

The translation of the data base into a user product - Wil Holland,
Canadian Forestry Service.

All of our lands need management whether they be farm, forest or rangelands. An integrated data base should provide an inventory of the basic resource components. To be useful it has to:

1. Quantify and locate the resource component.
2. Describe its characteristics.
3. Evaluate quality and suitability of the resource component for each different land use.
4. Aid to inform which resource components can be manipulated.
5. Be in form that is useful and understandable by management.

The evaluation of quality and suitability of the resource components for various land users is a point that has been neglected.

In order for an integrated data base to have the widest possible use it should confirm to the following principles:

1. Standardization

At present there are at least eighteen different methods for ecological land classification and in Ottawa alone ten resource data banks. In other words, standardization leaves much to be desired. Standardization, although very desirable, may be difficult to implement except for single resource components.

2. Specialization

Land suitability in the province should be described. Then can we decide what data to collect. There is plenty of information why we cannot produce certain things on certain lands but we don't know too much about what can be produced.

3. Synchronization

A survey carried out in the field at the same spot at the same time by specialists in soils, wildlife, vegetation and other fields is much stronger and provides a better integration of the various components than one where these components of the work are done separately.

4. Concentration

Uniform data collection would have greater success if it was

carried out under one authority. The responsibility for the inventory of the various natural resources is divided between provincial and federal agencies.

5. Maximization

Increased efficiency in terms of productivity and quality of data collection would be the result of maximization.

6. Centralization

Should we have a series of decentralized data bases or should they all be concentrated in one place, Ottawa or Edmonton? Centralization would permit data base exchanges and ease of user identification.

The application of an integrated data base are several. It could be used to develop a set of stop/go guidelines for land use management. A simple set of do's and don'ts. In order to develop this we have to clearly define land use management goals. For instance, when we talk about sustained yield for forestry this may, in ten or twenty years, not be sufficient. To double or triple the yield may be necessary. To answer questions like this we need a predictive capability in the data base. Other possibilities are to use the data base as a means for periodic land use review. Land use in this province changes rapidly. A good application is the monitoring of ecological change, especially in monocultures as practiced in farming. It would tell us what is happening to the nitrogen-phosphate levels, the organic matter and all the other minor variables that we know are slowly changing but that are rarely kept track of. It also could answer questions about land use and land use allocation.

A properly designed integrated data base would provide a great saving in time. A tremendous improvement over presently used methods would be an improved field to computer linkage where the data could be entered into the computer right in the field, doing away with forms.

An integrated data base would be a great help in planning and decision making. If we want to know the answer to a specific problem we go to the experts in that particular field who generally respond by collecting more data. With an integrated data base developed over a number of years those answers should be available without additional data

collection. To round off this discussion I would recommend that the following actions are taken:

1. Refine our thinking on an integrated data base.
2. Inform our managers of the concerns that have been expressed during this workshop.
3. Inform other agencies or groups with similar interests of our concerns for the development of an integrated data base.
4. Kananaskis Centre as part of the University of Calgary can set up or provide the facilities for a brain storming committee, that would provide an opportunity for discussion and development of new ideas away from the work atmosphere. Specialists tend to become isolated and it is good to have the opportunity to discuss doubts and plans with someone in a similar situation. This also provides a climate for the cross fertilization of ideas, something we can all gain from.

Delineation of information gaps in the data base - Ian Corns, Canadian Forestry Service.

In introducing the topic "Information gaps in the data base:", I will not attempt an exhaustive treatment of the subject, because what are perceived as data gaps will depend upon several factors:

- 1, 2 The area of expertise and level of training of the persons involved; whether they are data gatherers or users of the information in a report does not necessarily assure its use, particularly if it is difficult to interpret.
3. The intended application of the information may determine whether or not data gaps are perceived. For example, a wildlife biologist looking for habitat information will inevitably find shortcomings in a vegetation inventory report of his study area.
4. The scale of the project undertaken will determine information gaps. The more detailed the task, the greater will be the gaps in the information necessary for task completion.

Basically, perceived data gaps depend upon who you are and what you need to complete your task or project.

Data gaps occur in two broad categories of information:

KANANASKIS CENTRE FOR ENVIRONMENTAL RESEARCH

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INTEGRATED DATA BASE FOR WILDLAND AND
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