

## "So What Have We Accomplished?"

Robert G. Hitt\*

The date was Tuesday, March 25, 1924. Representative Gilbert N. Haugen of Iowa, Chairman of the House Committee on Agriculture, called the meeting to order and asked Mr. John D. Clarke, Representative from New York, to report on House Bill 4830 which was a companion bill of the McNary reforestation bill introduced in the Senate.

Mr. Clark's bill was to provide for the protection of forest lands, for the reforestation of denuded areas, for the extension of National Forests, and for other purposes in order to promote the continuous production of timber on lands chiefly suitable therefor .

Section 4 of that bill is the part that concerns us most here today. Section 4 contemplated cooperation of Federal and State Governments in the way of furnishing forest tree seeds and plants. It is worthy of note that there were then reported to be 81 million acres of denuded land in the United States subject to reforestation and fit for reforestation; and that the United States was then practically reforesting by planting about 30,000 acres, while Japan was reforesting over 300,000 acres annually (1924). The bill sought a \$100,000 appropriation in order to cooperate with the States. The whole motive of the bill was to provide for cooperation with the existing State agencies and private agencies under the supervision and approval of the State and Federal Governments in carrying out reforestation work.

Following Mr. Clarke's presentation, numerous prominent figures in forestry testified in favor of the bill. Included were such men as Mr. R. S. Kellogg, Chairman of the National Forestry Committee and Mr. George D. Pratt, Conservation Commission, New York City, who in discussing various sections of the bill said, "Number 4 deals with the distribution and planting of forest trees. I gave you that first statement to show you the condition we are in. " (He had earlier pointed out that we had about 300 million acres of timberland, both virgin and

\* Staff Assistant, Div. of Cooperative Forest Management, U.S. Forest Service, Washington, D. C.

second growth in the United States and we were cutting it at the rate of 10 million acres a year. He then said that at that rate we could very well face a timber shortage.) He continued his statement by saying "these States must be assisted in the distribution of trees and plants for the purpose of establishing forests if we are going to get anywhere on this reforestation project."

Mr. Charles L. Pack, President of the American Tree Association, Washington, D. C. , testified favorably. He said the Clarke-McNary Bill seeks to rehabilitate our forests in two ways -- through providing funds for use in cooperation with the States in distribution of stock for planting, and through study of the tax situation to the end that revisions may be made to encourage forest cropping as a business enterprise. These two objects alone justify the passage of the bill.

Col. W. B. Greele<sup>y</sup> , Chief of the Forest Service, and Henry P. Wallace, then Secretary of Agriculture, also testified in favor of the Bill.

The Clarke-McNary Act was signed into law as an Act on June 7, 1924. Numerous amendments and supplements have since been made to the Bill.

Well, what have we accomplished under the provisions of the Bill? Let's look at some of the statistics.

Since 1926, the first year that allocations were reported, the States have appropriated about 55 million dollars under the cooperative program for tree planting stock production. The Federal money allotted amounted to around 11 million dollars. This figures out to an overall ratio of 5 State dollars to each Federal dollar. These 66 millions of dollars have produced some 11.9 billion trees under Clarke-McNary.

If we figure a conservative 1,000 trees planted per acre, these trees would have planted 11.9 million acres of forest land. Initially, since there was greater emphasis on windbarrier and shelterbelt plantings, this figure could be somewhat larger; however, for the purposes of our discussion today we'll use our 1,000 trees per acre figure.

Certainly by now, many of the early plantings are gone through losses from fire, insects and diseases, drought and man's own activity, be it harvesting cuts, urbanization, or what have you. If we figure a 25% loss to these causes, we still have some 8.9 million acres of forest planting that are or will soon be producing pulp and timber products.

Conservation estimates would indicate yields of 30 cords of pulp per acre at harvest (this includes early thinnings) , plus at least 5,000 bd. feet of timber products per acre.

On today's markets, a stumpage, price for pulpwood of \$6/cord seems reasonable and \$40 per thousand for the sawtimber. Thus our harvestable acres now have on them some \$180 worth of pulpwood and \$200 worth of sawtimber for a total. of \$380 per acre. Deducting planting costs including planting stock costs of an average of \$25 per acre plus additional costs of taxes, compound interest on investments, etc. , we can estimate a further cost of \$110 per acre for the 35 years since planting. This leaves a balance of \$270 per acre. Thus planting stock furnished under Clarke-McNary at an average cost of \$5.55+ per acre has grown into forest products with values estimated to be in excess of \$250-270 per acre. Or perhaps another way one could look at this is that on acres now probably ready for harvest resulting from planting in the 1926-33 era, investments in planting of about 2.7 million dollars have resulted in a timber harvest crop valued in excess of 100 million dollars. If the mortality rate ran to 50%, our residual timber crop value would exceed 75 million dollars. I must hasten to add that these numerical gymnastics have not come under the studied or even casual surveillance of our Forest Service economists. I dare say they may well find gross oversights, but when painting with a broad brush as I've done, one can cover a lot of area with a few passing strokes. For whatever bureaucratic bunglings I may later be accused, at least we can all certainly agree here today that the monies, both State and Federal, which have gone into Clarke-McNa.ry tree planting stock production over the years, have been well spent. They have contributed richly to the forest resource so vital to our current National and International economy.

There are other values, too, which must be mentioned. No I'll not try to put a dollar and cent value on these, but each of you can reflect in your own thinking as to the values we might assign to these. How about the value of water conservation resulting from tree planting work? Recreation and wildlife values must also be considered. Today's burgeoning population, improved highways combined with better, faster cars, shorter work weeks, and longer vacation periods, all blend to add another value dimension which has applicability to our forestation efforts.

What else have we bought with our C-M 4 monies? Let's not forget your "Tree Planters' Notes." Born in November 1950, the first issue had this announcement - "Here is the first issue of Tree Planters' Notes.

This will be issued from time to time by the U.S. Forest Service in Washington, D. C. It will present news and articles of interest to forest-tree nurserymen and planters, covering all pertinent matters of seed collection, nursery operation, field planting, survival studies, etc. The material published will be gotten from the tree-growers themselves -- from the men doing the "dirty hands" job in the nursery, the forest, and the research laboratories. Material to be published will be solicited by general invitation to anyone who has something to offer, and by specific request when someone is known to have done a specific job of soil treating or machine designing or something else that should be made known to all of us through publication in Tree Planters' Notes. "

Since that initial printing of some 1,500 copies, our mailing list has grown to over 1,300 persons who receive over 2,600 copies of the 3,700 copies now printed of each issue. We mail to nurserymen, researchers, forestry schools, private landowners, State agencies, forest industries, consultants, yes -- even to banks and service men. "Tree Planters' Notes" goes to every State, to Canada and Mexico, and a number of foreign countries. It's read round the world from Tokyo to Rio, from Helsinki to Melbourne.

A glance at the titles of articles in its early issues would reveal such topics as "Machine Planting," "Ladders and Tree Climbing Equipment," "Chemical Weed Killing." "Shorty" Clifford had one entitled "Methyl Bromide to Control Weeds in Conifer Seedbeds", (Sept. 1951); Hugh Wycoff had one in November of 1952 entitled, "Green Manure Crop Causes Seedling Mortality." "Ink" Arnold had "Drill vs Broadcast Sowing" in October of '56, and so it goes.

Over the years the emphasis has changed somewhat. Researchers began to publish research findings; nurserymen kept up their contributions on machinery, management, and packaging.

Just for kicks, I analyzed the articles in the 1968 issues of "Tree Planters' Notes". There were a total of 41 articles. Twenty-three of these were research articles; twenty-eight were directly related to nursery operations (about 70%); ten were written by practicing nurserymen (that's about 25%); five were by nurserymen in the Northeastern Area (that's about 12%).

You fellows are doing your share -- but you know, you can do better. You have 33 (37%) of the nurseries in your Area. We've about caught up with our back log. of articles for "Tree Planters' Notes" so, if you have any new gadgets, favorite packages, or super seeders you'd like

to brag about, write it up , snap a picture of it, and send it on in to us. Although we don't publish everything we get, we run Ivory soap and their 99-44/100% a close second.

Now let's see -- where do we stand in C-M 4? What have we accomplished? MUCH: We've had good, highly productive years. You'll note I've been careful not to try to list all of the gadgeteering , the "Devicisms" , the "Rube Goldbergites" among you that have turned out hundreds of ideas, modifications, etc. , in equipment and methods for doing your nursery jobs -- for getting out planting stock., this in itself has been a truly significant accomplishment'.

There are now 89 nurseries operating under some cooperative financial assistance from C-M 4 funds. During fiscal year 1967-68 over 54 million trees were produced and distributed under C--M 4 cooperation. The production for 1968-69 should equal or exceed this. There is not a single nursery that is operating at full capacity. We could easily double our present production schedules if needed. The future looks bright.

A new era in forestry is upon us. Intensive forest management is aimed at maximum cellulose production in the shortest possible time. Increased mechanization in all phases of forest land management from reforestation through harvesting must attend this intensified culture. Management for multiple products, not only in the woods, but from the cut trees, places still another dimension in the forestry picture. The use of fertilizer is expanding; "cities" of all descriptions are in use from those that protect to those that peel, some sterilize and some kill, the array is manifold. And we must not forget the genetic giants that will soon or that are already passing through your nurseries.

Attending this great growth in total forestry, we in the nursery business will have some new problems , as well as the continued presence of some old ones.

- With refined and sophisticated research techniques and goals comes an admitted lesser amount of research on nursery problems,
- With increased need for high quality planting stock for intensified forest land management,
- With increasing demands for improved genetic quality stock and the attending need for More intensive nursery care and management,
- With ever mounting labor shortage problems,

---- With contract growing of trees becoming more and more significant in State nurseries' operations,

-- With extended. season planting possibilities expanding each year.

With these in mind and for other valid reasons, we in S&PF feel that a need now exists to carefully re-evaluate our total C--M 4 funding procedure. Couldn't the small allotments given to many States work for you more effectively in other ways? Combined, these funds could finance Research and Development projects. The current seedling lifter development work , about which you shall hear more later, is a prime example of the type of project redirected funds can finance for you. Suffice is it to say that we are currently examining this entire C--M 4 program funding procedure.

Whatever evolves will be in the best interest of the original intent of the law and will reflect a continuing effort to make the current program the most effective,. productive way to use public funds.

As the years have passed, nursery operations have gone up and down. We're on a relatively even keel now; however, that's not to be interpreted as an indication of smooth sailing ahead. Certainly, if we are to meet our Nation's increasing needs for timber and paper products, recreation, water and wildlife, our planting programs must be accelerated

We can be sure of one thing - change lies ahead'.

Whatever it be, I am confident that any challenge put to you men will be met. You've done it before and you'll do it again. We'll have our problems and our frustrations. Insect and disease epidemics, over and under production, weeds-weeds-weeds, too little storage facilities, short seed supplies, poor germination. -- Yes, these are a few of the problems and you know of others. They'll always be around.

But tell me honestly, men, wouldn't it be a dull, unrewarding job without them? Where then would your challenge be?

As we look back, we see millions of acres of forest plantings whose birth was in your nurseries — in your State - C--M 4 cooperatively operated nurseries. As we look ahead, we see a strong, continuing, cooperative effort under C-M 4 and know full well that an even more bountiful forestry enterprise will emerge.

Indeed the challenge is there, and each of you shall help in meeting that challenge

I can think of no more fitting way to end this presentation than to read to you a part of the testimony given by Representative Willis C. Hawley of Oregon, at the initial hearing for the C-M 4 Bill in 1.924.

" Mr. Chairman, may I philosophize just a moment? We are stewards of a great trust; we of the present generation did not create the natural resources, the industrial systems, the political and social advantages which we enjoy. We did not write the Declaration of Independence or the Constitution of the United States; we did not fight the Revolutionary War; I guess none of us in this room participated in the Civil War. We did not begin the educational systems or found them or the great universities. They were founded in a previous generation. I could enumerate, if time permitted, all of these things that have been given to us by generations that have gone. We are holding all of them in trust, including the national resources of the country. They are ours to use economically and beneficially so far as our needs require. But we have no more right to destroy the forests of the country or to deplete them or to injure them without taking measures to reforest all available areas and to provide adequate supply of them for the future than we have the right to destroy the other things that have been given us, than we have to destroy the Constitution or the general system of public life, our economic developments or our educational system that: would leave the next generation poverty stricken in these matters. Therefore, on: the very broadest public policy that I can conceive of, we are obliged, as men of sense and wisdom, having regard for the lessons of the past and deep regard for the future, to use such amounts of the public's monies as may be necessary to conserve these essential factors in the public welfare."

I'm confident that this admonition by Representative Hawley in. 1924 still holds today, and that you men will be a part of that great army of conservationists who will see to its accomplishment'.