fire danger and taxation methods that favored liquidation logging. In March of that same year, Frederic Olmsted, then president of the Society of American Foresters, spoke out in the Journal in more emphatic terms. (49) He reminded his colleagues

that "the wiping out of wealth, production, and employment over extensive areas good for nothing but the growing of trees," that had called their profession into existence went on almost unchecked. He held out no hope for efforts directed towards persuading the private owner to practice forestry, pointed to years of unsuccessful efforts in that direction and enlarged on the backwardness and inefficiency of the lumber industry. There was only one course of action that showed promise of results: "The public must compel the lumberman to treat his forests decently."

A Committee for the Application of Forestry was formed under Pinchot's chairmanship and its report appeared in the Journal of Forestry for December, 1919 preceded by a militant article by Pinchot entitled "The Lines are Drawn." (52) Compulsion was needed to get forest owners to manage their lands in harmony with the public good. It was the job of foresters to see that this compulsion was applied:

The field is cleared for action and the lines are plainly drawn. He who is not for forestry is against it. The choice lies between the convenience of the lumberman and the public good.

The report of the Committee which followed Pinchot's call to arms was entitled "Forest Devastation: A National Danger and a Plan to Meet it." (72) With three times as much timber being used as was growing a shortage was clearly building up with exhaustion in sight within 50 years. Of the unfortunate social consequences of forest devastation not the least was its effect on the men who

worked in the woods.

Housing, sanitary arrangements, and hours of labor too often have been outrageous and living conditions intolerable, and this because the lumber camp and the lumber town exist only long enough to skin the timber from the land.

Many benefits were likely to flow from the establishment of permanent forests. A greater degree of control over floods and drought could be expected and soil erosion and the silting up of streams and rivers would be lessened. Hunting and fishing and other forms of forest recreation would be favored and public health values would be improved in well-forested localities. To the committee's report was appended a draft of proposed legislation on the part of the federal government to make this plan a reality. This legislation provided for the setting up of a commission empowered to establish rules for the cutting of timber on commercial private lands and to sanction combinations among lumbermen for the limitation of output.

Opposition made itself heard within the profession from the very start of this campaign. There was resentment in some quarters because the findings and recommendations had been issued to the press before they were published in the Journal. It seemed to some members of the Society that a small group was taking it upon itself to speak for the whole body of foresters, without properly consulting everybody concerned. More important, however, was the opposition that was voiced to the spirit and the details of the Committee's plan. Professor Tourney of Yale who had served on the Committee signed the report only with

a number of important reservations. Donald Bruce wanted industry to be consulted and not held responsible for the conditions described in the report, which were rather the result of unwise land laws.

Many of the objectors to the plan urged caution and more deliberation. It was a big job to tackle all at once and the avenues of co-operation and education had been insufficiently explored. As Professor Toumey had maintained, a plan for federal regulation was an invasion of the rights of the states and of doubtful constitutionality. Moreover, private industry could not be forced into enterprises that showed little promise of profit. That was the way the economic system that had made our country great was set up.

As Philip T. Coolidge put it:

As to the production of timber for ordinary commercial use, the theories generally advanced by those opposed to the radical changes proposed are essentially correct, because they are based upon unchangeable economic laws.

Adam Smith might be dead and long since buried, but his soul went marching on in the ranks of the conservative wing of American forestry.

A detailed referendum was held in which all the members of the Society voted on the Devastation report, clause by clause. A majority was found to be in favor of every important provision. But when a short time later, another ballot was held on the issue of whether regulation should be in the hands of the federal government or the states the supporters of state regulation won the day. This second referendum may have been the turning point in

the whole campaign. A program that did not have the whole-hearted support of the profession could hardly be successful in Congress.

W. B. Greeley, who succeeded Graves as Forester, was in favor of regulation by the states. More emphasis was placed on the co-operative and educational aspects of the program and an effort was made to conciliate the lumbermen after their rough treatment at the hands of the Pinchot-Olmsted faction. A National Forestry Program Committee was established in 1920 in which all the forestry interests of the country, including private industry, were represented. The Committee put forward the Snell bills, based on the principle of grants-in-aid to states enacting legislation controlling cutting. Meanwhile, Pinchot and his group continued to press for federal legislation, their efforts being embodied in a series of Capper bills. These bills unhappily came at a time when the Supreme Court, in its Child Labor Act decisions, was limiting the interpretation of the interstate commerce and taxation powers of Congress. With each decision, a change had to be made in the bill, giving aid and comfort to the opponents of federal regulation. The Clarke-McNary bill which finally emerged from the whole controversy in 1924 was a victory for the school of thought that had urged moderation and co-operation. Increased governmental aid to the states in fire control was provided for, studies in forest taxation and forest insurance were authorized, the terms for the purchase of

lands for inclusion in national forests were liberalized, but nothing whatever was said about the regulation of cutting on private lands.

The decade of the twenties was on the whole a time of confusion and little faith within the profession. Research workers at the Experiment Stations made new and important contributions to American forestry knowledge, but the destruction of existing forests went on almost as before, with foresters seemingly powerless to do anything about it. Some gains were recorded in the field of private, or industrial forestry, as it was called, but even its most enthusiastic supporters could not pretend that the steps taken represented more than a token effort on the part of the industry. The private forestry point of view grew stronger within the profession during these years, as idealism, public and private, suffered a decline during the years of the scramble for "the big money."

But the old spirit of fervor and idealism had not passed altogether from the scene. Efforts were made from time to time to re-vitalize the enthusiasm of the profession for a real national program of forestry. Ward Shepard was the most eloquent and clear-sighted of these re-vitalizers, the most energetic pleader for a revival of confidence and faith, and a new assault on the obstacles in the way of American forestry. Shepard returned to the first great enthusiasm for regulation as his point of de-



parture:

At the close of the Great War when the world swayed between the bitterness of disillusion and the drunkenness of great dreams, forestry thought in America became dynamic with a magnificent dream . . . We all remember that great efflorescence of thought and speech and programs; and if the garish daylight of 1926 shows less of romance and mystery than the moonlight of 1918, it has the virtue of giving us sharp outlines and tangible contrasts. (58)

In words recalling Pinchot he re-asserted the moral nature of the cause of foresters, which touched on "the weal and happiness of millions of people through many generations." He struck out forcibly at the sort of reasoning that was making many American foresters content with the painfully slow progress that was being recorded:

The doctrine of economic fatalism induces lethargy and excuses failure to act . . . Its very emphasis on purely external, impersonal forces as the solvent of human bungling gives to its adherents a certain blindness to the inward spiritual forces of human nature and narrows their appeal to only one of the many instincts that drive man to his restless striving -- the instinct of gain.

The indirect approach that sought to remove the obstacles to private forestry and then relied on self-interest to do the rest was stultifying American forestry. What was needed was "rational and purposive control." (59)

Shepard was one of a group that included Pinchot and Zon who spoke out in "A Letter to Foresters" in 1930 (71) in words recalling those of 10 years earlier, though perhaps in their proposed remedy there was more emphasis placed on government acquisition of forest land and less on regulation of that belonging to private owners.

There was another modification noticeable also: the private lumberman was joined by the private forester in the culprit's seat:

The destruction of the forests of America has been a long-drawn out tragedy of waste. Now we face the danger of a moral tragedy also: that the foresters of America will accept that destruction and by silence condone it.

There were a number of comments published with the letter, some of them showing signs of anger and indignation. "Is Forestry a Religion?" asked Franklin Reed. (54) He pointed to the large numbers of foresters for whom there was no place in the public and educational fields, but only in private industry.

Amid such surroundings the forester inevitably must look upon forestry as a business proposition, to be practiced with a due regard for financial profit, rather than a public cause to be striven for with something akin to a religious zeal.

C. S. Smith sprang warmly to the defense of the business forester:

Carloads of bulletins on forestry have been written but little actually put into practice except through personal contacts with the lumber industry, not by ministers of the gospel of spiritual redemption, but by men who could appreciate the value of a dollar and talk in terms of profit as well as love of mankind.

More than this was needed to silence the old school foresters. A few years later they were back in print with a petition that began in these terms:

A group of members of the Society . . . have come to the conclusion that the editorial policy of the JOURNAL during the last few years no longer represents the broad social ideals of the founders of the Society. (v. 32, p. 781)

The coming of a second Roosevelt to the presidency in 1933 marked the opening of a period of expansion for the national forests. The camps of the Civilian Conservation Corps changed the faces of many existing forests and aided in the development of new ones created during the early years of the New Deal, as facilities for protection and public recreation were greatly enlarged. The new Chief of the Forest Service, F. A. Silcox, belonged to the public regulation school of thought and his administration, terminated by his death in 1939, was accompanied by a revival of the old time crusading spirit and social idealism. In the two years that the National Industrial Recovery Act was in effect some steps were taken by the lumber industry under Article X of its code to set up silvicultural standards. What little progress was accomplished in this direction was nullified by the Supreme Court decision on the Schechter brothers' chickens that declared the whole N.R.A. program unconstitutional.

Alongside the renewal of the campaign for government regulation of cutting on private forest lands, there was also a steady growth in private forestry during these years, particularly in the southern states, where the expanding market for pulpwood combined with the growing realization on the part of timberland operators that trees could be grown at a profit brought about a great advance in the practices in effect on the lands of many companies.

With some real successes to their credit, the private foresters spoke out with greater assurance and were heard with more respect in the councils of the profession.

One final incident will reveal the extent to which the private forestry point of view had made itself respectable by this time. At the banquet of the 1940 meeting of the Society marking the fortieth anniversary of its founding, the chief address was given by Gifford Pinchot, who took as his subject Theodore Roosevelt's old motto--"The Public Good Comes First". He insisted that business considerations were not a firm foundation to build sustained yield forestry on, and called, as in years gone by, for a thoroughgoing program of government ownership or control. When the proceedings of these meetings were published in the Journal for February 1941, the editor commented on Pinchot's banquet address in these terms:

Inasmuch as Mr. Pinchot dealt at considerable length with his conception of the need for public regulation, there were perhaps many in the audience who did not agree fully or perhaps even in part with his analysis of the forestry situation in the United States.

CHAPTER III -  
NEW DIRECTIONS

If up to this point we have pictured the years following the first great impulse for forest regulation as a time of decline and loss of faith among American foresters, looked at in another way this same period can justly be regarded as a time of growth and broadening out and encouraging new development. If the most ardent advocates of government control of private lumbering sulked in their tents or under the domes of state capitols, there were others who had learned the lesson of that great controversy and were striking out into the uncharted wilderness with new courage and resolution. They returned to the woods in a spirit of humility and openness and their reward was rich: where before they had only seen the saw log and the stick of pulpwood and forest land waiting to be planted or lightly cut, they now became alive to the birds and mammals that inhabited the woods, to all the possibilities wild lands held out for the hard-pressed and driven city dwellers of our machine civilization, to the relationship of the forest with other forms of land use. Like a young pine whose terminal shoot had been broken off in a storm, American forestry showed great powers of recovery: the new enthusiasm for wild life and recreation and land use planning was a side branch of the sturdy young tree swinging around to form a new leader.

In their reaction against the attitude that had largely dominated in the regulation debates -- the atti-

tude that looked upon the wood crops of the forest as the only really significant resource involved -- this newly formed group of foresters was stating in new terms the doctrine of George Perkins Marsh, fine old pioneer in American conservation thought. Marsh's important and influential views had been presented in his long and surprisingly thorough book first published as Man and Nature in 1869, in later editions as The Earth as Modified by Human Action. (5) Combining the experiences of his travels here and abroad with extensive readings in modern and classic authors, this teacher of English rhetoric, Minister to Italy and amateur geographer built up an impressive picture of the interactions of man and the earth, which, at the same time, with its learned citations of Pliny and Cicero and its long and enthusiastic foot-notes on such matters as the tapping of maple trees for syrup and the relative merits of the nuts of the walnut and hickory trees, makes enjoyable reading.

Marsh had been greatly impressed in his travels in the Mediteranean world by large areas of land in desert and uninhabitable, many of which, according to the accounts of the Roman poets, had been fertile and well populated in classic times.

There are parts of Asia Minor, of Northern Africa, of Greece, and even of Alpine Europe, where the operation of causes set in action by man has brought the face of the earth to a desolation almost as complete as that of the moon; and though within that brief space of time which we call "the historical period", they are known to have been covered with luxuriant woods, verdant pastures, and fertile meadows, they are now too far deteriorated to be reclaimable by man. (p.43)

Nature, in an undisturbed state, seemed wonderfully balanced and harmonious, but human settlement overturned this balance:

But man is everywhere a disturbing agent. Wherever he plants his foot, the harmonies of nature are turned to discords. (p. 33)

Marsh saw this same pattern of forest destruction and careless farming being repeated in America and was trying to arouse people to the dangers involved in this policy.

The influence of Marsh's book was considerable in the years following its publication, although his original doctrine was somewhat watered down and distorted by the admixture of an overly sentimental regard for trees and by an exaggeration of the beneficent influences of the forest. These followers of Marsh were ridiculed and labeled "denudatics" by a sceptical public; but their main article of belief, that, in Marsh's words, we were "breaking up the floor and wainscoting and doors and window frames of our dwelling, for fuel to warm our bodies and to seethe our pottage," was worthy of more consideration in forestry deliberations than it was to be accorded again for many years.

With the coming of Fernow and German forestry to this country a growing emphasis began to be placed on timber production in American forestry thought. Fernow (3) was well aware of the influences of the forest and of the need in some localities for protection forests. But quite

rightly he saw his "Arbor Day friends" as overly poetic and emotional, as impractical in their passion for planting trees while forests were being destroyed. Fernow took some pains to make his conception of what a true forester was clearly understood. He was not an arboriculturist, a botanist, a dendrologist, a landscape gardener, a lumberman, a forest guard, or even a silviculturist ("one who knows how to produce and reproduce wood-crops;")

But in the fullest sense of the term, a forester is a technically educated man who, with the knowledge of the forest trees and their life history and of all that pertains to their growth and production, combines further knowledge which enables him to manage a forest property so as to produce certain conditions resulting in the highest attainable revenue from the soil by wood-crops.

The limitation of the role of the forester to the raising of wood crops is a lesson American foresters learned from their German masters.

When the National Forests came under effective administration in 1905, the policy adopted for their development was from the first one of multiple use -- management for several objectives rather than the single one Fernow had stressed. The Forests were made up of some lands better suited to grazing than to timber production, some that found their highest use in farming. Besides, economic conditions in the lumber industry and the inaccessibility of most of the government holdings put the sort of intensive management that Fernow had in mind out of the question.



This intensive management for wood crops nevertheless remained the dominating objective in the minds of American foresters, as was clearly brought out in the discussions over forest regulation that followed the war. While it may have been in part a matter of expediency and political strategy, the advocates of federal regulation from the first built up their case in terms of an impending timber shortage. The Forest Devastation Report of Pinchot's committee (72) opened in these words:

A good and continuous supply of forest products is necessary for the safety and prosperity of the United States in peace or in war.

Other matters were dealt with in the body of the report and in the debate in the months that followed -- the social consequences of forest destruction, the regulating effect of the forest on stream flows, the recreational values of forest lands -- but all of these things were made to seem secondary to the major concern, that of safeguarding the nation's timber supply. To some extent this turn of events was inevitable: these so-called intangible values of the forest, important as they might be, were hard to measure and express in quantitative terms. But whatever may have been the logic of this plan of campaign, it turned out to be an extremely unfortunate one in the long run. Once it could be shown with some degree of plausibility that there was no real cause for alarm about the supply of timber, that the demand for almost all classes of wood products

was declining, that a number of substitutes for lumber were being made available and put into use, the props were knocked out from under the whole forestry argument.

If some members of the profession lost faith and asked themselves ominous sounding questions like "Why Saw Logs?" and "Whither Forestry?" others found new life in the ruins of the timber shortage campaign and proceeded to build anew in several fresh directions. The first of these new developments, in logical if not in historical sequence, was the rediscovery and re-statement of George Marsh's broad vision of the dependence of man on the earth and of the complex inter-relationships that bind together all plant and animal life and the soil that nourishes them. Aldo Leopold, member of the Forest Service in the Southwest in the early days and in more recent years a pioneer in the field of wild life management, has been one of the most clear-headed and vigorous exponents of this doctrine among foresters. Writing in 1933 (40) he states it concisely and well:

A harmonious relation to land is more intricate, and of more consequence to civilization than the historians of its progress seem to realize. Civilization is not, as they often assume, the enslavement of a stable and constant earth. It is a state of mutual and interdependent cooperation between human animals, other animals, plants, and soils, which may be disrupted at any moment by the failure of any of them.

Leopold calls attention again to those "contingent and unsought results which Marsh had found to flow from changes in the economy of nature initiated by man.

We inherit the earth, but within the limits of the soil and the plant succession we also rebuild the earth -- without plan, without knowledge of its properties, and without understanding of the increasingly coarse and powerful tools which science has placed at our disposal. We are remodelling the Alhambra with a steam shovel.

This approach to forestry through ecology has had several salutary influences. It has given foresters a broader view of the meaning of their work: in addition to helping provide that "good and continuous supply of forest products" mentioned in the Devastation Report, they can also serve as guardians of the biotic balance in nature, throwing their concerted weight against all developments in land use that are likely to be violently upsetting in their effects. Ecological wisdom has also contributed to the downfall of the older silviculture, based, in Leopold's phrase, on setting out trees like cabbages:

The "cabbage brand" of silviculture, at first seemingly profitable, was found by experience to carry unforeseen biotic penalties: insect epidemics, soil sickness, declining yields, foodless deer, impoverished flora, distorted bird population. In their new Dauerwald the hard headed Germans are now propagating owls, woodpeckers, titmice, goshawks, and other useless wild life. (41)

The control over the forces of nature that Western man imagines he has achieved is more illusory than real. The pride of the engineer and the scientist is an encumbrance for the man who works in the world of growing things: unless he learns Nature's ways and works with her his labors will not stand. The conservation ideal is undergoing an extension from conservation of the forest and conservation

of the soil to conservation of the whole biotic pyramid-- plants and animals as well as the soil which gives them life and to which they return.

The growth of interest among foresters in land use planning about this same time is a related development that touches on ecology and wild life management in some of its aspects. The aim of this form of planning is to bring about a wiser and better balanced use of land, benefitting alike the land and the people who live on it and work it. It has grown up and been most highly developed in cut over regions like northern Michigan, where logging has been succeeded by a precarious kind of farming that in many places has not added up to a living. The land use planner proceeds by classifying lands according to what they are best suited for, and then seeking to have the local people use them on that basis, whether it take them into farming, forestry, or development for wild-life and recreation.

Land use planning is a departure from traditional timber crop forestry in this respect: it questions the wisdom of trying to grow timber for commercial use on all cut-over and abandoned lands unsuited for agriculture. Critics of this forest-it-all policy, notably P. S. Lovejoy, have maintained strenuously that much of the land in these districts is sub-marginal for intensive forestry as well as for agriculture. Yet these have been the lands in many cases that the Forest Service, with its limited budget for land acquisition, has struggled to nurse back to producing forests, starting with bare land or worse,- lands in Lovejoy's words, "so poor that they were not worth stealing

while the stealing was good." While from the point of view of the Forest Service "a crust was better than no bread," there has been something tragically ironic about the whole business:

There may yet be an element of expediency about it, but to permit the steady wrecking and devastation of good, thrifty, self-renewing forests, while at the same time laboriously building up new forests on cull lands, surely partakes of economic idiocy rather than of expediency. (43)

At the same time, in planting and laboriously tending lands that can hardly do better than three-log Norway pine in 150 years, the potential values inhering in the aspen and birch and pin cherry coming in to re-clothe the fire- and stump-scarred earth have been disregarded. The possibilities for game management and recreational development in these types are considerable, as Lovejoy long labored to show.

For much of our forest and ex-forest land there will, I think, shortly be an extensive silviculture which merges into game cover management.

If the recreational use of wild lands was involved in game management and land utilization, there was also a strong impulse in this direction on more purely social grounds. When widespread use of the automobile had first made it possible for large numbers of people to take to the National Forests to picnic and camp, the response of many foresters had not been altogether friendly. Planned improvements were hardly in existence and the new visitors caused rangers considerable annoyance by their carelessness with fire and their capacity for getting lost in the woods.

As time went on, however, the right of the people to use their National Forests for recreation came to be respected and even encouraged and picnic grounds, camping sites and other recreational facilities were developed. Foresters came to recognize the hunger of city people for the open spaces and the woods, and sought to minister to that hunger. Recreation took its place along with timber production, watershed protection and grazing as an important use of the forest.

Another phase of the recreation philosophy was involved in the setting aside of large, isolated areas of land in the western forests in which developments and improvements of virtually every kind were expressly excluded. The creation of these Wilderness Areas for the enjoyment by those who were able of the unaltered primitive and for the preservation of the original forest types of the continent was largely the work of Robert Marshall and the Wilderness Society, of which he was one of the moving spirits while he lived. The reservation of these large areas as wilderness was justified not on the basis of the number of people likely to avail themselves of their recreational possibilities, but rather on the quality of the enjoyment these preserves made possible for the few willing to rise and meet their challenge.

In the other aspects of the recreational development under Silcox and Marshall, considerations of the greatest good for the greatest number were more prominent. One

of the dominating themes of Forest Outings, the attractive and eloquent booklet of the Forest Service that covers the whole field of recreation on the National Forests, is the need for making forest outings possible for families with small incomes, for giving priority in the allocation of lands suitable for recreation to public camp and picnic grounds rather than to private summer homes and limited membership clubs. This policy is embodied in the "Basic Principles Governing Recreational Management on the National Forests" quoted in the booklet:

Particular attention will be given to facilities for the use of those in the low-income groups who can enjoy forest recreation only if its cost is small. This means emphasis on both camping and picnicking facilities, and organization camps owned by the Government and made available to those sponsoring vacations for low-income groups. (p. 287)

The spirit of serving the people, so strong in the Forest Service in the first years of its existence, is still something to be reckoned with.

Up to this point an attempt has been made to trace the origin of the forestry movement in this country to the general protest raised against the excesses and evils of our business civilization; to follow the course of the reaction among foresters against this first idealism; and finally, without meaning to subscribe to the action-reaction theory of history, to describe the renewal and extension of the first generous impulse towards forestry and conservation in more recent years. An effort will be made in the discussion which follows to appraise these past movements in the world of forestry ideas more fully and to relate them to present and future developments in American life.

In preceding pages considerable stress has been placed on the expansion of forestry into the allied fields of wild-life management, land utilization and recreation in recent years. Fully as noteworthy a development of this same period has been the growth in numbers and influence of the adherents of the private forestry point of view -- in the lumber industry, in the forestry schools of the country, in the Forest Service itself to some extent. Private foresters now have their own section within the Society and representatives of this group make themselves heard at Society meetings and in the pages of the Journal.

If we are to criticize the position of these private foresters of today adequately, it will be well to



call to mind the original sources of the impulse for forestry in America and the ideals of the profession in the minds of its founders. It was the wholesale destruction of the virgin forests of this country at the hands of the old time logging industry that called American forestry into existence. In contrast to the logger, who sought his own maximum profit in the short run, the forester undertook to preserve the right of the public, now and in future generations, to enjoy the benefits of the forest. He was content with a modest remuneration for his efforts, happy to be free of the general scramble for money and power, satisfied that his was a useful, valuable life.

This ideal of the forester as public servant, we have already seen, was questioned early in the life of the profession by such men as Austin Cary and Donald Bruce. By the end of the war those who shared this new attitude were well enough represented to prevent the showing of solid support among foresters in the struggle for the federal regulation of cutting on private timberlands. Since that time, and particularly in the last ten or fifteen years, the private forestry philosophy has made further headway among foresters generally.

The first private foresters were unwilling to limit the scope of their actions to the National Forests, whose direct contribution as timber forests was at best

slight. There was more to forestry, as Professor Matthews likes to say, than fighting fire and planting trees. Moreover, the appeal of the world of business with its uncertainties and gambles, its rewards for skillful planning and bold and well executed strokes, must have had weight with those who went to work for the lumbermen. This element in business life ought not to be under-estimated: it is no mere accident that men speak of being in the insurance game or in the printing game. Even Forestry students get a certain amount of exhilaration from drawing up logging plans for 30,000 acre tracts and saving their mythical employers 24 cents for every thousand feet of lumber on the property. Those foresters whom the lumber industry took in and put to work it largely made its own. The forester was sometimes able to convert the lumberman; but almost inevitably he underwent an equally far-reaching conversion himself.

If there was a time when the private forester hesitated between loyalty to his employer's interests and what might have appeared to him to be his professional obligation, that day is past. The private forester has taken his place alongside the engineer as the technical supervisor of the operations of private business -- or, at least, that is what he would like to be given the chance to do. He views many of his publicly employed colleagues as missionaries and crusaders who are not living up to their professional responsibilities. Harris Collingwood, Forester for the National Lumber Manufacturer's Association, had this to say at the Society's meetings at Jacksonville just a few months

ago:

The history of our profession reveals, in the belief of many, a disproportionate amount of energy devoted toward evangelism and propaganda rather than toward the economic responsibilities for satisfactory continuous management of forest lands. (20)

Moreover, the public forester is given taxpayers' money to do all sorts of economically unjustifiable things and is held to no strict accountability like that of business. The forestry problem of the nation is on the way towards being solved -- by the private foresters and the hard-headed business men they have won over to sustained yield by showing them that it pays. These are, in Collingwood's words, the foresters who believe that "permanent production of timber crops is a natural corollary of enlightened self-interest."

Some assessment of the achievements of these foresters who have seen their function as that of educating the private owner to a more enlightened sort of acquisitiveness is in order at this point. Their task of bringing more careful and exacting and more socially responsible methods to an old and once triumphant industry, set in its ways and resistant to new ideas, has not been an easy one. The lumber industry, like the mining industry to which it was all too closely related in outlook and technique, belonged to an earlier industrial period than that of the newer chemical and metallurgical industries, with their emphasis on scientific management, careful cost accounting and the utilization of by-products. Timbermen had made

their fortunes on the unearned increment accruing to them through the growth in stumpage values that went along with the growth of the country. When the day of reckoning arrived early in the present century and carrying charges suddenly loomed large they lacked the flexibility and business intelligence to adjust to the times. It has been the contribution of the private forester to supply this needed flexibility and business intelligence -- to a certain number of operators who have been receptive to new ideas. Some private companies which have been operated on a sustained yield basis for a number of years can point to important social and community benefits which have followed upon their change in methods. Private foresters also may claim to have won a greater respect for the profession in some quarters, particularly among lumbermen and in business circles generally.

It is fair to say in answer to the claims made by private foresters for their method that its successes have up to this point been limited. In certain regions -- notably the South -- in certain timber types, where certain markets exist, some really noteworthy gains have been recorded. But for the country as a whole, the old policy of forest destruction goes on as before. Many hardwood operators in the Lake States, for example, are steadily cutting themselves out of business with the end of operations in sight. Sustained yield can not always be shown to be more profitable than liquidation logging, and often when it can be, the men who make the decisions are unim-

pressed. P. S. Lovejoy covered this whole matter pretty satisfactorily some years ago in these words:

Shall we continue the pretense that presently, before long, soon, most private timberland operators will adopt and apply some method of continuous production? (42)

There is an equally important reason for hesitating before conceding that private forestry represents our most hopeful line of advance. This other reason lies in the domain of morals, a domain that our first foresters insisted was all-important. Judged by their uncompromising standards, many practices commonly engaged in by foresters to-day, many fairly generally received articles of belief, fall considerably short of the mark. Hence the petitions to the Journal on its editorial policy and the "Letters to Foresters" lamenting the present waywardness of the profession. Are we to consider these periodic protests by Pinchot and some of the older foresters as querulous outbursts on the part of men whose forestry philosophy belongs to another day, or ought we rather to take their words to heart and try to restore what has been lost?

A few illustrations will help bring out what it is that old forest idealists feel has been lost. It will be noted that Harris Collingwood, quoted above, is forester for the National Lumber Manufacturer's Association. Besides working for trade associations, there seems to be an increasing number of foresters interested in timber invest-

ments and timber speculations in their own right. These lines of endeavor are not altogether new ones for foresters. They were sufficiently common to warrant consideration by Olmsted in a paper he read at the annual meeting of the Society in 1921.(50) His whole treatment of these forms of employment under the general subject of professional ethics will reveal the extent of the change in outlook since that time. Olmsted strongly questioned the right of men in such lines of work as timber brokerage or speculation to professional recognition. He called attention to the forester who went to work for a private company in some such capacity as scaler, grader, or woods foreman and seemed to forget all about forestry; and to the forester engaged by associations of timber producers or lumber manufacturers,

a possible case in which the forester abandons forestry, in practice and in spirit, falling into the ranks of his commercial employers, thinking and acting as they think and act.

In Olmsted's mind the issue was clear-cut and sure. As in all his public utterances his vigor of expression was undiminished by judicial reservations. The whole matter stood this way:

Finally, is there or is there not a relation between the professional standing of a forester and his regard or disregard for the public welfare in his work?

Professor Chapman of Yale covered this same ground in an article in the Journal a year or so later. (17)He pointed out the divided allegiance that might confront

the private forester who owed loyalty to his employer, but could not at the same time lend his support to destructive laws contrary to his professional ideals and the public good, even though his employer might do so.

To the private forester of today this distinction between professional ideals and the public good on the one hand, and the possibly unsocial interests of his employer on the other, is not real and meaningful. Consider a recent article by A. E. Wackermann endorsed by a number of other foresters and dealing with the responsibilities of forest owners.(67) It is acknowledged that ownership of forest land carries with it some obligation to keep the land productive and prevent its becoming a public nuisance. But Wackermann makes a drastic qualification:

Obligations of forest ownership, however, are held to be no greater than the actual or implied obligations of owners of other lands or properties which contribute to the wealth and well-being of American citizens.  
(italics mine)

Not only is the destructive logger no more to be held to account for what he does than the soil-depleting farmer; but also -- and Wackermann says this explicitly -- his unsocial actions are put on a level with those of the wasteful manufacturer. Any program imposing responsibility must be applied equally to all these classes of owners. If this is not the sort of reasoning employed by the proverbial purple-faced gentlemen at their clubs, it is a near relation to it.

While the private forestry movement has been

responsible for some gains in the practice of forestry on private lands, in some respects it marks a throwback to the past. It is an attempt to make a profession that all its life has seen the spiritual hollowness and destructive recklessness of a business civilization turn back and throw in its lot with that old order. It rests on the belief that impersonal economic forces which in years past slashed and destroyed our forests, culled out the walnut and poplar and cherry and left behind the scrubs and crooks, which everywhere left their mark in bleeding lands and ghost communities, that these same economic forces will now bring about sustained yield forestry and its attendant blessings on most of good remaining forest lands of the country.

If it does not seem desirable, then, that the main body of American foresters join with Mr. Wackermann and the private foresters, where may they look for direction and purpose in years to come? The philosophy of Olmsted and Pinchot still has its adherents and there is still much to be said for it. Events of recent years have suggested, however, that these proposals for government control and a greater measure of government ownership are in themselves not sufficient to insure that all will be well. While planting programs, selective cuttings and the balancing of growth against drain all have their importance, the results of all these policies in terms of the people most directly affected by them must not be overlooked.

Raphael Zon, veteran member of the Forest Service now serving as chief of the Great Lakes Experiment Station,



has recently shown a wise concern for the present needs of people in the forest regions. (70) He has seen clearly that the little trees being set out on the National Forests of the Lake States will be of little help in meeting the economic difficulties of this region for many years to come and that what is needed is a concerted effort directed at developing its remaining resources and processing them at home to provide employment and a better livelihood for the people. Julian Griggs of this school has been using this same approach to the problems of the cut-over region, with a greater emphasis on its recreational resources. Zon urges that uses be found for the aspen now rotting in the woods and proposes that, with government help, it be used to provide better housing for people who are badly in need of it in these districts. He calls for the promotion of small forest industries that will do such things as salvage fuelwood from the slash of lumbering operations for the market in not too distant cities, manufacture wood souvenirs for the tourist trade and make woodcraft articles for more general distribution.

This same view of things is taken by Lyall E. Peterson in an admirable paper read at the New Developments session of the 1940 meetings. (51) He is dissatisfied with much current forestry thought that sees all our problems in technical terms and asks: "Is it possible that the great cause of conservation is eroding away along with soil, and humanity in general?" He urges a more flexible approach

on the part of foresters, asks them to think of people, their needs and their lives, whether it lead to forestry agriculture or something else:

All foresters, by one means or another, are pledged to the central objective of encouraging better management and use of forest resources for the greatest good of the greatest number in the long run. This social objective, in reality, rests on the basic family needs for food, clothing, shelter, fuel and cultural expression. Perhaps if we begin with these needs -- community by community -- instead of with the forest, it will be possible to make greater strides.

This approach to American life through the region and the local community that has characterized the work of the land use planners and is involved in such a development as the Tennessee Valley Authority may be one of the most hopeful signs in the current forestry picture. We have long put our trust in economic self-interest or in the restraining powers of the government to attain our ends. It is time now to recognize that the most important factors involved are human customs and folkways and beliefs; that the solution to our problem lies, in M. W. Wilson's phrase, "beyond economics". To the extent that community planners can bring people to have a greater reverence for the land they work, to feel a deeper sense of responsibility in the use they make of it, much will be accomplished towards strengthening what Aldo Leopold has well called "the conservation ethic".

For the duration of the war not too much can be hoped for in the way of improvement in the use we make of our forest lands. The greatly enlarged market for lumber and wood products is accelerating the pace of destructive

logging in many parts of the country. Public forest agencies, depleted in man power and appropriations, can only strive to hold on to what has been won in the past. The American Forestry Association has called for a truce on the issue of governmental regulation until after the war. Foresters, however, are justified in opposing unnecessary inroads made upon the forests under color of the national emergency.

The years following the war will be the decisive ones for American forestry. After the strain and sacrifice the war will surely entail there will be a strong urge to return to the irresponsibility and carelessness of the good old days. If the sacrifices made during the war are to have any lasting meaning this tendency to go back to old ways of doing things will have to be strenuously resisted. Part of the meaning of the Nazi revolt against civilization is this: the worship of money and gadgets and material possessions that has been general in the western democracies is not an ideal worthy of men's faith and allegiance. With all its evils and excesses the fascist ideal has some human meaning to it, has given men something outside themselves to believe in and has made economic institutions responsive to human purposes rather than at odds with them. In the place of the Nazi barbarism we must find a new kind of system, rich in human values and satisfactions and subject to control by us for the things we want. Towards this new dispensation foresters have been looking for long years. Acting in the great tradition of American forestry

they can play an honorable part in bringing it about and in giving it form and meaning.

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