Preaching Forestry To Farmers

Irwin T. Bode
Iowa State College

Follow this and additional works at: http://lib.dr.iastate.edu/amesforester
Part of the Forest Sciences Commons

Recommended Citation
Available at: http://lib.dr.iastate.edu/amesforester/vol11/iss1/5
Preaching Forestry To Farmers
IRWIN T. BODE.

Extension Associate Professor of Forestry Iowa State College

Coming to us from a level-headed business man like Secretary of Agriculture, Henry C. Wallace, the following paragraphs, taken from an interview printed in a recent issue of The American Forestry Magazine, can hardly be labeled "calamity howling," "propaganda," or "theorizing." They must be taken for the cold facts which they contain.

"The rational use of land, the same correlation of timber crops with live stock and food crops, based upon the factors of soil, climate and market, is one of the foremost problems of the whole United States.

"American agriculture has received a terrific jolt during the past four years. Changes both at home and abroad brought about by the war and by economic developments since the war make it necessary for us to resurvey our agriculture. Those of us who are living pretty close to the farmer and his problems during these trying times have become convinced that the expansion of cultivated land in the United States is due for a slowing up, that land tillage will have to be contracted on a lot of poor land along the margin of successful farming, and that for some time to come American agriculture will tend to concentrate capital and labor upon the best soils and in the regions most favorably located in relation to the principal food markets. We must find a profitable crop which can be grown cheaply, with little labor, on land which the plow will pass up. On much land of this kind Nature is ready with the crop—timber; and the needs of the day are ready with the market.

"A new order of land use must take the place of the old. The realignment of agriculture forced upon us by the great war will give it tremendous impetus. I can conceive of nothing more important than an intellectual co-ordination of rural effort that will afford profitable crop of lands which cannot economically be tilled.

"And just as the land economist was wrinkling his brow over this problem came the national need for timber knocking at the door, indeed, bursting right through it. While the old order in American farming, under which men reached out constantly for more raw land, has changed into a new order which impels contraction, our national timber supply has been silently and steadily disappearing. One forest region after another has been swept over. The average carload of lumber has had to be hauled farther and farther from the saw-
mill which made it, to the farmer or city man who put it into his home. Last year, I believe, the country hauled something over two million carloads of lumber an average of 485 miles and paid $275,000,000 in lumber freight bills.

"The answer is so plain that he who runs may read it. Here are two big birds of ill omen to be killed by one stone. We can put our unplowed acres to work growing a profitable crop for which there is no glutted market; repopulate our deserted forest regions and abandoned farm districts; give both the earth and the people something to do; and meet the impending shortage of forest products—by growing wood, east, west, north, and south as part of a rational scheme of land use, with somewhat the same intelligence and skill that we put into the growing of cereals and fruit. National refor-

![A demonstration planting in Tama County, Iowa, on land cleared of timber and from which all the good top soil has been washed, leaving only eroding hillsides.](image)

estion should command the interest and support of every thinking American citizen.

"There is an urgent call that we make ourselves a timber growing nation. The day of timber mining is over."

Relation of Forestry and Farming

This view in itself comes to many of us as a "jolt." Neither the farmer nor the forester has been prone to think of agriculture and forestry together. The forester, for the most part,
has turned his attention almost completely to the field of the large forest tract. The farmer, being adequately supplied from the bounty of our hitherto plentious forests, has been too busy to reflect much upon timber possibilities for his idle acres. Farm Forestry courses have existed in many of the agricultural colleges for years, but perhaps, if the truth were told, they have meant in more than one of these institutions merely one more subject that a fellow had to take as a necessary evil, or even had to teach along with the "more important" real forestry subjects. The results that have actually been produced upon the farm are negligible. Now, let there be no misunderstanding. No reflection is intended in the present discussion upon either the importance of the broader field of forestry or upon the desire of the agricultural student and the farmer to devote their entire attention to those things which are the chief business of the farm. Neither is it intended to pervert the sense of Secretary Wallace's statements from reference to the relation of farmlands and forestry as it exists in the eastern and Lake States to an exclusive reference of a relation between these two industries as it exists or should exist in some of the midwestern, highly agriculturalized states—such states as Iowa, where 85.5 percent of the land is improved farm land, and where 43.7 percent of the population is rural. It would be wrong economy surely, as well as absurd, to suppose that such states should drop farming as a business and start to raising forests. However, even in these states, the day is rapidly passing when idle land is excusable on any farm, and even here there are many acres which are non-productive so far as agricultural crops or pasturage are concerned. There is scarcely an acre of this idle land that will not raise good timber crops, and the relation to which Secretary Wallace refers should exist in these states as well as in those states with greater percentage of timber soil. It is with this latter field that the following discussion deals.

**Why Forestry for the Farmer?**

"But," you say, "it is the business of the farmer to farm and of the forester to raise trees, and the farmer should devote his time to farming and buy his wood and use substitutes when there is no wood. Why attempt to make a forester out of the farmer?"

This is undoubtedly true up to a certain point, yet it cannot be made as a blanket statement without reservation. The farmer is the largest wood-user that we have. Forty percent or more of the wood consumed in the United States goes to the farm. The average farm consumes 2,000 board
feet of lumber per year. In Iowa, alone, one of the most typically agricultural states we can think of, there are consumed some 20 to 25 million fence posts per year, and one-half million of cords of wood, while the wood using industries in the state require yearly over 262 million board feet of wood. This is a wood bill of more than 35 million dollars for a purely agricultural state. On top of this there are in Iowa some two to two and a half million acres of land best suited to growing wood crops. Surely the farmer is far from being unconcerned about wood.

In spite of substitutes our demand for forest products is increasing daily. There are some things, especially on the farm, for which wood will always be the most practical material as long as it is obtainable—posts, poles, fuelwood, rough construction timber. The farmer finds on his farm certain acres better suited for the producing of trees than for anything else. These acres are a part of a permanent property and comparatively small in extent, and the tax and carrying charge problems are not what they are for large forest tracts. Therefore, the product can be harvested as needed, and that which is left until the farm needs it or until the market conditions improve for its sale can be held over on the stump without deterioration. The work on the forest crop can be done nearly altogether during the winter when man and team labor is plentiful. So, after all, the business of producing wood materials on the farm works in well with the rest of the farm cropping plan, and the farmer as a wood producer in an agricultural state is not at all an irrational conception.

Preaching—Easy: Practicing Meets Its Snag

It is all well and good to preach to the farmer that it is practical for him to raise timber crops, but it is another matter to help to do it and to show him that it is a profitable thing to do. Here again, we are dealing with the situation as it exists in the regions where the woodlot is only a few acres in extent at the most, and where large scale lumbering does not take place. Certain problems immediately present themselves to the worker in this field which are peculiar to it alone.

Little By Way of Precedent to Go By

Outstanding among these problems is the fact that there is very little by way of precedent to guide the new worker. The chances are that any such endeavor in any of the states will be more or less linked up with Extension Service or at least Extension methods. It is true, there are those States where timber is recognized as one of the chief products, where state aid is available to the farmer in the matter of securing
trees for planting, etc. and where certain methods of procedure have been developed along the lines of woodlot practice. In such states many things can be done with plantings and woodlot crops that cannot be done when it comes to dealing with woodlot situations in Iowa. Yet the woodlot is a valuable asset to the Iowa farm, has its place there, and should receive careful consideration. The consequence is that the forester, attempting to translate his technical training into terms of farm forestry in Iowa, finds a new language and new conditions.

The problems with which he must deal are those of forest mensuration, increment of stands, types of stands, land classification, utilization, etc., just as truly as in large forest regions. Yet they are different in character and purpose. For the present at least, it seems wise to put these subjects into terms of the farm itself.

**Profitable Disposal of Surplus Crops a Problem**

To adapt the technical phases of forestry to the size of operation required by the needs of the farm rather than to outside industrial requirements of the localities is another task. This is generally speaking, for there are areas where
trees should be growing regardless of whether the farm itself can or cannot consume the entire crop. When this latter becomes the case, it means that to present any reason at all for economy is expending time and labor raising timber on such land there must be some outlet for the product at a figure which will insure a little more than the cost of raising it. To date this has been one of the biggest snags in the way of otherwise favorable promotion of woodlot practice. This condition does not arise because of a surplus of wood materials for wood working industries, or because of a lack of industries using wood material. It is believed that there exist in the state of Iowa or near the borders enough wood using industries to absorb any such production. These industries now obtain the large bulk of their raw material from distant states and pay considerable in freight for transportation to the point of manufacture. Many of them would undoubtedly be willing to purchase their raw material nearer home if it were practical to do so. But this only raises another problem, namely, that of putting a possible product of idle farm acres on the market in such quantity and in such form and quality that it is acceptable to the user of wood in the rough. There are certain localities where considerable amounts of local timber are purchased by manufacturers now, but there is much more timber available for such purposes, and there could be much more of it produced on now waste land if some adequate system could be worked out for getting the buyers and producers together.

**Fair Profits and Soil Values**

Immediately upon the heels of the foregoing problems comes the question of what should be a fair profit, even if timber can be grown on waste farm land. Almost at the same time, in fact unavoidably linked with profits, is the charge which a farmer should be allowed to make for his land as capital. Of course, under forest conditions it is a recognized fact that forest land does not and should not carry a high soil value, but in dealing with the Iowa farmer one has to deal with the man who is accustomed to talking of a farm as a piece of land of so many acres and that farm as being worth so many dollars per acre for each acre included. In other words, if a farm in Iowa is sold, it is sold for a lump sum or for so much per acre regardless of whether or not all the acres are good farm acres, except as poor land affects indirectly the sale price of a whole piece. The result is that the farmer is used to thinking of farm land as worth $100 or $200 or $300 per acre whether that land will raise 60 bushels of corn or whether it is so low and wet or so steep or so poor and
dry that it will hardly raise a blade of grass. It is hard to
get him to appreciate, to a workable degree, the fact that
he must make a "classification" of his poor and good land;
that as long as he is in possession of the farm and will there-
fore not be able to realize on any actual sale of those idle
acres they are not worth $200 or $300; that as they stand
in their present condition they are not worth $1.00 an acre
so far as their productive power is concerned. Furthermore,
even though convinced of the plausibility of a proper soil value
for forest crops, too many of the farmers feel that they are
too busy to start such land producing timber. At the same
time many of them are hauling fence posts and coal from town.

**Forests and Their Indirect Relation to Farming**

Then, besides these problems, come the ones which al-
though of paramount importance to agriculture are most in-
tangible and therefore most likely to receive a deaf or at
least indifferent ear of the land-owner. These problems are
the ones which have to do with the effect of tree growth on
climate, water holding capacity of soil, underground water
supplies, etc. There come repeated and increasing evidence
of such problems in reports such as the following:

Cherokee, Iowa, September 18th. "For the first time in
many years, if not in the history of the settlement of the
county, an increasing number of farmers are being compelled
to haul water for domestic use and for stock purposes. Flow-
age of deep wells has continuously diminished for the period
of eighteen months, until some of them have failed. There
has been sufficient rainfall for crops but deep veins have
not been reached. From farms supplied by springs no com-
plaint of water shortage has been received. Those who have
reserves stored in cisterns are able to continue feeding oper-
ations without the addition of over-head expense represented
by hauling."

Or again:

gallons of water are being imported daily by the Burlington
Railroad here. Unusual low levels of lakes of the neighbor-
hood have virtually shut off the local supply of water. The
road is building a new reservoir, which, when completed,
will eliminate future water shortage such as is being experi-
enced at this time."

It is clearly recognized that many other factors enter
into these changing conditions. To place the forestry prob-
lem in its proper relation to these others and then to get
the man who is interested in the land that is affected to ap-
preciate this relationship is clearly a task in itself. Land
drainage, straightening of streams, removal of forest growth, etc., have made available for cultivation many acres of otherwise non-agricultural land, and undisputably have their place in our intensive agricultural system, so that there is no attempt to discredit these practices wherever they will prove permanently beneficial. Yet, there has undoubtedly been a tendency to use these practices with only present results in mind. It may be we shall learn too late that some of our

Many of the Iowa lake shores are in urgent need of forestation.

swamp lands were worth more actual dollars many times over as swamp land than as drained agricultural land. It may be we shall regret deeply the fact that some of our streams no longer wind idly through our fields but rush down through them in a straight channel, carrying too much of the earth's water supply at one season and not nearly enough at another. It is already regretted in many places that the hillsides no longer carry their forest growth, but have been stripped and bared, and now have given up even their profitable soil covering and are rapidly becoming useless, decreasing, rather than increasing the improved farm lands. In short, even in Iowa, the day is bound to come when it will be realized that trees and woodlands in their economic aspects with relation to agriculture in general, are worth all the land they occupy outside of any intrinsic value they may have as crops.
Forestry Extension for Iowa

It is because of these considerations that Iowa is attempting what to some may seem a useless thing.

"Forestry and Forestry Extension for Iowa! Seems rather foolish on the face of it."

Yes, but only on the face. It will not be forestry of the sort that goes on in Minnesota or Pennsylvania, or Georgia or Oregon. It must be of the type involving the problems already set forth and linked very intimately with farming.

Something more than a year ago there was organized in the general Agricultural Extension Division of the Iowa State College a Forestry Extension Service. A year's work has established one or two facts beyond question: The need for forestry work in Iowa is greater even than had been supposed and its possibilities more promising; the methods for carrying on the work and the work done have to be especially related to the requirements of intensified agriculture and hence adapted to the small farm woodlot and utilization of material mostly in a localized field; the increasing interest in this type of forestry points to the developing appreciation of the beneficial influences of woodlands to farms.

The following analysis will give the clearest idea of the field and the lines of work to be carried out.

I. WOODLOT MANAGEMENT
   A. The Native Woodlot—Care, Proper Management, Provision for Regeneration.
   B. The Planted Woodlot
      2. Young Plantings—Thinning, Plan of Management.

II. SHELTERBELTS
   A. Mature Temporary Planting—Needs, Renewal.
   B. The New Shelterbelt—Proper Species, Arrangement

III. REFORESTATION
   A. On Eroding Lands.
   B. On Waste Lands.
   C. On Overflow Lands.
   D. On Areas for Aesthetic Purposes.

IV. WOOD UTILIZATION
   A. Woodlot Crops—Their Value, Marketing.
   B. Wood Preservation.

Here is a peculiar field for the forester; one in which the problems have received only partial consideration. The Forester has been very apt to consider such states as Iowa as well separated from the forestry field. Yet such a type of forestry must be considered in any National forestry program.