Primer Part One

**Understanding the Role of Research in Parks and Protected Areas and Applying Evidence**



Purpose of the Primer

The purpose of this primer is to provide a basis for understanding the role of research in park management and the importance of applying evidence to decisions regarding park management.

This primer is intended to be a resource for decision-makers, politicians, journalists, and others who want to be more informed about research and the importance of incorporating research evidence into decision-making for park management.

Mangers who oversee Canada’s natural resources are among those public servants who have a moral obligation to make evidence a vital part of any decision involving parks and public spaces. “We can do this by learning how to distinguish science from folklore, data from assertions, and evidence from beliefs, anecdotes or personal opinions” (Barends et al., 2012, pg. 1).

Outcomes and Expectations

At the end of this self-directed primer participants will have an understanding of the role research plays in decision-making.

Primer Readings and Resources Compiled

Barends, E., Rousseau, D. M., & Briner, R. B. (2014). *Evidence-based management: The basic*

*principles.*  <https://www.cebma.org/wp-content/uploads/Evidence-Based-Practice-The-Basic-Principles.pdf>

Lemieux, C.J., Groulx, M.W., Bocking, S., & Beechey, T.J. Evidence-based decision-making in Canada’s

protected areas organizations: Implications for management effectiveness. (2018). *FACETS*. 3(1): 392-414. <https://www.facetsjournal.com/doi/pdf/10.1139/facets2017-0107>

López-Rodríguez, M. D., Castro, H., Arenas, M., Requena-Mullor, J. M., Cano, A., Valenzuela, E., &

Cabello, J. (2017). Exploring institutional mechanisms for scientific input into the management cycle of the national protected area network of Peru: Gaps and opportunities. *Environmental management*, *60*(6), 1022-1041. <https://doi.org/10.1007/s00267-017-0929-x>

Macat. (2016, February 2). *What is critical thinking?* [Video]. YouTube.

<https://www.youtube.com/watch?v=HnJ1bqXUnIM>

Mills, T. J., & Clark, R. N. (2001). Roles of research scientists in natural resource decision-making. *Forest*

*Ecology and Management*, *153*(1-3), 189-198.

Weiss, C. H., Murphy-Graham, E., Petrosino, A., & Gandhi, A. G. (2008). The fairy godmother—and her

warts: Making the dream of evidence-based policy come true. *American journal of evaluation*, *29*(1), 29-47. [https://doi.org/10.1177/1098214007313742](https://doi.org/10.1177%2F1098214007313742)

Content

The foundation to understanding the role of research is to consider **why** it is important to apply research to decisions involving policy, priorities, and practices, and how to take the research findings into account when making decisions or plans for park management.

In this primer the term ‘research’ will include research data, information from universities, research institutions, government research, organizational research, and peer-reviewed journal articles. The common element is that the research be deemed relevant and trustworthy in source or content.

*What is the Role of Research in Park Management?*

Research is important to all aspects of park management. It is fundamental in:

* Making decisions for creating or updating policy, practice, programs, and management
* To increase understanding of how our environment functions and changes, and our role as humans in that system
* Generating new knowledge and begin conversations by presenting ideas and theories
* Building and sustaining relationships based on those research conversations
* Facilitating interdisciplinary learning and work regarding our natural resources and park areas
* Defining the parameters of choice, risk, and opportunity

It is important that we recognize the value in conducting and disseminating the various areas of research

* Research about impact (e.g. restoration, species management, invasive species, climate change, fire, etc.)
* Research about changing needs and adaptation
* Research about how people use the park (volume, cycles, tourism, etc.)
* Research about leadership for people who manage parks

We need “More and better quality information to support sound management actions and related conservation outcomes is necessary” (Lemiex, et al., 2017, p. 2).

*Why does it matter?*

Why should we care about how research is regarded in Parks Canada?

* We should care because our natural areas and parks, including the wildlife that live there, could be impacted by the quality of decisions made about their use and care.
* We should care because the cost of the consequences will eventually find their way to our pockets.

Self-directed Activities

*For your own understanding:*

What is your understanding of the role of research in decisions?

**Please write a paragraph or two** describing how you understand the role of research regarding our parks and natural spaces and why you think it is important.

What would it look like, or what would be different, if research played a more prominent role in your work? **Please write a paragraph or two** describing how you envision your work if research played a bigger role.

The objective of this primer is to develop an understanding of the role of research in the park management. One of the ways this can be supported is by connecting with others that have an interest in this area. In the following sections of this primer you will be asked to interview individuals that you work with, or would like to meet, and ask them for their perspectives. **Please begin generating a list of potential interviewees.**

You will also be tasked with creating a product that you can share with your colleagues or others that showcases what you have learned about the role of research in parks management. Please begin to think about what that might be. It can be a stand-up presentation, a storyboard, an infographic or something that will convey your learning to others. **Please give some thought to what you would like to create.**

Quiz

1. The role of research in natural resources is
   1. To generate new knowledge
   2. To highlight Parks Canada
   3. To make good decisions
   4. To increase profits

Answer a and c

1. The following are considered research for decision-making
   1. Social media posts
   2. Articles in a peer-reviewed journal
   3. Research conducted by an academic institution
   4. Government reports

Answer could be all of the above

1. The purpose of research in decision-making is
   1. To please the public
   2. To make justifiable decisions
   3. To highlight new research findings
   4. To fund research students

Answer b