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

This report is published by the Northeastern Forest Experiment Station as a public service. The papers it contains are published as received from the authors. Any questions or comments about these papers should be directed to the authors.

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Fred Holt, Maine Bureau
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held 20-22 July 1976 at Nutting Hall, University of Maine, at Orono.

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TECHNICAL ASSISTANCE FOR INTENSIVE CULTURE OF NORTHERN FOREST TYPES

BY Timothy G. OKeefe, Extension Forester, University of Maine, Orono, Maine.

Origin & Types of Technical Assistance (TA):

During this Bicentennial celebration, it is interesting to note that in America TA programs in forestry have evolved from both a formal and an informal foundation. European foresters, attempting to motivate many small forest landowners to practice more intensive forest management, have learned that incentive and educational TA programs are far more effective than programs of regulation and control. Throughout American history there are many examples of "informal" arrangements that were in fact a form of technical assistance. In colonial America, the old custom of community barn raising is a good example of an informal kind of technical assistance. The Cooperstown forestry co-operative might be considered as a kind of formal program of TA. Another good example of a formal TA program is the educational forestry programs operated within the framework of the Cooperative Extension Service.

Today, there are many other types of TA programs in the forestry field. Most of these assistance programs can be classified as field or educational efforts. The field type of TA program is basically applied assistance. Most of the service forestry--both industrial and State C.F.M.--programs are operated as direct field types of TA. In many areas, private consulting foresters also offer a field type of TA on a fee basis. Attached to many State forestry organizations is a forest products utilization specialist who often functions in a field capacity by providing market information. Educational types of TA programs include forest Extension activities from the Land Grant college, as well as the organized I & E programs from state and federal forestry organizations. Industrial forestry organizations are also active in the educational type of TA program; AFI, APA, and in Maine the Forest Products Council and P-IIO are good examples of effective educational TA programs.

Technical assistance in forestry is also provided within a mixed framework of field/education programs by a number of unique organizations. At the federal level the State and Private Forestry Division of the U.S. Forest Service is actively engaged in a wide

variety of TA (e.g. sawmill improvement programs). Specialized research labs, such as the Madison Forest Products Lab, often carry out different types of TA. On the private level, many groups such as Christmas tree growers, maple products producers, and small forest landowners associations carry out active educational programs, as well as field assistance programs such as "cooperative" marketing. The Tree Farm program is an industrial TA program operated in a mixed framework.

Who are the recipients of all this TA action? Indirectly, any forest manager dealing with any size and any type of forest land is part of the TA client group. More specifically much of the TA work is directed to:

1. general citizen groups, including youth
2. small forest landowners
3. small forest products manufacturers
4. small producers of non-timber forest products.

Of course, many individuals may be a member of more than one client group. And the characteristics of these client groups are most variable.

Objectives and Success of TA:

Most field type TA programs are designed to supply some rather specific service to the client group. For example, service forestry programs usually aim to provide small forest landowners with a limited range of woodlot services, such as tree marking and TSI recommendations. The field type TA programs are usually structured so that, in general, most of the rather specific goals of the program can be clearly evaluated. In 1975, the USDA Forest Service published an evaluation of the CFM program. This evaluation reached a number of conclusions, such as:

1. a serious lack of manpower and funding prevents full return on the CFM program.
2. financial incentives for management are important.
3. information aspects of CFM must be improved.

The educational type of TA program is usually designed to meet a wide range of more general goals. For this reason, it is usually more difficult to determine the degree of success with an educational TA program. Such educational TA programs often attempt to provide some client group with correct forestry information that will result in a change of attitude or in some more specific action. When some specific action, such as a request for management assistance, is a primary goal of the

program it is usually easier to evaluate. However, the success of those programs aimed more directly at a change in client attitude are much more difficult to assess.

In recent years, the American Forest Institute contracted with a professional survey organization to evaluate the impact of forestry education programs on the general public. These evaluations show some interesting results. Generally, there seems to be increased awareness and concern about forestry in all segments of the general public. Forest industry seems to have maintained a generally creditable image with the public. Unfortunately, on the negative side, there is still a high degree of public misunderstanding about forestry and forest practice. Based on the results of these surveys, there is yet a great deal of educational TA to be completed.

Indirectly, there are certainly other ways to evaluate the success of the forestry TA program. For example, public attitude reflected in the ballot on a critical forestry issue, may be one indirect measure of the effectiveness of the educational TA program. With regard to field type TA programs, it might be possible to evaluate the program in terms of improved operation methods or improved quality of growing stock. Numbers of program participants, or even the percentage results of a survey can furnish part of the total success picture when forestry TA programs are evaluated.

Applications and Limitations:

Programs of TA in forestry must represent an important factor that will determine effective implementation of intensive cultural practices. Basic to implementation of any program of intensive cultural practices is public understanding and acceptance. Therefore, educational types of TA activities are essential if intensive forestry programs are to be successfully implemented. In fact, it will probably be necessary to increase the level of educational TA in proportion to the degree of complexity associated with proposed programs of intensive forestry practices.

For the small forest landowner (who represents about 59% of the nations forest landowners) in addition to education TA, the field TA program will be essential for successful implementation of intensive forest practices. Small landowners must first be motivated (educational TA) and then must be shown how (field TA) to accomplish the recommended intensive cultural practices on the ground.

Expanded TA programs designed to promote intensive forest practices can be successful only to the degree that the major obstacles can be overcome. In connection with large scale

(public and industrial private forestry) programs of intensive forestry, the major constraint is probably the large number of very diverse interest groups. A better understanding of forest landowner's goals will be necessary in order to determine the correct procedures for motivating the landowner to practice more intensive forest management. A solution to this problem possibly lies in greater use of the mass media for communication; more active use of established programs in public schools, adult education, and cooperative Extension. Another major TA problem connected with the small forest landowner lies in active contact with the very large number of landowners. In Maine alone, it is estimated that there are 100,000 small forest landowners. Thus, a field TA program that could reach each of these small landowners on a continual basis must require a very high input of manpower and money, above present levels.

In summary, the degree of success from most programs of intensive forest practice will depend upon the degree to which effective TA programs are developed and implemented. The basic technical information to implement intensive forest practices is generally available now. The most significant limitation for any program of intensive forestry is the component of effective TA - both educational and field programs.