A Summary of The Development of Community Forests in The United States
by
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Approved:

[Signature]
Professor of Forestry
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Introduction

Purpose or objective:

The underlying purpose of this thesis is to call attention to my fellow students of the need for, scope and values derived from one of the fastest growing fields of technical forestry; that of starting, growing and managing community forests.

Community forests are properties owned and operated for forestry purposes by a village, city, town, school district or county. They may be locally known as town, city or municipal forests, town woods, school forests, watershed forests or memorial forests.

Undoubtedly the graduating senior of the typical forest school of today has his ambitions directed into but a few narrow channels such as the Forest Service or private enterprise. Many of the more minor fields but yet fields offering employment to the technically trained forester are completely ignored, obscured or pigeon-holed out of existing possibilities.

It is the chief aim of this paper to uncover one of the branches of an ever-increasing profession and expose its possibilities to the student. Besides this objective, however, is one of bringing before the student a summary of the present day status of community forestry and of increasing his general knowledge of the field. Finally, to create an interest in community forestry am I writing this thesis, for
though the student may not enter this field, he will undoubtedly someday be exposed to it and be in a position to promote a worthy undertaking.

Importance of the problem:

"Today, we are confronted with a situation, not a guess. We have passed the point of argument. We need more forests.

The last century has seen a forest resource of some six thousand billion board feet of timber cut to one-third of that amount. The same century has seen our population mount eleven-fold, creating increasing demands for forest products. To meet the economic, industrial and social demands we must transport timber, at heavy toll in freights, thousands of miles. We not only need more forests but more forests in more places." 9/

Though our national forests comprise over 150,000,000 acres and our states have their forests totalling a few million acres, they will not solve the problem when the pinch comes but only aid for awhile.

We need our forests and more because the products of the forest are essential to our industrial and social future and prosperity. Hundreds of thousands of our citizens are dependent directly for their livelihood upon the trees of our forests. Many more are dependent indirectly. Our railroads must have ties, our families lumber to build homes,

9/- Harris A. Reynolds, Town Forests, The American Tree Association, 1925, p. 3.
our mills logs to saw, our water supply must be protected, our wild life furnished natural sanctuary and our people must have a place for forest recreation.

It is because of these various needs for more forest areas that community forests have come into the spotlight. They are not just an idle dream, something to think about and plan for, but an actuality that offer a help in solving our reforestation problem.

Review of related previous studies:

Though the field of community forestry is not an entirely recent one, it has been only during the past few years that any appreciable amount of research and study has been undertaken to uncover its possibilities in this country.

The one most important thing accomplished to date has been the educational program put on by states, forest conservation organizations, the federal government and public spirited individuals. Quite a good deal of literature has been published by these various agencies in the form of magazine and newspaper articles and pamphlets. Even radio talks encouraging the idea have been given. Yet, for the most part the man on the street is unacquainted with the program.

Method of procedure and sources of data:

This thesis, which in no way is set up as a problem solving paper, is merely a research through the previous
writings on the subject to present a short summary of community forestry as it exists today in the United States.

The method of procedure was entirely one of research. Current material pertaining to the subject was gathered from the college and school libraries and classified as to how it dealt with the field. Classifications included the need for community forestry, its history, both exploratory and developmental branches, its values and finally, how community forests may be established. An outline was drawn up to fit along with the broad classifications of the literature. It then merely became a matter of combining various writers' opinions and data on the subject into a logical, well-organized paper.

Sources of data consisted chiefly of current Forest Service publications in the form of pamphlets. Magazine articles, newspaper articles and a few miscellaneous pamphlets put out by states and forest conservation societies were also utilized.
Chapter I
--- History of Development ---

European:

Throughout Europe the city or town without a forest is an exception. Community forests are the most popular, profitable and successful phase of the forestry program. There they present a proud record of achievement. Strange as it may seem to Americans, there are communities where local citizens receive a bonus check from the operation of their town forest instead of a tax bill to maintain the town.

It is little wonder then that an idea originally intended to merely supply food, clothing and shelter to tribes, clans and families has become so popular. It is these revenues secured from regular timber crops that have proven to be the motivating force behind the establishment and management of community forests in Europe.

The idea in Europe is one centuries old, as the city of Zurich, Switzerland for example has the famous Sihlwald, a carefully managed forest of 4000 acres for 500 years and which has been owned by the community for 600 years. It shows a net return of twelve dollars per acre per year, employs one man for ever thirty-three acres and additional labor during the season as needed. The Thun forest, also in Europe, is reported to be yielding twenty dollars per acre annually.

Finland, Germany, Bulgaria and Switzerland are dotted with these revenue producing forests where much of the land
is ill-suited even for the growing of tree crops.

Native:

The field of forestry as a whole, which is further developed in Europe than here in our own country, bears a parallel relationship to that of our development of community forestry. It was a good many years before the possibilities and success of foreign undertakings in this field became recognized and finally started on a wide scope.

The eras in the development of community forests in the United States may be summarized as follows:

1- "The exploratory or initial stages during which many articles and much publicity appeared as a result of European visits of foresters, public officials and others interested in the success of community forests abroad.

2- A campaign of public enlightenment and education regarding the advantages of community forests.

3- The legislative period, during which many laws appeared on state statute books providing for the acquisition of community forests. Seventeen states have passed such laws.

4- Establishment and management. This stage is just coming into being." 8/

Although records indicate that Newington, New Hampshire established the first town forest in 1710, it was Massachusetts that first gave the movement emphasis. New York established its first community forest in 1909 at Gloversville. The oldest town forest in Massachusetts is at Fitchburg, started in 1905, while Newark, New Jersey also started a large co-

8/ - Progress Being Made in Community Forests, U. S. Department of Agriculture, Forest Service pamphlet B-21, August 1938, p. 3.
mmunity forest in 1909.

In all, there are some excellent examples of town and community forest operations in this country.

In Vermont, the city of Rutland owns a forest of 3,500 acres on which 66,000 trees were planted up to 1932. During the winter of 1931-32 the city used about forty men daily. The city of Concord, New Hampshire retained 100 acres of forest land on a poor-farm which it had purchased during the period of 1813 to 1827. An additional 400 acres was purchased at a later date and 3,000 white pines planted in 1895. Additional trees were set out later and a forest nursery started. The city now has 400 acres of forest land around the city reservoir on which it is estimated there are two million board feet of merchantable pine valued at $50,000.

Fitchburg, Massachusetts' forest has 109 acres of woodland in four tracts. The maintenance cost of the forest has been $4,405 and the returns from lumber and fuel wood sold has been $3,518. These figures of 1925 show that even after such a short time the forest started in 1914 was already on a near paying basis. Seattle, Washington owns a large tract of timber by Ruby Dam which is primarily used for recreational purposes. Bunk houses have been built along with mess halls to accommodate visitors. As many as 2,500 people visit this area each weekend during the summer season, as it represents a cheap form of outdoor recreation.

Other notable examples of town and community forests, serving a variety of uses, exist throughout the New England
states. Among the better known forests are those at Stowe, Vermont and Newington and Danville, New Hampshire.

In all, the examples of community forests are far too great to mention. The following table shows the number, area and distribution of town and community forests in the United States as of August, 1938.  

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Town and County Forests</th>
<th>Area (in acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
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<td>4,400</td>
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<tr>
<td>Arizona</td>
<td>3</td>
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</tr>
<tr>
<td>California</td>
<td>158</td>
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<tr>
<td>Connecticut</td>
<td>23</td>
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<tr>
<td>Florida</td>
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</tr>
<tr>
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<td>5</td>
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</tr>
<tr>
<td>Illinois</td>
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<td>Indiana</td>
<td>2</td>
<td>6,150</td>
</tr>
<tr>
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<td>8</td>
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<tr>
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<tr>
<td>Vermont</td>
<td>42</td>
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</tr>
<tr>
<td>Wisconsin</td>
<td>25</td>
<td>1,750,000</td>
</tr>
<tr>
<td><strong>Total for 27 states</strong></td>
<td><strong>1,097</strong></td>
<td><strong>2,889,605</strong></td>
</tr>
</tbody>
</table>

Though, as shown by the table, the north-east states are

far in advance of the others, the southern and western states are rapidly expanding their community forestry programs. It is only natural that the western states should be slow in getting started as they still have the largest share of their timber left. However, the time is coming when they too will realize the need for community forests and take steps to establish the program more extensively.
Chapter II

--- Economic and Other Values of Community Forests ---

As an aid to community financing:

During the past decade the cities and towns in this country have been getting deeper and deeper in debt until the subject has become one of national concern. There are thousands of towns or townships and some cities in which many acres of land are lying idle, producing nothing even to pay taxes. Most of this land is too poor for agriculture. However, it is suited for the production of trees.

The land is not contributing by paying a fair share of the tax burden of the town. Instead, it is a liability as it must be protected against fire that may spread to valuable holdings. It is a harbor for insects and other plant pests. In some of the eastern states this parasitic land runs as high as twenty percent of the total land area of the state.

Under forest management and with proper protection a reversal of these conditions may be expected. The land will produce net profits comparing favorably with the average farm land of the community.

Everyone recognizes the fact that the government is dependent upon taxes and that the application of heavy penalties is the only sure way to insure collections. For real estate, the penalty has invariably been to forfeit the property to the taxing unit. But today, land is an unwelcome substitute for taxes. The private individual cannot be ex-
pected to hold such poor sub-marginal land. It remains up to the organized government, therefore, to take this poor land and put it into productive form. Community forests are the logical answer to this idle land-use problem and that of town financing.

Profits of from two to four dollars per acre per year may be reasonably expected from these community forests under a systematic management plan. The income from community forests in Europe is frequently from five to fifteen dollars per acre per year and in some cases is even higher. In nearly every case, community forests will pay the taxes on the land.

Not only do community forests remedy the town financing situation but they put every acre to its best use. Land, sub-marginal for agriculture or even grazing, finds its position in growing trees.

After all, idle acres in a town have the same effect as idle men, the only difference being that it is not so readily detected.

As work reservoirs:

"the development of a town or community forest offers a means of putting both idle acres and idle men to work at an undertaking which will be self-liquidating and in which the original cost of the investment is relatively insignificant.

Although the number of men who can be given whole or part-time employment varies, the records of community for-
ests in Europe show employment ranging from one man to thirty acres to one man to every one hundred acres of producing forest lands, with additional labor needed at cutting or other seasonal periods."

The National Resources committee states that provisions must be made for employing increasing numbers of men over forty-five years of age. Because of the long period of unemployment during the depression, a considerable group of older employees will find few chances to work under private employment. Many of these individuals may be more or less permanently employed on community forests. By distributing the work among the men, relief may be given to all.

An excellent example of how community forests aid in employment is shown by studying Wisconsin's set-up.

The employment of local workers is placed in the hands of the county administrative officer. Usually the workers are selected from the community in which the work is being done. County forest work camps have been set up as a means of giving men from all parts of the county an opportunity to work on the county forest. Each camp accommodates thirty-two men. Some men furnish trucks or teams for which they are paid extra.

Work done by the camps includes the cutting of cordwood for county institutions in connection with timber thinnings, telephone line construction, fire lane maintenance and

tree planting.

"Comparable in importance to the fact that through the county forest local labor is given some income, is the changed attitude shown by the workers towards forestry and conservation in general."11/

A few years ago no professionally trained forester was employed in this kind of work. Now there are more than twenty such men used in connection with the larger community forests. Wisconsin has recently hired ten foresters to manage county forests there.

Though these few jobs that were filled represent a small proportion of the openings being sought, it is an indication that more will be needed as the movement progresses. In order for the community forest to pay, it must be systematically managed. Who else but a trained forester could handle this job so effectively?

As an aid to local industries:

"The days of the big, itinerant sawmill are numbered. The sawmill of the future will not be built on the principle that its existence is temporary, depending on the time required to strip the surrounding land of its timber as rapidly as possible and then be moved on to another forest district. Its capacity will be based on the annual timber production of the area to be served. The lumberjack will no

11/ - The County Forests of Wisconsin, Wisconsin Conservation Department, 1938, p. 21.
longer be a rover but will have a permanent home and an interest in the community.  

Though the big sawmills are being pushed farther and farther into the back country, the big industrial centers with their nearby rural townships remain. Their demand for forest products will always be constant or nearly so. The eastern landowner and gradually the western one too will have a natural subsidy for growing timber consisting of the freight differential from the more remote lumber centers.

Many small towns have small, wood-using factories for which the raw materials are grown within a radius of a few miles of the town. This is the ideal to be sought in the development of a forest district. The short haul eliminates freight rates and the lumber is manufactured into products for the consumer before it leaves the district in which it was grown. Because of the character of the products manufactured, close utilization can be practiced and many small mills exist and prosper when their larger neighbors, due to lack of raw materials, are forced to close or move out of town. The employees of these little, wood-using factories are thus insured permanent employment because the nearby community forest offers cheap raw resources.

Such a situation will encourage other factories to start, causing better economic conditions as a whole by giving the town a greater payroll.

As a place for forest recreation:

"Today we live at high speed and at high tension. We need a safety valve and none is better than wholesome recreation. Unfortunately, most of us do not have the time or the money to visit a national park, a national forest or any of the few remaining wilderness sections of the country every time we hear the call of the wild. We must be content with the forests and wild parks close at hand. Yet, with the steady increase in population and the rapid denudation of the forest, wild areas are diminishing in size and number at an alarming rate."  

The time is at hand then when the public must own its own forests to provide this needed type of recreation and the community forest offers the solution to this problem.

There is nothing new in this proposal that communities own forest lands for the use and enjoyment of all their people. Town commons, still found in some sections of the country, are held for a common source of food, clothing and fuel. Our parks and playgrounds for athletic sports have become public necessities and their maintenance has been accepted as a public policy.

As a rule, the establishment of a park solely for recreation adds a permanent item to the tax bill. On the other hand, the community forest is self-supporting from the time the first crop is ready to harvest. The recreational value

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is one of the chief, if not the most important, benefits to be obtained from such an area. From the purely investment standpoint the recreation feature is only a by-product of the forest which costs the community nothing.

The community forest established for recreation need not be large, as even a one acre tract will be worth while.

Another phase of the community forest which combines recreation with education is the planting to trees by school children. This is not only healthful exercise but it gives them a knowledge of trees and how to care for them. It will give these voters of tomorrow a keener insight regarding the conservation of our national resources.

Community forests offer good areas for field work within easy access of their homes to such great organizations as the Boy Scouts and Campfire Girls. The opportunity for the study of trees, shrubs, flowers, birds, and animals is not the least of the benefits derived from them.

"In short, the town forest can be made to serve the main functions of a park. It is not a place for play grounds or formal flower gardens which naturally belong near schools and in public gardens. But for a touch of Nature in the wild state, it takes the place in the local community of the state or national forest which cannot be reached by the great majority of the citizens." ⁹/

As game and bird sanctuaries:

In the United States more than 7,000,000 sportsmen take

to the woods for a few days each year. Our only hope of preventing the extinction of game birds and animals is the creation of sanctuaries where these wild creatures may breed in peace and safety; where they may find shelter during the hunting season. "It has been said that our great-grandfathers hunted the buffalo and the antelope, our grandfathers the caribou and the elk, our fathers the moose and the bear, while we must be content to follow the deer. At the rate we are going our boys will have to confine their hunting exploits to rabbits."  

In the east and especially in Pennsylvania it has been proven that game refuges are practicable. The auxiliary refuge permits almost any town or city to have its own game refuge by the establishment of a forest, even though small in area. Such protected areas in any state can be increased by thousands of acres if each town will secure control of a tract of land.

Game protection, however, is only half the story. The birds are of even greater economic importance than the game. "Even now the ravages of insect pests cost the farmers, orchardists and timber owner over $1,000,000 a day in this country. Were it not for the assistance of the birds in suppressing these enemies, the costs would mount even higher. States, towns and individuals are creating bird sanctuaries

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[q/- Harris A. Reynolds, Town Forests, The American Tree Association, 1925, pp. 21-22-23.]
in many parts of the country and beneficial results are already becoming apparent.

On a small tract of only two and one-half acres in Massachusetts 175 birds representing fourteen species have been banded there during three summer seasons. Winter feeding has been carried on successfully and when snow is on the ground from fifty to one hundred birds may be seen feeding at almost any hour of the day. Most of these birds are nesting and reproducing on the area. Although this section is troubled with the Gypsy moth and many native insects, little spraying with poison is necessary on this sanctuary due to the predatory work by the birds.

If such results have been obtained on two and one-half acres, how much more can be done on the larger scale of a community forest? Such sanctuaries hold educational value for old and young. It would be well worth the cost to any community to create forests for this purpose alone.

With a wide program of this type, the creating of game and bird sanctuaries on community forests, there need be no fear of any of our valuable wild-life creatures disappearing from our land. The community forest is ideally suited for this very program as it represents a replica of the game's natural haunts.

As watershed protection units:

Long-range planning and careful thought are necessary but the forest lands owned by communities may provide protection to municipal watersheds. This sort of protection
offers an extensive field for development, since many of the 10,000 municipal water systems in the United States have experienced a water shortage in the last five years.

It is estimated that fifty percent of the community forests have been acquired and developed primarily for the purpose of protecting the sources of water supplies.

Community forests established for this purpose can also be coordinately used for growing timber crops or providing recreation or wild-life refuges.
Chapter III

--- Establishing Community Forests ---

"Community forests have been established in various ways. Some have been set aside from the original land grant; others have been purchased; some are composed of tax delinquent land; some have been given by public spirited individuals as memorial forests; in one instance a town farm was set aside as a memorial forest to veterans of the World War." 12/

From the legal standpoint the creation of a town forest is merely a matter of routine. There are a few states such as Massachusetts and Wisconsin that have specific laws pertaining to community forests and these outline the method to be followed. Where no such laws have been enacted, the general laws applying to municipalities will probably be found adequate to enable the city, town or county to acquire a forest.

As a rule, state laws pertaining to establishment of community forests require that the state forester be in general supervision. The state furnishes technical advice and in some cases trees also, free to the community.

"The type of land to be acquired, the area desired, its location and the cost are matters of prime importance. It should be first determined whether the land under consider-

ation is suitable for timber production and the advice of
the state forester, where such officer exists, should be
obtained on that point." 9/ As a rule it is best to begin
with land already in the community's possession.

Wild park lands that are not producing species of
commercial importance and which under forest management can
be made into valuable assets are good beginnings. Other
lands held by the community, such as tax delinquent lands,
should be planted to forest trees.

If the town does not own any land it can always ac-
quire it by gift or purchase. Many people are willing to
give forest lands to the town for such a purpose as is dem-
onstrated in the results by the town committees in Massachu-
setts. The purchase of lands by the town is the most bus-
iness-like way of going about the establishment of a forest,
because it means that the majorority of the voters are in
sympathy with the movement.

The real problem in connection with the adoption of
the community forest idea is public education. However, any
community can have its forest if there is the will to do so
on the part of a few individuals or service organizations.

Just such methods as have been described above have
proven very effective in the establishment of community for-
est.

"In 1913 a law was enacted in Massachusetts providing

9/- Harris A. Reynolds, Town Forests, The American Tree
Association, 1925, pp. 43-44.
that cities and town might set aside lands for the express purpose of growing timber. That law authorizes municipalities to purchase lands or to accept gifts or bequests of land or of money for this purpose. A town may incur debt within the legal limit for the purchase of lands for town forests and any town can establish a forest by a two-thirds vote of any regular town meeting. When a forest is established by such official action the state, through its Conservation Commission, will give trees to the town to reforest the land." 9/

Immediately after the Town Forest Act went into effect, the Massachusetts Forestry Association started a campaign of education to persuade the cities and towns to acquire forests under the act. Studies were made to determine the methods applicable in that section and free technical aid was given.

Much the same sort of a set-up holds true in Wisconsin. In 1927 the state legislature enacted the Wisconsin Forest Crop Law. It provides for a flat annual tax rate on land, while timber as a product of the land, is to be regarded as income, and is taxed, like all incomes, only when realized. For forests, this means a tax is levied on timber only when it is cut. "The annual tax rate on the land for the fifty-year period of the forest crop law contract is ten cents per acre, to be paid by the owner of the land, except when virgin timber is involved, in which case the annual tax is

forty cents per acre per year, gradually decreasing to ten cents per acre per year over a period of years. The income tax on the timber, when ever it is cut, or at the end of the contract, is ten percent of the value of the marketable material, as it stands uncut in the forest. Because this annual land tax, paid to school district, town and county is relatively small, the state is required, under the law, to pay another ten cents per acre annually to the same tax districts which receive the landowner's annual tax. In return for this extra tax paid by the state to the local governments, the state, according to law, receives the stumpage or timber income tax.  

When the attorney general of the state ruled that the counties as owners might not have their tax-deeded lands classified as forest crop lands, the next legislature provided that counties would be exempt from paying the owner's share of ten cents per acre annually, it appeared the answer to the problem of current income in place of taxes had been found.

Through the forest crop law, the state pays a form of tax to the local governments. Through the county forest aid law, the state helps rebuild the resources.

11/- The County Forests of Wisconsin, Wisconsin Conservation Department, 1938, pp. 6-7.
"Communities with adequate community forests can expect to benefit by reducing such evils as migratory population, the ups and downs in standards of living and necessity for furnishing employment in a hurry when a relief problem arises."\(^{12/}\)

It has been proven that community forests do produce beneficial results when properly established and systematically managed. They aid in community financing by at least paying their own taxes and in most cases producing a surplus. They afford a means of putting idle acres to an economic use. Growing timber on such lands can furnish employment to many unskilled men in nurseries, in forest planting and in cultural work. They also offer openings for the professionally trained forester. By producing cheap raw resources they keep small, wood-using factories in the towns and encourage the start of more which means greater town payrolls.

However, all of their values cannot be measured strictly on a dollars and cents basis. Not only do they provide a place for much needed forest recreation and wild-life refuges but they afford a means of watershed protection that can fit along with the other uses.

From examples from all over the nation it has been shown

that community forests are relatively simple to establish. The legal procedure is merely routine while in such states as Massachusetts and Wisconsin where the legislatures have passed enabling acts, their beginning is even more easily accomplished. With technical advice and in some cases free trees given by the states, there is every indication to believe that the town without a community forest will soon become a rare thing.

Yet, the progress made to date represents only a modest start in the right direction for at least 10,000 community forests are needed. There are about 20,000 organized communities and many others in this country. Nearly everyone of these except those in deserts or semi-arid regions where trees grow with difficulty, if at all, should have a community forest for one or more of the multiple purposes mentioned in this thesis.
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