

# THE CANADIAN COUNCIL ON ECOLOGICAL AREAS: LOOKING AHEAD

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## Abstract

*The Canadian Council on Ecological Areas (CCEA) was established in 1982 as a national not-for-profit organization dedicated to facilitating Canadians with the establishment and management of a comprehensive network of protected ecological areas that are representative of the country's terrestrial and aquatic diversity. Over the last 20 years, CCEA has made important contributions to the nation's protected areas agenda through collaborative participation of the academic and non-governmental community, several federal departments, 10 provinces and now three territories. This paper examines the role of CCEA in the Canadian protected areas scene, provides a resume of key projects and products, and describes new proposals contained in the Council's draft business plan as a means to gain input on protected areas priorities from the Parks Research Forum of Ontario (PRFO). To this end, PRFO participants were surveyed during and after the conference; the results are summarized in this paper.*

## Introduction

The Canadian Council on Ecological Areas (CCEA) was incorporated in 1982 as a national, not-for-profit organization and became a registered, charitable organization in 1995. Its mission is "to facilitate and assist Canadians with the establishment and management of a comprehensive network of protected ecological areas representative of Canada's terrestrial and aquatic natural diversity" (CCEA, 2003a).

CCEA provides services to its participating agencies and organizations, the Canadian people, and the international community by undertaking projects, organizing discussion forums, and using a number of communication vehicles to inform and educate the larger protected areas community and general public on a variety of protected area issues. CCEA has also achieved success by providing advice and assistance to international, national, provincial/territorial and local agencies on matters dealing with protected areas and ecosystems and their conservation.

This paper:

- introduces CCEA, its past and present activities;

- reports on the survey that was undertaken during and after the May, 2003 PRFO conference as a means to identify views of conference participants on protected areas needs; and,
- presents the future priorities contained in the new business plan (CCEA, 2003b) as a means to encourage participation in CCEA activities (elements of the draft business plan were presented at the PRFO conference to encourage discussion about priorities and needs).

## CCEA Foundations

CCEA's objectives for establishing, protecting and managing a representative and scientifically sound system of protected ecological areas are to:

- inform and to educate Canadians about the importance and roles of protected areas;
- guide the design and completion of a network of Canadian protected areas including the full range of terrestrial and aquatic ecosystems;
- determine the ecological requirements and institutional arrangements needed to secure the integrity of protected area networks;
- advance sound stewardship, management, monitoring and reporting of protected areas;
- promote the environmental, social and economic values of protected areas in an ecosystem context; and,
- facilitate the exchange of relevant information among interested partners through regional and national forums.

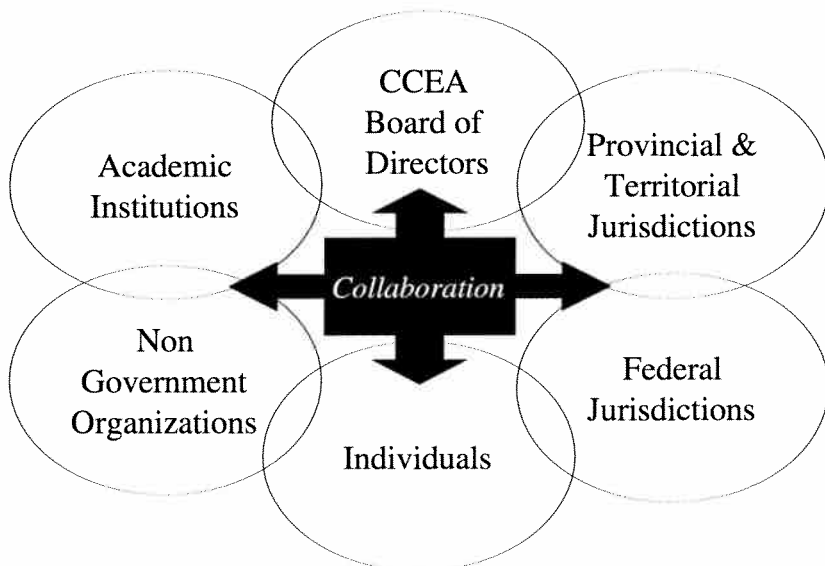
CCEA is structured to encourage a collaborative approach (Figure 1). An elected Board of Directors is the managing and decision-making body that oversees and coordinates the Council's activities. The board seeks advice, assistance and the participation of representatives of Canada's ten provincial, three territorial and several federal government jurisdictions, environmental non-governmental organizations (ENGO), and academic institutions, as well as a diverse range of associates. These groups are also encouraged to participate and lead CCEA activities. This technical and apolitical collaborative approach enables the protected areas community to work together on meaningful initiatives. Accordingly, CCEA provides a national forum to discuss and build knowledge on the ecological values, importance, and the establishment of protected ecological areas. It is able to facilitate constructive dialogue among the diverse agendas, programs, and commitments of governments that affect protected ecological area programs, and synthesize jurisdictional activities and progress into a nation-wide picture.

Over the last 20 years, a wide array of work has been undertaken, yielding useful products. For example, CCEA:

- was the initial developer and manager of the *Canadian Conservation Areas Database (CCAD)* (CCAD, 2003), a listing of Canada's diverse network of protected areas. Today, through several partnerships, CCAD continues to grow

- with the support and contributions of provincial, territorial, and federal jurisdictions. CCEA also developed the North American Conservation Areas Database (NCAD);
- introduced annual jurisdictional reporting to document Canadian activity and progress on protected areas;
  - established an awards program to recognize individuals and organizations that have contributed outstanding service on protected areas;
  - played a lead role in advancing, utilizing and promoting terrestrial and marine ecosystem classifications for protected area applications in Canada. The seminal report, *Ecozones of Canada*, forms the basis of high school geography curriculum;
  - contributed to the development of North American terrestrial and marine ecosystem and conservation areas systems;
  - developed Canadian framework for protected areas utilizing an ecosystem, representation and habitat, construct and gap analyses;
  - advanced regional conservation strategies such as Carolinian Canada and the North American Grasslands strategy;
  - publishes newsletters, occasional papers, conference proceedings and special reports; and,
  - promotes the establishment of protected area indicators and reporting initiatives and the application of classifications such as the IUCN protected area management categories as a means of assessing the status of protected areas.

**Figure 1.** The collaborative working relationship of CCEA and other participants in Canada's protected areas network encourages a focus on relevant activities.



## Establishing Priorities

During 2003, the CCEA board of directors finalized a new three-year business plan. As part of the business planning process, Canadian jurisdictions were surveyed to identify their priorities and needs for CCEA. This paper was also delivered at the PRFO conference to raise awareness about CCEA's work and opportunities to participate in it, and a survey was undertaken to identify PRFO conference participants' views on priorities for the protected areas agenda in Canada. This information has been helpful in formulating the priorities in the CCEA business plan and communications plan (CCEA, 2003b).

Forty-two percent of PRFO conference participants responded to the survey, which was administered during the conference and after the meeting through an email distribution to participants (Table 1). The post-meeting email response was nearly twice as effective as the handout during the conference. Employing both methods resulted in a high return rate of 42.5%.

*Table 1. Summary of survey distribution and responses (\*the maximum number of participants contacted through both methods).*

	AT PRFO (BY HAND)	AFTER PRFO (BY EMAIL)	TOTAL
# surveys distributed	108	113	113*
# received back	17	31	48
%	15.7	27.4	42.5

From a list of 23 choices, survey respondents were asked to identify the top five needs facing protected areas in Ontario and across Canada that could be addressed from a national perspective (Table 2). A challenge in offering a list of choices in this type of survey is that most of the topics could be either aggregated due to the inter-related and often overlapping nature of the subject matter, or split further to identify the more particular nature of the needs. For example, among the top five needs identified in Table 2, several are closely related. The authors felt that the list of 23 options provided an opportunity to not only identify the key needs, but also to identify many of the specialties in which PRFO participants are engaged. In this respect, the second question asked participants if they, or others in their organization, would be interested in participating in a CCEA working group that looked into the themes. Of the 63% of respondents that said yes, 83% further indicated the themes that interest them, and 80% provided contact information, suggesting that PRFO conference participants are indeed interested in participating in advancing the protected areas agenda. This information supports a key operating strategy that CCEA subsequently adopted in the new business plan, which is the use of collaborative national working groups.

The provision and sharing of information are critically important in terms of achieving CCEA corporate objectives. Survey participants indicated that the more technical information tools (CCAD and occasional papers) have been used less in the past, however, all of the key tools are considered important for the future (Table 3). CCEA has retained these

tools, among others, in the new communications and business plans. The fact that 15–41 percent of the respondents had used CCEA materials suggests that there is room for improvement in terms of the access to and distribution of materials or the staging of conference and workshop venues. Similarly, with less than 50% of respondents identifying these tools for future use may suggest that other sources of information are meeting their current needs. Again, improvements in this area are warranted.

**Table 2.** Needs facing protected areas (PA) in Ontario and across Canada that could be addressed from a national perspective.

THEME	% (#) (n =48)
Ecological integrity: developing the science & /or translating theory into practice	71 (34)
Managing human uses and impacts in protected areas	48 (23)
Ecosystem-based planning (i.e., planning and managing beyond protected area boundaries)	48 (23)
Biodiversity conservation and sustainability	40 (19)
Impacts of activities in the greater protected area ecosystem (e.g., mining, forestry, etc.)	31 (15)
Climate change and Pas (e.g., protected area design)	29 (14)
Gap analysis methodologies (i.e., assessing ecosystem representation): review and best practices	27 (13)
Indicators of protected area and/or ecosystem integrity (possibly moving towards a broadly agreeable suite of national indicators)	25 (12)
Freshwater aquatic ecosystem classification and the design of PA systems	23 (11)
Protected area and ecosystem restoration and stewardship	23 (11)
Protected area stress or threat identification and assessment methods	21 (10)
Land use planning and protected areas (e.g., synthesizing Canadian experiences and best practices)	21 (10)
Partnerships in protected area establishment and/or management	19 (9)
Communication between diverse protected area groups across Canada and the world (e.g., facilitating jurisdictional, national and international reporting and information sharing)	17(8)
Other (Describing/surveys of protected area values, processes and functions; Explaining heritage landscapes; Law and policy reforms; Information management; Criteria to limit human activities in protected areas )	15 (7)
Strategies and techniques for site securement	10 (5)
Preparing a National State of the Protected Areas report (including jurisdictional summaries)	8 (4)
Ecosystem classification	8 (4)
PA valuation	6 (3)
IUCN and other protected area classification schemes -making them work for Canada's protected area network	4 (2)
Large area protected areas -special concerns	4 (2)
Canadian Conservation Areas Database (CCAD): data standards, improving procedures etc.	4 (2)
Canadian protected areas and providing expertise in the international scene	0 (0)

**Table 3.** PRFO participants use of CCEA information tools and venues.

	HAVE USED % (#)	PREFER IN THE FUTURE % (#)
<b>CCAD (on the web)</b>	17 (8)	39 (18)
<b>Website (www.ccea.org)</b>	33 (15)	43 (20)
<b>Eco newsletter</b>	35 (16)	46 (21)
<b>Occasional paper series</b>	15 (7)	37 (17)
<b>Conferences and proceedings</b>	41 (19)	43 (20)

### Strategic Priorities 2004–2007

The Canadian Council on Ecological Areas is well positioned to meet the protected area challenges of the 21st century. An inclusive corporate structure, a solid track record of accomplishments and an objective approach to issues will be harnessed to tackle future challenges, in four key areas (below).

#### *Design of Protected Ecological Areas*

CCEA will facilitate discussion and advance issues associated with protected area design. CCEA will continue its leadership role with respect to the development and use of indicators and reporting, a hierarchical ecosystem classification scheme, and gap analysis (coarse filter) approaches. Canadian jurisdictions have also expressed a desire for CCEA to complement these with fine filter approaches such as biodiversity hotspots, and incorporating particular interests such as forests, freshwater, wildlife and issues associated with large protected areas.

Designing protected areas must also consider long-term viability, particularly under the threat of climate change and its impacts and the many other stresses that affect protected ecological areas and their surroundings. Therefore, CCEA will aid its collaborators, participants and clients, including jurisdictions in particular, by pursuing opportunities to advance the discussion of ecological integrity. Exploring ecological integrity will also include identifying stressors such as climate change and land-use changes and measure their impacts on protected areas, including the species, habitats and ecosystems that they are designed to protect.

#### *Stewardship and Management of Protected Ecological Areas*

There is growing recognition that effective stewardship and the management of ecosystems is a partnership of natural science and social sciences. CCEA can be an effective advocate of both aspects. Finding ways to effectively apply the science behind ecological integrity, the restoration of damaged ecosystems, and helping promote assessment methods, particularly through the development of a common suite of criteria and indicators for Canadian protected areas, are some important areas. CCEA will also advance discussion of measures of effective management.

On the human side of the equation, jurisdictions require advice and facilitation of dialogue

on cultivating partnerships and promoting best practices. CCEA will also promote discussion of ecosystem approaches to management that will enable jurisdictions to think beyond the boundaries of protected areas.

### ***Data and Information***

In the past CCEA has led the development and use of the *Canadian Conservation Areas Database* (CCAD) and the *North American Conservation Areas Database* (NCAD). Exploring opportunities to improve the content and access to this data will enhance this work. One goal is to develop on-line updating through a distributed network of authorized agencies as well as developing and applying protected area standards such as the IUCN classification scheme for management objectives and other schemes appropriate to the Canadian situation. Enhancing the content of CCAD, such as including information on non-governmental protected areas and more on marine protected areas, is also important, as is the addition of attributes such as types of stressors to existing protected area data. Such improvements will aid various reporting and assessment efforts.

### ***Communication***

CCEA has a long-time strength in communicating scientific information on emerging and topical issues. CCEA will continue to organize and participate in forums to discuss and share information on priority issues such as ecological integrity. Future workshops, conferences, *Eco* newsletters, website, and occasional papers will help to strengthen the ties between the scientific community and other partners in conservation. A new quarterly electronic protected areas news bulletin will also be a priority to strengthen the Canadian network of protected area specialists and organizations.

Reporting is also an important part of CCEA's business. Jurisdictional reporting and contributions to national and international reporting have been successful and will continue. Preparing a national *State of the Protected Areas (SOPA)* report has been done by CCEA previously in conjunction with the national *State of the Environment* reporting and is a major undertaking that CCEA intends to pursue with its collaborators and partners. The report will include an assessment of ecosystem and habitat integrity, identifying research needs, and recommended future directions. CCEA will also make it a strategic priority to focus on the numerous environmental indicator and reporting activities being advanced by a variety of agencies as they relate to ecological integrity and apply these in *State of the Protected Areas* reports.

### ***National Working Groups***

CCEA will encourage the formation of thematic working groups to explore major issues associated with protected areas. It is expected that these working groups will be comprised of individuals from diverse organizations who share a common interest in the strategic priorities of CCEA. The working groups will report to and advise CCEA's board on the ways and means to explore these issues, such as through coordinated research agendas of the working groups, conferences, workshops, communication vehicles and strategic partnerships. Opportunities to establish national working groups will be investigated for climate change, ecological integrity, CCAD/NCAD, criteria and indicators, and State of the Protected Areas reporting.

## Summary

As a not-for-profit, charitable organization, CCEA provides a valuable opportunity for the Canadian network of protected area organizations and agencies to collaborate on the establishment and management of a comprehensive network of protected ecological areas that are representative of the country's terrestrial and aquatic diversity. The array of challenges and needs are diverse, as identified by PRFO participants in this paper, however, the benefits of engaging in a coordinated work program are significant.

Strong business and communications plans are now in place to guide CCEA activities over the next three years. With a focus on engaging interested agencies and organizations, including PRFO, CCEA can encourage coordinated science agendas, and the provision of helpful information on the protection and management of ecological areas.

### *For Further Information*

The CCEA website, [www.ccea.org](http://www.ccea.org), contains the information tools and materials described in this paper (*Eco* newsletter, proceedings, occasional papers, etc.). The full results of the PRFO conference survey cited in this paper are contained in an unpublished report available from the principal author.

## References

- CCEA (Canadian Council on Ecological Areas). 2003a. *Canadian Council on Ecological Areas Website*. Available: [www.ccea.org](http://www.ccea.org).
- CCEA (Canadian Council on Ecological Areas). 2003b. *Canadian Council on Ecological Areas Business Plan 2004-2007*. CCEA Secretariat: Ottawa, ON.
- CCAD (Canadian Conservation Areas Database). 2003. *Geogratias: Canadian Conservation Areas Database (CCAD)*. Available: [www.geogratias.cgdi.gc.ca/ccea/ccea\\_e.html](http://www.geogratias.cgdi.gc.ca/ccea/ccea_e.html)