CAN WE MANAGE A MILLION SMALL FORESTS?

by

Zebulon W. White

ABSTRACT

Foresters tend to overlook or ignore the implications of managing a million small forests. The administrative cost is exorbitant. By embracing such a grand plan, we hopelessly complicate the real job that needs to be done. We should accept the fact that hundreds of thousands of owners will never be reached by personal counseling or services.
Can We Manage A Million Small Forests?

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You are probably asking yourselves why I devised such a frivolous title for this kick-off speech. One reason must have been to get your attention—to start you thinking about it too. A second reason is that in dissecting this question and getting to the basis for it we may add a little to the understanding of what lies ahead in small tract forestry. The third reason may be that the question is valid. Can we manage a million small forests? We need to take a long, hard look at the magnitude and the cost of that job.

Why a million small forests? What is the source of such a figure? The best display of ownership figures comes from the Timber Resource Review in which the tables list data for 1953. Changes in the ensuing 26 years have not been great enough to affect the broad relationships between the acres and total numbers in owner classes.

In the twelve southern states in 1953, 12,205 forest industries owned 33⅔ million acres, an average of 2,747 acres each. All other private owners, 1,835,000 of them, owned about 144 million acres, an average of 78.6 acres each. Farm owners were over three-fourths of these, but only averaged 65 acres each and other private ownerships (numbering about 428,000) averaged 124 acres of forest.

— A talk presented in Mountain View, Arkansas, March 18, 1981 at the SOFEW Workshop.
In 1968 Phil Wheeler made some good guesses when he was writing his Third Forest Report, estimating what the southern forest and its ownership would look like in year 2000, and then assigning a productivity rating to several categories of owners.

He guessed the total acreage in year 2000 would be 188 million — which turns out to be high. He calculated that industry would increase its ownership and control to 60 million acres, that public ownership would total 21 million acres, and that farmers and other private owners would have 107 million acres.

His estimate of forest productivity puts that 107 million acres of farmers and other private owners in three categories: 10 million acres contributing maximum growth, 72 million acres with average growth and 25 million acres written off because of poor site, poor location or lack of owner interest. If we take the best 82 million acres and say it represents a million owners, the average ownership is 82 acres, a little above the 1953 average of 78.6 acres. Or, stated another way, if there are now one and one-half million forest owners in the South, we may
expect at least minimum forest practices from two-thirds of them.

Another clue to the magnitude of the numbers is the distribution of private ownerships (including forest industry) by size classes, again from 1953 data. Owners of less than 100 acres total 1,495,420 or 81% of all owners, their acreage is 49 million or 28% of all acreage and the average ownership is only 33 acres. 98% of all ownerships are less than 500 acres and they represent only 57% of the total area.

In 1953, 13% of the number of owners had 43% of the total private land. My observation is that there is somewhat more concentration in 1981.

1953 Private Forest Land in the South

By Ownership Size Classes

<table>
<thead>
<tr>
<th>Acre Size Class</th>
<th>Number of Owners</th>
<th>Total M Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-100</td>
<td>1,495,420</td>
<td>48,951</td>
</tr>
<tr>
<td>100-500</td>
<td>323,335</td>
<td>52,660</td>
</tr>
<tr>
<td>500-5,000</td>
<td>26,966</td>
<td>27,701</td>
</tr>
<tr>
<td>5,000-50,000</td>
<td>1,513</td>
<td>21,467</td>
</tr>
<tr>
<td>50,000 +</td>
<td>171</td>
<td>27,073</td>
</tr>
</tbody>
</table>

Let's shift back to the question again and look at the word manage. What do we mean by manage? What management is needed? It has been said that for a million owners of forest tracts there would be a million different individual objectives or short-term and long-term goals. It follows that the management would be custom-tailored to fit these goals - and very few would be identical.

After all my years selling forestry I have come to the conclusion that we foresters are too much bound by our upbringing,
education and training and try too hard to impose our forestry on each situation. Most of us have not been flexible enough, not willing to give full consideration to what might be the true goals of the forest landowner. Management will certainly run the gamut from very intensive, dollar-oriented forestry to the come-what-may attitude of no impetus. Our million landowners supposedly only included those who are willing to go to some minimum effort to keep the lands productive, although even that effort is going to have to be stimulated by public agencies or industry.

When we say "manage", I know the image projects itself of some forestry-trained person persuading an owner to adopt acceptable practices (EMP'S!) and then helping the owner to follow through. We intend for the word to mean that by managing we are maintaining the productivity of a woodlot, or, even better, increasing it.

Minimum management would be prevention of wildfires, salvage and selective cutting, leaving a seed source when harvesting, perhaps prescribed burning. Intensified management would bring in intermediate cuttings, weed tree eradication, more concern for regeneration, perhaps site preparation and planting.

So - we are ready to start managing in some way the forest tracts of a million owners.

If 400 consultants worked full time and each did nothing but grind out one complete management plan every two days, it would take them 20 years to complete the first set of plans.
To spend only one day every five years on the business of each of the owners would require the full-time services of 800 men - 200,000 man days per year.

A minimum file system for a million owners would require 21,000 file drawers - eight miles long. If the files grow like mine do, they would eventually take up six times that much space.

If each forester had 50 clients, it would require 20,000 foresters, approximately the entire SAF membership.

To run the land lines for these owners would require one million surveyor days. One crew would take 4,000 years.

If 82 million acres are put on a 40-year rotation, it means that about 2 million acres should be regenerated each year.

Two million acres artificially seeded will require at least a million pounds of seed. The two large seed companies in Birmingham now process maybe 50,000 pounds.

Two million acres site prepared and planted will require 3,400 more planting machines and crews and 1,400,000,000 more seedlings - not to mention four hundred million dollars.

These figures are patently preposterous, but we do seem to overlook or ignore their implications in our discussions and writings about the non-industrial private forests.

You may have guessed by now that my answer to the title question is a resounding NO. We should not lavish our time and money on these myriads of small tracts. The administra-
tive cost is exorbitant - the cost per tree or cost per acre cannot be justified. We should accept the fact that hundreds of thousands of owners will never be reached by personal counseling or services.

We must devise more ways to persuade and teach them to do the forestry job themselves.

We must develop methods and attitudes in logging which will permit and encourage forestry-oriented operations on small tracts. The loggers can carry the message.

Otherwise, we must focus our limited personal professional counseling and services on those few thousand owners of, say, 200 or more acres where the effort will result in more intensive production.

Let's not write off the million small forests - but let us not continue to embrace them all in a grand plan for reforestation and hopelessly complicate the real job to be done.