

**LEGISLATIVE ASSEMBLY OF THE  
NORTHWEST TERRITORIES  
9<sup>TH</sup> ASSEMBLY, 11<sup>TH</sup> SESSION**

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# SEVENTH ANNUAL REPORT

The Science Advisory Board  
of the Northwest Territories

A summary of activities for the  
year ending March 31, 1983

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## 1982-83 ANNUAL REPORT

### INTRODUCTION

The Science Advisory Board was established in January, 1975 by an Ordinance of the Legislative Assembly of the Northwest Territories. That Ordinance, which originated as a private member's bill, states in broad terms the duties of the Board - to identify research needs and then initiate or recommend studies to provide advice to the Assembly on matters related to science, engineering and technology. The Board reports to the Legislative Assembly through the Minister of Renewable Resources.

### ACTIVITIES

During the past year the Board's activities have focused on its two principal objectives; the research of northern problems, and the development of a resident scientific community in the NWT.

1. RESEARCH OF NORTHERN PROBLEMS

(a) Reports Completed

During the past year the Board has completed two studies of interest to northern residents. Wind Energy in the NWT provides an analysis of available data on wind regimes in the NWT and identifies those areas where wind might play a useful role as an alternative energy source.

Metallic Contaminants reviews information on the levels of some heavy metals (lead, arsenic, mercury and cadmium) in the environment and discusses health-related concerns.

These reports have been circulated widely. In the NWT they go to all schools, libraries and community offices. In the south they are deposited in the libraries of the major universities. Sales of the reports have been brisk.

(b) Studies Underway

The Board currently has three studies in progress. Community Scale Hydro in the NWT is an initial attempt to identify those communities that might be able to use small hydro as an alternative to diesel generation of electricity.

This study, which was conducted in co-operation with The Energy and Resource Development Secretariat, has already been used in draft form by the GNWT, NCPC and Energy, Mines and Resources Canada in their planning of energy alternatives.

Food Production in the North is an assessment of agricultural capabilities in the NWT, particularly in that area above the tree line. The study considers the use of new and hardy strains of traditional cold climate vegetables as well as the potential that northern native plants may have as food crops.

Acid Deposition in the NWT is an overview study which attempts to assess the implications for the NWT of the "acid rain problem". This study is being conducted with financial support from the Department of Renewable Resources.

Appendix A summarizes all publications to date.

2. THE GROWTH OF A RESIDENT SCIENTIFIC COMMUNITY

(a) The Northern Research Labs

For a number of years the Department of Indian and Northern Affairs has been considering transferring responsibility for its laboratories at Igloolik, Frobisher Bay and Inuvik to a northern based "Science Institute". The SAB has been supportive of the concept on the understanding that control would rest with northerners and that adequate funds would be identified to carry on programs without there being an undue financial burden placed on the GNWT. SAB members feel that such an Institute could be key in involving northerners in both the directing and the application of science.

In response to a motion passed at the Winter Session of the Legislative Assembly the SAB is presently preparing recommendations related to the establishment of such an NWT-based Science Institute. These recommendations will be submitted to the Spring Session of the Assembly.

(b) The Summer Student Program

The Board recognizes that northern students face both a wide variety of career choices as well as few opportunities to experience first-hand what a particular career might be like. To help bridge that gap, at least in the area of science, the Board operates an informal program where students from across the north are placed with scientists doing research in the field. The cooperating scientists attempt to introduce students to the applications and techniques of their particular branch of science.

The Board underwrites all costs associated with the program, including the student's transportation, living expenses and his salary, and provides any unusual field gear that he might require.

MEMBERSHIP

A number of significant membership changes occurred during the year. Dr. O. M. Solandt, first Chairman of the SAB and Dr. W. A. Fuller, one of the founding members stepped down. Dr. J. M. Harrison, a current member, was appointed to replace Dr. Solandt as Chairman. In addition two new appointments were made to the Board, Dr. Milton Freeman of the University of Alberta and Dr. A. M. House of Memorial University.



A current list of Board members follows:

Dr. J. M. Harrison Chairman	4 Kippewa Drive Ottawa, Ontario
Dr. W. O. Kupsch Vice-Chairman	Dept. of Geological Sciences University of Saskatchewan Saskatoon, Saskatchewan
Mr. Dan Billing	Science Advisor, GNWT Yellowknife, NWT
Mrs. Jane Dragon	Fort Smith, NWT
Dr. Milton Freeman	Dept. of Anthropology University of Alberta
Dr. J. A. Hildes	Northern Medical Unit University of Manitoba
Dr. A. M. House	Health Sciences Centre Memorial University
Mr. Michael Kusugak	Government of the NWT Rankin Inlet, NWT
Mr. Rene Lamothe	Government of the NWT Fort Simpson, NWT
Mr. R. W. Spence	Northern Mineral Advisor (DIAND) Ottawa, Ontario
Mr. R. K. Bell Executive Secretary	Yellowknife, NWT

ADMINISTRATION AND FUNDING

For administrative purposes the Board is currently housed within the Department of Renewable Resources and its budget is presented with that departments. In the current fiscal year the Board was allocated O & M and Casual Wage funds in the amount of \$152,000.

Those funds have been used as follows:

Studies and Reports	28%
Meetings	37%
Student Program	12%
Administration	23%
	100%

APPENDIX A

LIST OF SCIENCE ADVISORY BOARD PUBLICATIONS

Research Reports

1. Contribution to the Northwest Territories Population Studies, 1961-1985  
by Louis-Edmond Hamelin
2. Aquatic Resources of the Northwest Territories,  
by Peter J. McCart and J. Den Beste
3. The Present Status and Future Management of Arctic Marine Mammals in Canada,  
by Drs. Rolph A. Davis, Kerwin J. Finley, W. John Richardson
4. Management of Some Terrestrial Mammals in the Northwest Territories for Sustained Yields,  
by Dawn M. Dickinson and Tom Herman
5. Dietary Habits and Nutritional Base of Native Populations of the Northwest Territories,  
by Otto Schaefer and Jean Steckle
6. Fish, Fur and Game in the Northwest Territories,  
Report Number 2
7. Wind Energy in the Northwest Territories,  
by B. Janz, D. G. Howell and A. Serna
8. Metallic Contaminants of Significance to Northwest Territories Residents,  
by R. D. P. Eaton

Working Papers

1. Commentary by the Science Advisory Board of the N.W.T. on the Final Report of the Canadian Public Health Association on Arsenic.
2. Further Education in the North  
by O. M. Solandt

Working Papers (continued)

3. The Yellowknife Scientific Resource Centre  
by O. M. Solandt
4. Availability, Cost and Nutritional Value of Imported Food in  
the N.W.T.  
by the Nutrition Liaison Committee
5. Fish, Fur and Game for the Future, a Summary of Presentations and  
Discussions from a conference sponsored by the Science Advisory  
Board.
6. Conservation and Its Implications for the Northwest Territories,  
by Boreal Ecology Services Ltd.





















