## Research — A Fundamental Management Tool

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As the park superintendent of Quetico Provincial Park, I have a little different twist on some of the things that you might have heard this morning. As a park superintendent, I bring the perspective of a manager who is actually in charge of protecting and managing an area on the ground, as compared to those having a wider corporate view associated with regional or provincial planning and management.

It really comes home—the relationship between research and park management—when you do not have enough information to deal with a specific issue on stewardship of the resources that you are charged to administer. And I have had reason to reflect on that relationship a number of times in the past, and I can't recall getting into trouble for having had too much information and research in a park. But I do recall getting into trouble for not having had enough information.

So the value of research, as I see it, is that it provides an understanding of the park resources as well as the visitors that utilize the park. The bottom line is that you can't really manage what you don't understand, and a good understanding is absolutely essential to be an effective steward of a park. In terms of the public and the administration of the park, research can be a valuable tool for public accountability. It can often turn what can be a very antagonistic issue or situation into one that can be supportive, allowing the managers of that park to get on with business. So research in essence becomes a very fundamental tool for managing the park.

In terms of priorities, I guess that my sense of priorities might be a little bit different than that expressed by others on this panel. I don't know that we do as good a job as we need to on this, but collecting and maintaining basic knowledge of a park's resources through resource inventories is a fundamental need. This includes information on both the park's resources and park visitors. It is my sense in Quetico that we have a fair bit of knowledge about our park visitors. This may be an atypical situation associated with Quetico's stature, which garners a lot of support for research activity to help us to understand our park visitors. Enough is conducted to provide us with the information that we need to manage this aspect of the park's resources and use.

Knowledge of the biophysical resources of Quetico, and most other parks, is perhaps a little bit different. From this perspective, I see three basic research priorities in Quetico, that are commonly shared with most other parks:

 collecting and maintaining basic knowledge through good resource inventories;

- monitoring change in the park over space and over time to determine what is happening to the park; and,
- issues and problem solving, an area where we probably spend most of our time.

Issues oriented research is often the focus of research after the fact, and it would be nice if we could be more anticipatory in dealing with problems before they escalate into issues. Unfortunately, we spend too much time in reacting to issues.

Reflecting on the elements of a park research programme, I see five characteristics that are central to an effective research programme:

- contribute to the park's knowledge base in a catalytic fashion that stimulates further research;
- document natural and anthropogenic change in the park;
- 3) evaluate management policy and the park management plan;
- help to minimize reactionary management; and,
- 5) serve as an issue management tool when and where necessary.

While there may be wide agreement on the merit of research in parks, there are also some problems associated with research activity and coverage. Certainly a major one has to do with gaps in research coverage which may arise through agency or institutional bias. Recently I experienced a vivid example of this in a presentation on moose distribution and density in northwestern Ontario where mapping based solely upon harvest data revealed a large white hole centred on Quetico Provincial Park. A basic lack of data gave rise to this gap, which may not seem so critical in a provincial context, but is serious from the park's perspective.

I have seen other problems in the past with what I call "hobby horses", where either agency-based personnel or academics pursue interests that are "nice to do in parks", but the work does not contribute substantially to the management of the park.

Research in the way of issues management is often a very slow process, and its not the kind of thing that you can deal with quickly. It often takes substantial effort to collect several years of data and information, and that can delay important decisions that need to be made sooner.

There is always a problem with funding research, and its not the kind of activity that often is assigned the highest priority by park managers. But in terms of meeting this challenge, I would support Patrick Lawrence in his call for developing productive partnerships to further research in parks. Partners and partnerships, whether its two parties or a large collaborative, are really important.

Another problem is the failure to focus on priorities. In Quetico, focusing on priorities is very important, where our rule of thumb is to concentrate on essential research that stimulates broader interest to beget additional research. In a sense, good investments generate broader interest to expand partnerships that extend the initial capability.

However, beyond partnerships, direct sponsorship is important. In Quetico, the stature of the park creates a fortunate situation for marketing a diversity of

research opportunities, and attracting sponsors to assist with funding priority projects. On top of this, we have to look at providing base funding for research, which is an area that we do not provide with enough programme funding.

By way of comparison, In 1990, I was fortunate to talk to a fellow named Fred Varley who is the head of research in Yellowstone Park. He indicated to me that 4 % of the base funding for Yellowstone was allocated for research in the park, and that part of his job was to apply this funding creatively to lever additional funding from other sources amounting to three times the park allocation.

Finally, there are things that managers can do beyond direct funding to support research in parks. This can include the assignment of equipment, provision of accommodation, subsidizing meals, access to transportation, and others kinds of logistic support and assistance.

But the bottom line, as wise stewards of the resource, park managers are in the unique position of identifying critical research priorities and insuring to see that they are executed so that we have the knowledge to protect and manage our parks in an informed manner. And the bottomline for me—my quest if you will—is to insure that there are no maps where Quetico Park appears as a "white hole".