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## **EXECUTIVE SUMMARY**

Forest resource managers play an important role in the management of 558,915 hectares of public and private forest lands in the Eastern Ontario Model Forest area. In recent years, continuing education and professional development have become more important to forest resource managers and their employers. These rapid technological changes, along with an increased awareness and interest by the public, have accelerated the need for change.

One objective of this study was to identify forest resource managers working at least part-time in the Eastern Ontario Model Forest area, and to identify their needs and interests with respect to continuing forestry education. This was accomplished through the distribution of a questionnaire, along with personal interviews.

Another objective was to assess the continuing education opportunities available. To accomplish this, many educational institutions, government departments and research and development organizations were contacted throughout North America for details which have been summarized in this report.

Forest resource managers can no longer count on previous education and job experience to keep abreast with changes that enable them to have the skills and information to do their jobs well.

The recommendations in this report should be considered the framework necessary for incorporation of sustainable forestry concepts into continuing educational programs for forest resource managers. It will provide a model for similar continuing education initiatives on other model forest sites.

Strong linkages between educational institutions, forest resource managers and their employers will result from action on the recommendations.

A hundred forest resource managers were contacted and given a copy of the Forest Resource Managers questionnaire. Results revealed that many managers were not aware of significant continuing educational opportunities. Furthermore, it was noted that no network currently

exists amongst all forest resource managers, to provide for communication of information regarding these educational activities.

A second questionnaire was developed to obtain information from various educational institutions, government departments and research and development organizations regarding self-improvement opportunities and structured learning programs.

There were twenty-four respondents to this questionnaire. Thirteen respondents had forestry libraries, while eleven had forestry related libraries. Considerable information regarding structured learning obtained in the study, is presented in this report. Perusal of this information will help forest resource managers locate continuing education opportunities that correspond with their needs and interests.

Important results from the study are highlighted below.

### **FOREST RESOURCE MANAGERS SURVEY**

Major employers and others were contacted to establish a list of active forest resource managers working at least part-time in the Eastern Ontario Model Forest area. In all, 160 forest resource managers were identified. While it is quite probable that there are others who have been missed, this survey represents the first attempt to identify them.

### **QUESTIONNAIRE - CONTINUING EDUCATION FOR FOREST RESOURCE MANAGERS**

This part of the study assessed the involvement of forest resource managers in continuing education activities and detailed their needs and interests with respect to it.

A total of 100 questionnaires were distributed to forest resource managers. Response to the survey was excellent, resulting in a return of 83%. Respondents showed more interest in correspondence courses and other distance education opportunities, short courses, lectures, etc., than in longer, more expensive advanced modular and degree courses.

**Some highlights from the questionnaire:**

1. Many resource managers were unaware of continuing education programs that were offered. For example, 43.9% of respondents were not aware of the Ontario Advanced Forestry Program.
2. The majority of the respondents (88.9%) were not aware of correspondence courses available, however most (85.2%) expressed an interest in receiving information on what is available.
3. Many (71.4%) believe that a work exchange or job secondment would be beneficial, yet only a small percentage have had an opportunity of this sort.
4. Many (77.5%) were interested in obtaining a list of forestry or forestry-related libraries.
5. To find out Continuing Forestry Education needs and interests of forest resource managers, choices were divided into five divisions. The most frequently chosen topic in each division is noted below:

Div.	Category	Most Commonly Selected Topic
A	Scientific and Technical	Ecosystem Management
B	Regulations/Legislation/Transfer Payments	Environmental Regulations
C	Planning	Landscape Ecology/Forest Fragmentation
D	Administration and Decision Making	Information Management
E	Communication and Social Skills	Motivating Private Landowners

**QUESTIONNAIRE - EDUCATIONAL INSTITUTIONS, GOVERNMENT DEPARTMENTS, RESEARCH AND DEVELOPMENT ORGANIZATIONS**

The second questionnaire in the study obtained information from various educational institutions, government departments and research and development organizations regarding self-improvement opportunities and structured learning programs.

A total of thirty-four questionnaires were distributed and twenty-four responses were received. The questions in the self-improvement section, related to libraries and library access. Thirteen respondents had forestry libraries and eleven respondents had libraries with forestry-related

materials. Of the twenty-four libraries identified in the survey, only six were located within the Eastern Ontario Model Forest area and Forintek Canada Corporation has since moved to Quebec.

Information supplied in the structured learning section of the questionnaire was often incomplete, however considerable information regarding structured learning was obtained through other correspondence and is included in the report.

### **CANADIAN EDUCATIONAL OPPORTUNITIES for FOREST RESOURCE MANAGERS**

Many universities and colleges offering degree and diploma programs of interest to forest resource managers have been detailed in this report. In addition, several important, but rather expensive modular continuing education programs have been detailed; including the Ontario Advanced Forestry Program, the Advanced Forest Pest Management Training Program and the Professional Module Program of the Silvicultural institute of British Columbia.

The continuing education programs of the Science and Technology units for the Ontario Ministry of Natural Resources in the Southern and Northeast regions cover a wide variety of subjects of interest to forest resource managers and are also detailed in this report.

### **OTHER MODEL FORESTS CONTINUING EDUCATION INITIATIVES**

The other operational model forests in Canada were contacted to advise them of this project and to establish linkages with continuing education initiatives carried out by them.

Significant continuing educational activities for forest resource managers have been planned by model forests in Quebec, Manitoba and Saskatchewan.



## **CONCLUSIONS**

The leadership roles of the Society of American Foresters and the Canadian Institute of Forestry in the development of continuing forestry education programs, emphasize the importance of both organizations in forest education.

The two questionnaires designed and distributed to gather information for the study met with varying success. Considerable information from them was summarized and included in this report.

Until now, Canada has not had a national continuing forestry education certification program, but as a result of extensive efforts of the Canadian Institute of Forestry, working in consultation with five Provincial Registered Forester Associations, a National Continuing Forestry Education Certification Program was developed and is scheduled to commence in 1995. Forest resource managers are now on the threshold of a new era in continuing forestry education.

The success of this program will depend on cooperation and support of many institutions, organizations, government departments, private industry, as well as individual forest resource managers who must exercise their option to participate in the program.

## **RECOMMENDATIONS**

The following recommendations are based on comments received in the questionnaires, as well as information and opinions expressed in interviews and telephone conversations conducted during the study. They are not presented in order of priority, as they are all important measures contributing to the development of a framework for the incorporation of sustainable forestry concepts into continuing educational programs, for resource managers working in the Eastern Ontario Model Forest area.

Action on the following recommendations by the Eastern Ontario Forest Group and others will contribute significantly to the development and delivery of a continuing

forestry education program of high standards.

As a result the needs and interests of forest resource managers will be better fulfilled by offering them a greater opportunity to keep abreast with changes and keep their skills up to date.

**RECOMMENDATION #1**

That the Eastern Ontario Forest Group provide funding for the establishment and operation of a forest resource managers network, to improve communication, co-operation and understanding of programs, policies and objectives and to increase awareness of continuing education opportunities amongst forest resource managers in the model forest area.

**RECOMMENDATION #2**

That the Canadian Institute of Forestry and the Professional Forester Associations raise the concern with appropriate educational institutions, research and development organizations and government departments, which distance education programs in scientific and technical aspects of forest resource management. These are very limited and should be expanded. In doing so, they should explore ways to expand distance education opportunities.

**RECOMMENDATION #3**

That consideration be given to offering modules of the Ontario Advanced Forestry Program and the Advanced Forest Pest Management Training Program at a suitable location in Eastern Ontario, such as Kemptville College of Agricultural Technology in Kemptville.

**RECOMMENDATION #4**

That representatives of the CIF and OPFA contact employers of Forest Resource Managers to discuss the importance of staff work exchanges or job secondments as a means to extend learning opportunities.

**RECOMMENDATION #5**

That the Eastern Ontario Forest Group provide a member to participate with representatives of the Ontario Professional Foresters Association, and the Canadian Institute of Forestry in discussions relating to Continuing Forestry Education. This will help to ensure the needs and interests of forest resource managers in the Eastern Ontario Model forest area are fulfilled.

**RECOMMENDATION #6**

That the Eastern Ontario Model Forest Group support and promote the implementation and delivery of the Canadian Institute of Forestry "Continuing Forestry Education Program", in the Eastern Ontario Model Forest Area.

**RECOMMENDATION #7**

That the Eastern Ontario Model Forest Group provide financial assistance to the Canadian Institute of Forestry, to assist with the establishment of an office of Professional Development, in connection with their National Continuing Forestry Education Certification Program.

**RECOMMENDATION #8**

That the Eastern Ontario Model Forest group evaluate forest landowner's needs along with interests in forest resource management to assess the type of services provided, the level of achievement and competence shown in the provision of assistance to landowners in the Eastern Ontario Model Forest area.

**RECOMMENDATION #9**

That the Ontario Ministry of Natural Resources, being the largest employer of Forest Resource Managers in the Eastern Ontario Model forest area, consider a 5 year secondment to the Canadian Institute of Forestry, to contribute to the establishment of the office of Professional Development.

## **ACKNOWLEDGEMENTS**

I would first like to acknowledge the excellent effort put forth by the steering committee in the development of the project proposal which formed the basis for this study. I would also like to thank them for providing good guidance and many ideas that were very helpful in carrying out and completing this study. Dave Chapeskie, R.P.F. Agroforestry Extension Advisor, Ontario Ministry of Agriculture, Food and Rural Affairs at Kemptville, served as Chair. Peter Murray, R.P.F., Consultant Forester from Gananoque, represented the Ontario Professional Foresters Association and Chris Lee, R.P.F., Executive Director of the Canadian Institute of Forestry in Ottawa, were the other members who gave so freely of their time and knowledge.

My special thanks to Janet Fewster for her excellent assistance with formatting and word processing.

Also, I would like to thank all those who replied to the questionnaires, which formed an important part of the study. Many have contributed valuable and important information--their opinions were greatly appreciated.

Finally, I would like to thank the members of the Board of Directors of the Eastern Ontario Forest Group who made this important study possible.

*Clarence F Coons*  
November 10, 1994

