

**Proceedings of the
SYMPOSIUM ON
INTENSIVE CULTURE OF
NORTHERN FOREST TYPES**



**USDA FOREST SERVICE GENERAL TECHNICAL REPORT NE-29
1977**

**FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE
NORTHEASTERN FOREST EXPERIMENT STATION
6816 MARKET STREET, UPPER DARBY, PA. 19082**

FOREWORD

THE NORTHERN FOREST TYPES constitute a vast natural resource for the United States and Canada. For instance, in the eastern United States there are more than 10 million acres of commercial forest land supporting spruce and fir types alone. The magnitude and variety of this resource is such that treating it in any detail at a 3-day meeting was impossible. Rather, the idea that germinated and developed into this symposium was to present a broad picture of the extent of our knowledge of intensive cultural techniques, the status and trends of our research in the northern forest types, and some actual experiences in managing this resource; and to explore those factors that affect our use of the intensive cultural techniques we have at hand.

There is no doubt that we face a new era in the management of northern forests. The production of wood products is no longer the primary objective of many owners, and increased pressure for the social values of our forests is being felt by all landowners. We must recognize these other forest values, which in turn dictates intensification of all aspects of forest management if we are to meet the future demands of a wood-hungry society.

The enthusiastic efforts of the symposium sponsors—the School of Forest Resources, University of Maine; the Maine Bureau of Forestry; the Maine Forest Products Council; and the U.S.D.A. Forest Service—and the individuals behind those efforts, should be commended. Special thanks are due to Great Northern Nekoosa, Inc., and Brooks B. Mills for their help in providing interesting field trips, and to the Casco Bank and Trust Co. for sponsoring the symposium brochure. Also, without the enthusiastic participation of the experts invited to present papers, and the moderators of each session, the Symposium could not have taken place.

—**BARTON M. BLUM**
Symposium Chairman

PUBLISHER'S NOTE

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SYMPOSIUM ON
INTENSIVE CULTURE OF
NORTHERN FOREST TYPES**

*held 20-22 July 1976 at Nutting Hall, University of Maine, at
Orono.*

SPONSORED BY:

- School of Forest Resources, University of Maine
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- Maine Forest Products Council
- Forest Service, U.S. Department of Agriculture

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Ray McDonald, Casco Bank
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C. D. Hartley, Valley
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DISCUSSION PAPERS

Below is a list of discussion papers on important topics that were presented Tuesday evening, 20 July. These papers are not included in the proceedings, but copies may be obtained from the authors.

"Summer planting of container-grown northern hardwoods":

Raymond E. Graber, plant ecologist, USDA Forest Service, Durham, N.H.

"Planting and intensive culture of yellow birch to improve timber quality and production": Peter R. Hannah, associate professor of forestry, University of Vermont, Burlington.

"Birch management—cleaning and weeding": R. W. Nash, G. A. LaBonte, and F. H. Manning, Department of Conservation, Augusta, Maine.

"Spruce-fir silviculture and management in the northeast":

Robert M. Frank and Ken Lancaster, USDA Forest Service, Orono, Maine (slide-tape program).

"Opportunities and limitations of northern forest types in Alaska":

John Galea, Alaska Planning Team, Anchorage, Alaska, and John Zasada, Institute of Northern Forestry, Fairbanks, Alaska.

"Economic aspects of intensive management; directions of technological change currently inappropriate": Lloyd Irland, Department of Conservation, State Bureau of Forestry, Augusta, Maine.

PLANNING PITFALLS

by James H. Freeman, Director, Programming and Land Use Planning, USDA Forest Service, Eastern Region, Milwaukee, Wisconsin, Symposium of Intensive Culture of Hardwoods, University of Maine, Orono, Maine, July 22, 1976.

The subject this morning is planning and the problems peculiar to planning for management on public lands. As I am sure you know, we could devote entire seminars to problems encountered in planning. However, within the scope of the program today, we have the opportunity to touch briefly on some of the more important highlights of planning with the focus on major factors that influence the usefulness and continued viability of our plans.

When we consider long and short range planning involving forest resources, it is well to remember the hierarchy of plans that has evolved over the years. With the development of the assessment and subsequent program required by the Resources Planning Act, the Forest Service has seen the top planning level of our hierarchy of resource land management plans come of age. The hierarchy of plans can be illustrated in this fashion with the R.P.A. program being represented at the national level. (Table a)

1. Note the mix of management plans and budget, and programming activities.
2. The downward flow of direction and,
3. The provision for feedback.

Why is this hierarchy important to us?

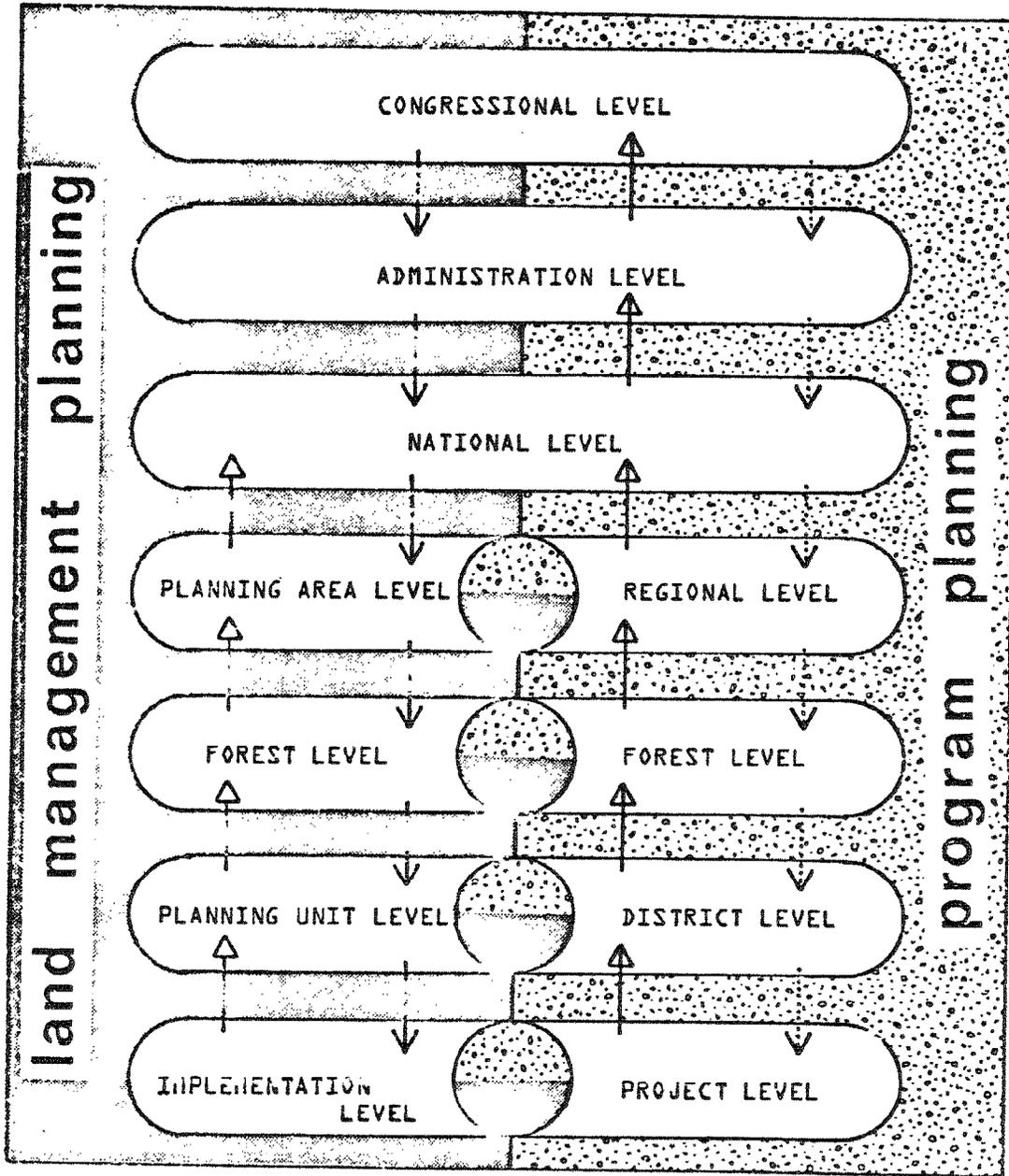
For one thing, it helps to inject a sense of structure and organization into the overall planning process. That structure, keyed as it is to organization level reinforces our ability to build a set of dependent plans that are responsive to both direction and objectives set from higher authority, and to knowledge of local concerns and land capabilities developed at ground level.

It also serves another very important purpose. It visually illustrates to us the intended interdependency of the land management planning, the programming of activities, and the actual funding of projects.

So, now we can begin to relate to a basic question that I believe must be answered in the minds of the people engaged in a planning job. To be at all successful, a planner or planning

TABLE a

FOREST SERVICE PLANNING RELATIONSHIPS



↑ LAND CAPABILITY ESTIMATES
↓ DIRECTION, GOALS AND OBJECTIVES

○ INTERFACE AND CORRELATION
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↑ PROGRAM PROPOSALS
↓ PROGRAM ALLOCATIONS

team must understand why a planning activity is necessary or desirable. This seems basic but it is surprising how often people can lose sight of their basic purpose as they become emeshed in the process of developing a plan.

So, why do we plan? In the National Forest System, we plan in order to achieve selected (directed) objectives in the most effective, efficient manner available. A fairly simple statement. However, in practice the question becomes more complex; and we replace the original question with several that are more difficult to answer.

What are the objective(s) we wish to achieve? How will we measure effectiveness? What yardstick will we use to measure efficiency? How will we know when we have satisfied our objectives? What time factors are involved?

You may feel these are all rather basic questions with obvious and mutually understood answers. However, failure to deliberately address each of these areas and to reach mutual understanding on the answers between members of a planning team is a common pitfall in many troublesome planning efforts.

When it comes to objectives, it is necessary to distinguish between what I call "planning" objectives and the final output related results or management objectives that are the end product of the plan directed actions. For example, planning objectives are fulfilled for the most part through the process of developing the plan. They may include such things as, "provide an opportunity for local and county officials to participate in the planning process, or to involve specialists in the fields of anthropology, forest economics, and landscape architecture in the analysis of alternative courses of action."

On the other hand, management objectives relate to the primary results desired and are usually achieved as a result of carrying out actions prescribed by the plan. Examples of such objectives include: provide for an annual timber harvest level between X cunits and Y cunits by 1990, provide dispersed recreation opportunities for 900-1100 PAOT by 1985, maintain wildlife habitat diversity at current levels and so on. These objectives, quantified and dated, become planning guides and later are the yardsticks against which the ultimate success of planning and execution is measured.

So far so good, except that about now someone usually says, "just a minute." "You haven't described any planning activities yet and already you have established your output targets." "You've come to the bottom line before you start." "Where did those management objectives come from?" If you have already decided what you are going to do, there really is no use playing all these planning games!"

There is a parable that is apropos here that says, "Any road is a good road if you don't care where you're going," and by the same token, any plan is fine if you don't care what the results are. Without objectives, there is very little to use to determine whether a plan and its alternatives is even heading in the right direction. So I look for those management objectives and I find them as assigned targets contained in plans prepared at a superior level. Failing that, as is occasionally the case, objectives must be developed from an analysis of such things as: historical use patterns, predictions of future demands, timber survey reports, and population and economic growth predictions.

Objectives developed from such analysis must always be agreed to by the line officers responsible for making final decisions and approving the plan before proceeding.

There is a reward for this effort, for now that objectives are established and agreed to, the planning serves several purposes among which are to: test the capabilities of the area you are considering to provide the desired mix of output benefits, and to develop a number of alternative strategies for delivering the desired results.

A common problem area is a failure to do an adequate job of preplanning. An important product of preplanning is a PERT chart or general blueprint for carrying out the planning process. A number of different display charts can be developed, but it is important to build these planning progress and schedule charts on a large enough scale to put on the wall and mark up on a daily or weekly basis. That way, important dates are least likely to be missed and jobs will generally proceed in the desired sequence.

During this preplanning phase, the individual who will ultimately be responsible for making the decisions has several critical duties.

One of these duties is to determine, to the extent possible, the major factors that will influence or have a bearing on the decisions that are anticipated. He may identify aesthetics, benefit/cost, soil movement, or other factors that his experience has led him to regard as critical to decisionmaking in his area. This identification of decision influencing factors is by no means final at this stage, but it will help him identify the makeup of skills needed on the initial planning team. It is also useful in identifying the data needed during planning. This helps to offset a tendency of some planning teams to get mired down in purposeless inventory and data collection.

Usually, the preplanning phase also will include an intensive training session for all members of the planning team. This training serves an essential function in addition to providing

information on the expected planning process. That essential is the first step in the team-building process, which molds the individuals assigned to the planning job into a fully functioning group.

In the "preplanning phase" it is also time to begin the public involvement connected with the planning process. This in itself is a broad enough subject for a separate symposium so I'm going to simply say that the public involvement actions developed for any particular planning activity must be carefully designed to elicit full participation from the publics involved and must avoid meaningless meetings or requests for inputs for which there is no planned use. The key is early involvement in the process coupled with realistic use of the opinions and comments received. There is no use asking for comments or opinions on matters that cannot be adjusted as a result of the public comment and these items are often well identified as basic assumption or management direction.

Data collection seems to be a common stumbling block for many planning teams. The tendency of many planners has been to try to collect much more information than is needed or really used in the decisions.

In some instances, of course, the collection of data is aimed at covering every conceivable, even remotely related, question. All this data is nice to have and may even be useful at some future time. However, quite often extra data collected on the basis that it may be useful sometime only confuses the issues when it comes to making decisions for the short time. I'm not advocating a careless disregard for the full range and variety of resources and factors that bear on any resource decision. I am saying there is a great need to make deliberate decisions early in and during the planning process, on what data is really needed to make the alternative selections, and on how that data will be used. Not only can this save time and prevent confusion, but there are some real cost factors involved in collecting, storing, and maintaining data.

A common rebuttal to deliberate limitations on data collection is to refer to possible challenges that may be forthcoming from some of the publics. Here our public involvement can serve as a very useful and sensitive sounding board. Continually during the process, the sensitivities and concerns of a wide variety of interests can be sifted and weighed to help determine the final decision criteria and the data needed for support. We have a number of tools to help us do this, and here I refer you to the work of Dr. John Mendee and Roger Clark of the Pacific Northwest Forest and Range Experiment Station, and George Stankey from the Intermountain Station in developing the CODINVOLVE system for analyzing public comments. Their system isn't complicated but it is certainly useful in helping to organize and keep track of comments from all kinds of sources.

It must be understood that I am not suggesting that we can respond effectively to all challenges and questions through intensive public involvement efforts. What we can and do accomplish is to develop heightened sensitivities to peoples' concerns and values as they related to specific issues. This heightened sensitivity may help make our final action as responsive as possible to peoples' current needs as we can make them. And that's what we in both the public and private sector are working for.

The analysis of the data leading to decisions can employ many techniques ranging from computer assisted techniques to simple graphic comparisons. A key is to keep it simple and with a highly visable or traceable thread of logic.

Although the need to keep the analysis as uncomplicated as possible to provide for maximum understandability is great, there are several items that commonly need improvement.

One is economic considerations. It is imperative that we indicate, in our planning and analysis, the benefit/cost ratio we anticipate from our proposals. We must be able to identify the long term return on the investment we are recommending, and we should also be able to compare alternative courses of action in terms of long range returns and costs.

Another item for analysis that is often a problem is the determination of the effect of proposed or considered actions on archaeological, cultural or historic features. Here the problem often lies with whether or not the issue has even been addressed. If no historic features are effected by any of our proposals, we must so indicate in our environmental analysis reports or statements and documenting evidence must be cited. Failure to address this issue has resulted in unnecessary delay and frustration. The key to dealing with the cultural, historic, or archaeological resource is to address the issue squarely. Conduct whatever level of field reconassiance or survey is needed. Verify the presence or absence of cultural resources. Then deal positively with the subject according to Federal law and regulation.

The final point I would share with you today has to do with the need to provide easily traceable and visable evidence of the rationale used in making decisions. Many people, both from within the Forest Service and from other walks of life, are interested in decisions of public officials. 'Often all that is sought is to be able to easily trace through an open and understandable train of logic to a decision point. This doesn't guarantee agreement, but it may help build trust in the process followed. This may, in turn, lighten the case load of requests for administrative review and build credibility in our decisionmaking.

In covering this potpourri of problem points in public land management planning, I have not attempted to prescribe a cure all for all public planning efforts. Hopefully, some additional attention to some of the points I have touched on briefly will help smooth some of the wrinkles out of your planning efforts.