

## Conference on Arctic Research and Resource Development

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The Arctic, long shielded by its remoteness and inaccessibility, has recently become the focus of considerable attention. Its avowed resources potential has been confirmed by the oil strikes on the arctic coast of Alaska and, perhaps less dramatically, by other discoveries such as the sizeable deposits of iron ore on northern Baffin Island. The pressure is on — at least in the case of oil — to open the northern storehouse that has been waiting the “some day” when development would be economically feasible. It appears that that some day may be tomorrow, and the oil companies are getting ready by devising specialized methods of extraction and transportation to bring the arctic oil to market.

But there are other pressures as well. Scientist and layman alike are apprehensive of harmful effects on the environment which could result from hastily conceived or poorly regulated exploitation methods. Ecologists are saying that tomorrow is too soon. They want industry to wait for whatever time it takes to gather enough information fully to understand the arctic ecosystem so that they can determine what man can afford in the way of environmental destruction and make certain that the limits of acceptability will not be exceeded.

Another area of concern involves the people of the North and their participation in the economic growth. Resource development ought to be the basis for a solid and continuing northern economy which can support all of the residents of the North and provide an opportunity for the indigenous peoples to become a part of the overall social structure.

If each of these interests is to be served, there is clearly a need for careful planning to strike a balance between exploitation of northern resources and protection of our arctic regions and the people who live there now as well as those who will come. An effective plan for orderly development can be reached only through a spirit of cooperation and a free exchange of ideas. To promote such an atmosphere, the Arctic Institute of North America sponsored a Conference on Arctic Research and Resource Development held in Rensselaerville, New York, on 8, 9 and 10 May 1970. Twenty-three individuals who have interests of various kinds in the Arctic were invited to the meeting to consider resources development, ecological factors, and human problems in the North. Scientists, educators, economists, industry spokesmen, and government representatives from both Canada and the United States participated in the informal discussions. Their

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purpose was to find some common philosophical ground upon which to set long-term objectives for northern development and to clarify ultimate hopes for the North.

#### CONFERENCE SUMMARY

A description of the Arctic as it may be fifty years from now can serve to illustrate the objectives of various interests and show whether they can be welded into a single vision. After the goals have been clarified, perhaps it will be possible to chart a course for development.

#### *The North of Tomorrow: A Concept*

Oil exploration will very likely expand over the next several decades and fifty years from now there will be very substantial production of oil and natural gas on the North Slope of Alaska and in northern Canada. While there may be some shipment by ocean tanker, most of the oil and gas will be moved southward and eastward through pipelines equipped with automatic controls and monitored by means of an extremely sophisticated surveillance system. Oil and gas will receive the most immediate attention, but within the next fifty years there will be some production of hard minerals as well, such as copper and iron.

People will be drawn to the North by economic opportunities associated with resource development, but their numbers will be relatively few. Oil companies are at present stationing their personnel in the larger population centres and rotating them to the forward operating areas as they are needed for assignment or for emergencies. They most probably will continue to follow this pattern so that at the actual drilling sites there will be only work camps rather than permanent settlements. Permanent settlements are more likely to grow up in connection with mining operations which require greater numbers of on-site workers. There will be small communities in the western part of the Brooks Range, perhaps, and in the Coppermine areas. In Ungava, the Asbestos Hill development and the New Quebec Raglan nickel mine may include some larger on-site communities with populations of about 1,200.

Fifty years will bring advancements in communications and transportation which will eliminate the isolation that has been characteristic of life in the Arctic. Northerners will have great physical mobility and the mechanism for a rapid exchange of ideas so that remoteness no longer will be a determinant of mental attitudes and aspirations. There will be an increased political awareness among citizens of the North and stronger identification with the values they share with their countrymen farther south.

The development of the mineral industry offers a valuable opportunity to incorporate the autochthonous people into the life of the North by making use of their special abilities. There are both economic and social advantages to be gained by training these technologically oriented people in the specialized skills that resource development requires. In addition to their particular fitness for technical occupations, the native people are already in the North and are accustomed to living there. A system of education which alternates periods of job experience with

periods of schooling would best suit the needs of the Eskimo; with such a program, the native peoples will be equipped to make the transition over the next five decades into modern technological society.

Resource extraction on the scale that is envisaged will certainly have an impact on the natural environment. The Arctic is still a comparatively unchanged ecosystem and apparently is a relatively fragile one in which the elements are very delicately balanced. Because very little is now known about the arctic ecosystems, there is no way of predicting to what extent various elements of the system will be disturbed by the anticipated commercial activity or what consequences such damage will have on the total environment or on man himself. Nor is there any known way of repairing damage once it has been done. Therefore as development proceeds, care must be taken to maintain the stability of the ecosystem by using the environmental knowledge that is available and the best technological know-how we have to keep deleterious effects to a minimum.

#### *Concept to Reality*

Orderly development of the North is a goal worthy of the efforts of industry, government, and the scientific community, and that goal can be attained through increased communication and coordination of activity. The main problem is to set up rules and regulations and apply them so that the least damage will be done to the environment. Most importantly, the environment should be protected during the exploration phase. Once the location and extent of deposits have been determined, then specific areas ought to be set aside for development while other areas are maintained as nearly as possible in their natural state. In this way, development could proceed with the least chance of unknowingly introducing changes in the environment which could do permanent and irreparable damage.

Industry has demonstrated an awareness of the problems of operating in the Arctic, and some steps have been taken voluntarily to deal with them. This is admirable, but the responsibility does not fall on one company or a few companies with operations in the North. All of the problems have aspects which bear on the environment, aspects which bear on the people, aspects which bear on the economy, and aspects which bear on the need for legislation. Their solution requires the combined insights of natural scientists, social scientists, industrialists, economists, and government specialists. A course for orderly development in the North must coordinate all of these points of view. At this conference perhaps some seeds were sown; but if the concept which combines both the exploitation of resources and the protection of the environment and the people of the North is to become a reality, there must be mutual understanding through a continuing exchange of ideas.