

**A SUMMARY OF PEST MANAGEMENT
TRAINING NEEDS FOR THE
BRITISH COLUMBIA FOREST SERVICE**

by

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for

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INTRODUCTION

This summary report provides the results of a study done to assess the need for pest management training in the B.C. Forest Service. It also considered the possibility of presenting any such program in cooperation with Simon Fraser University. It concludes that such training is necessary and recommends its nature and methods of delivery.

At the request of Dr. Robert DeBoo, Manager, Forest Health Program, Protection Branch, B.C. Forest Service, the study was done during the summer and fall of 1989 by N.E. Alexander, a B.C. Institute of Technology Instructor, who has been closely involved with pest management training in B.C. for more than thirty years. The full report presented to the B.C. Forest Service with appended "end notes" is available from Dr. DeBoo upon request.

PAST TRAINING INITIATIVES

The significant eras in the evolution of forest pest management training in the B.C. Forest Service have been:

- | | |
|----------|--|
| Pre-1960 | B.C. Forest Service and Canadian Forestry Service in-service research and organism-oriented training in the recognition of pest problems |
| 1960's | development of continuing, operations-oriented pest management courses in post-secondary educational institutions, notably B.C. Institute of Technology and Simon Fraser University |
| 1975-84 | progressive development and delivery of a broad spectrum, intensive, B.C. Institute of Technology equivalent, Association of B.C. Professional Foresters accredited, forest pest management course, delivered through the B.C. Forest Service Training School, and ad hoc pest management training within the Ministry which has emphasized tactics, not strategy - operations, not overall management |
| 1985-90 | ad hoc pest management training within the Ministry which has emphasized tactics, not strategy - operations, not overall management. |

PROCEDURE TO IDENTIFY NEEDS

Given the wide diversity of backgrounds of B.C. Forest Service managers, professional and technical specialists, a needs survey by a needs survey was conducted by:

- circulating a questionnaire to a large and diverse group of forest practitioners (+60), plus directing specific letters of inquiry to others
- interviewing as many managers as possible
- discussing the problem with:
 - the B.C. Forest Service Project Coordinating Committee (JF Henigman, Chairman)
 - the Forest Pest Review Committee
 - members of the Forest Insect and Disease Work Conferences
 - coordinators of the Oregon and Washington States Silvicultural Institute
 - members of the B.C. Silvicultural Institute
 - Forestry Canada Forest Insect and Disease Service staff
 - senior academic managers at Simon Fraser University

SUMMARY OF RESULTS

The opinions obtained were as diverse as the backgrounds of those holding them.

- People with advanced academic training favour further academic training.
- Many potential candidates believe there is no need for further training.
- Many managers believe training should focus on "how to" rather than "why."
- Many believe further training is necessary, but only for subordinates, not themselves.
- Many also show resistance to learning from practitioners and experts from outside of the Ministry.

CONCLUSIONS

- Further, on-going pest management training is needed within the Forest Service, related ministries, and their contractors.
- Training is needed at both managerial and operational levels, and this will require at least two different courses.
- No single delivery system will be adequate to reach either audience.
- Experts from both inside and outside the Forest Service will be required to deliver both courses.
- To maximize the benefits and exposure, the greatest possible support should be given to Ministry staff to enable them to take the courses.
- The Simon Fraser University's Management Skills In Advanced Technology Program would be the most suitable model for the Ministry of Forests course.

RECOMMENDATIONS

The following are recommendations derived from this training needs study.

- Two distinct courses should be developed:
 - a management-oriented "why-based" course for managers; and
 - an operations-oriented "how-to-based" course for others.
- Both courses should incorporate:
 - instruction from a diverse body of experts from both inside and outside of the Forest Service and other Agencies; and
 - a delivery system which includes:
 - an initial period of self-directed study which should be "signed-off" before candidates proceed,
 - group seminars which would efficiently permit idea exchange and the use of specialized people, equipment, and facilities both in a central location, or, when appropriate, on-site and in-season, and

- individual study during which candidates apply their knowledge to site-specific or region-specific problems, with assistance from regional pest management experts and other available experts and for which the students are "signed off."
- The management-oriented course should be packaged and offered by Simon Fraser University.
- The operations-oriented course should:
 - be packaged and offered by British Columbia Institute of Technology or the Open Learning Agency; and
 - be made available to Ministry contractors and associated Ministries' staff.
- A Branch (not Ministry) Training Coordinator should be appointed to coordinate:
 - the considerable pest management expertise and enthusiasm already available within the Forest Service;
 - the application in the various Regions of procedures which have proven effective in others; and
 - the evaluation of the results of the program.
- Forest Health concerns and techniques should, if possible, be incorporated into the offerings of:
 - the Ministry Silvicultural Contractors Training Course; and
 - the Silvicultural Institute of British Columbia.