2019 Centre for Applied Sciences in Ontario Protected Areas (CASIOPA)
DRAFT (Sept 3) Conference Agenda

Planning Protected Areas & Natural Spaces:
Working Together to Conserve Natural Landscapes

0900-1200: Presentations on the conference theme - from a variety of perspectives.

- 0900-1000: Julia Baird, Brock University "Environmental governance in an era of disruption: A resilience agenda for protected areas"
- 1000-1030: Mark Stabb, Nature Conservancy of Canada "Tallgrass Awakening: Landscape-scale conservation and restoration of tallgrass ecosystems in the Rice Lake Plains."
- 1030-1100: Health Break
- 1100-1130: Kawartha Heritage Trust (speaker TBA); title and abstract TBA
- 1130-1200: Rob Davis, Ontario Ministry of Environment, Conservation & Parks "Working together in Ontario to assess and report natural areas toward Canada's international biodiversity targets."

Detailed abstracts and biographies of the speakers follow on the next pages.

1200-1300: Lunch

1300-1545: Breakout sessions for those in-person at Peterborough or at the group e-meeting locations in London and Thunder Bay. Participants in Peterborough or those at group e-meeting sites will discuss each of the three topics (details follow this agenda outline page and the pages on speaker abstracts and bios). We plan to use a Global Café format, i.e. it is anticipated that the facilitators will help participants form into smaller discussion roundtables and each of these roundtables then discuss each topic (in any order they choose). If the group e-meeting sites have a limited number of participants, the organizers there may choose to have one larger group discussion at their discretion.

- 1300-1345: Breakout Session I
- 1345-1430: Breakout Session II
- 1430-1500: Health Break
- 1500-1545: Breakout Session III
- 1545-1600: Conference closes

0900-1000. Julia Baird, Brock University

Environmental governance in an era of disruption. A resilience agenda for protected areas. We are living and working in an era where humans have an unprecedented impact on nature, resulting in a changing climate and complex and non-linear interactions between human and natural systems where predicting outcomes based on historical patterns can be extremely difficult. Protected areas are no exception to these challenges. Resilience – the ability of a system to persist, adapt and transform when needed – offers a way forward in this era of disruption. Resilience is a complex concept that has been distilled down into a series of principles that, when put into practice, creates the potential to navigate uncertainty and surprise in the system. I focus on one critical principle here that holds great potential as a leverage point for system change: complex adaptive systems thinking. To what extent do individuals think from a systems perspective? What are the potential implications of a complex adaptive systems mindset? How might we encourage this mindset? I draw on by past and current work in case studies in North America, Europe and Australia to explore these questions in an environmental governance context and consider how they hold potential for Ontario's protected areas.

Julia Baird is at Brock University. https://brocku.ca/esrc/julia-baird/. Julia's research interests centre around the decision-making processes and actions we take focused on water resources. Julia aims to:

• build an understanding of how (and why) people engage in water management and governance, and how the qualities of these processes relate to social and ecological outcomes;
• examine how the concept of resilience relates to water governance, and how it is operationalized and applied in practice; and,
• apply the notion of social-ecological systems to agriculture, how these kinds of systems can be modeled, and how those models can be used to improve decision making about practices that influence water resources on agricultural landscapes.

Julia's research is situated within the field of sustainability science. She collaborates with researchers from diverse disciplines and outside of academia to pursue solutions to research questions. Her research is influenced by her many years on the family farm, her educational background in the natural sciences, and her keen interest in how people make decisions and take action to impact the sustainability of our water resources.

1000-1030. Mark Stabb, Nature Conservancy of Canada

Tallgrass Awakening: Landscape-scale conservation and restoration of tallgrass ecosystems in the Rice Lake Plains. Over the last 20 years the Nature Conservancy of Canada (NCC) has moved from opportunistic land conservation to strategic habitat conservation in priority landscapes. The Rice Lake Plains Natural Area Conservation Plan (NACP), NCC's first such plan, was prepared in 2005 to focus conservation on the globally-significant tallgrass ecosystems on the Oak Ridges Moraine in Northumberland County. Since then NCC has secured more than 840 ha (>2,000 acres) of significant tallgrass prairie, black oak savanna, black oak woodland and other habitats, and are actively managing them all to conserve and enhance their tallgrass elements. From the outset, NCC has also collaborated with Alderville First Nation, Ontario Parks, conservation authorities, local land trusts and others in the Rice Lake Plains Partnerships – to foster tallgrass conservation and other habitat stewardship across the landscape. There are great successes to report, but much more remains to be done. NCC is now in the process of updating our NACP and to expand its boundary, scope, reach and impact. This presentation will focus on the Rice Lake Plains NACP as an example of NCC's approach, and will also touch on some of NCC's other planning and conservation activities in the province.

Mark Stabb is with the Nature Conservancy of Canada: http://www.natureconservancy.ca/en/blog/authors/mark-stabb.html. Mark is the Nature Conservancy of Canada's (NCC's) program director for Central Ontario – East and has overseen conservation projects across the Oak Ridges Moraine, in the Rice Lake Plains, on the limestone landscape of the Napanee Plain and around Prince Edward County and the islands and shores of the eastern Lake Ontario coast. Before joining NCC in 2006, Mark worked as a biologist with MNR, a park planner with Ontario Parks, as a teacher at a community college, as a wetland program manager and as a freelance writer and ecological consultant. An avid hiker and naturalist, Mark's current fascination is with exploring the landscape legacy associated with glacial Lake Iroquois. Mark lives with his partner and two daughters (and his 'prairie' dog Ella) in Uxbridge, where they can be found on local trails searching for flying squirrels.

1100-1130 Speaker TBA from the Kawartha Heritage Trust

[updated as soon as the speaker provides us with details]

1130-1200. Rob Davis. Ontario Ministry of Environment, Conservation & Parks

Working together in Ontario to assess and report natural areas toward Canada's international biodiversity targets. An important part of working together to conserve natural landscapes is to recognize what areas are already protected by a broad range of collaborators, including public, private and Indigenous conservation partners. For three years, Ontario has been working with conservation partners to assess a range of natural areas as potential protected areas or "OECMs" (Other Effective Area-based Conservation Measures) and to report qualifying areas to the national database, where they can be counted toward the 17% figure in Aichi Target 11 and Canada Target 1. This presentation outlines the criteria for areas to count as protected areas or OECMs, approaches that Ontario has taken to working with partners, outlines the results to date and shares some lessons learned.

Rob Davis is with the Ontario Ministry of Conservation, Environment, & Parks (MECP). Rob is manager with Protected Areas Section in Ontario Parks, MECP. The section has the lead for legislation and policies that guide the establishment, planning and management of provincial parks and conservation reserves. Rob has been with Ontario's protected areas program since 2001. Before that, he worked in forest management with MNRF and the forest industry. He holds Bachelors and Masters Degrees in Forestry from the University of Toronto. Rob is into cycling, paddling and live music including volunteering on the board for the Peterborough Folk Festival and hosting house concerts in his living room.

Breakout Topic 1. Science-based Selection of Protected Areas

Overview

This session will explore science-based criteria for identifying new protected areas in Ontario. Protected areas should be complementary, connected, and collectively contribute to achieving biodiversity objectives. Discussions will focus on identifying science criteria to guide conservation planning by a diversity of groups from local to provincial scales. In addition, we will examine challenges and possible solutions to the adoption of shared criteria by conservation organizations with varying interests and mandates.

Background

Science-based conservation planning

The process for identifying and selecting areas for protection has evolved over time. Many of the first protected areas were identified in an ad hoc manner to provide recreational opportunities or preserve scenic vistas. Over the past few decades, systematic, science-based approaches to conservation planning have developed for identifying complementary areas that collectively achieve the protection and persistence of biodiversity.

National perspective

Aichi Target 11 and Canada Target 1 both set a target to protect 17% of lands and inland waters and have renewed interest in expanding protected area networks. In addition to quantitative targets, Aichi Target 11 and Canada Target 1 describe qualitative elements that should be features of protected area systems. This includes the idea that protected areas represent the full variety of the species and ecosystems of a region, be well-connected, protect areas of particular importance for biodiversity and ecosystem services, and are integrated into the broader landscape.

Local and regional conservation planning

Criteria and methods for site selection vary among groups and organizations that are engaged in conservation planning. Consequently, the complementarity of sites and their contribution to a provincial network of protected areas can only be accounted for in a post hoc fashion, rather than as an integral part of the conservation planning process.

Challenges

Some challenges to developing shared criteria and approaches include incomplete biodiversity data, coverage of spatial data, the biogeographic variability of the province, regional variation in land uses and resource management activities, and the different interests and mandates of various conservation groups and government agencies. There are also science needs related to emerging areas of interest; for example, designing for climate resilience, ecosystem services, connectivity, and aquatic ecosystems. In addition, there are often multiple and sometimes conflicting objectives that must be balanced in

selecting sites, such as addressing the demand for outdoor recreational opportunities, while maintaining ecological integrity.

Questions for Breakout Topic I

1) What values or criteria should be considered in selecting and designing new protected areas?
2) Why is it important to consider the values/criteria identified in question 1?
3) What data and methods are available for assessing each value/criterion?
4) What research is needed or recently available to improve how the values/criteria are applied or to assess their effectiveness at achieving conservation goals?
5) What are the challenges and/or opportunities to adopting shared criteria among different groups involved in conservation planning, and how could these challenges be addressed, or opportunities realized?
6) Vote on the most important values/criteria (dotmocracy to be done by entire group at the end of the global café)

Breakout Topic II. Integrating Protected Areas into Landscape Management

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Overview

There is clear evidence that even large protected areas cannot achieve their management goals in isolation. In order to safeguard species and ecosystems, it is critical that a landscape approach considers the regional context, including key elements such as connectivity, population viability, climate change, and invasive species. There is a need for approaches that see landscapes as both the target for and the mechanism to achieve conservation. Discussions for this session will explore strategies for improving the integration of protected areas into landscape level management for better biodiversity outcomes.

Background

Integrated landscape management

Integrated landscape management is not a new concept, and some protected areas are already engaged in broader landscape initiatives (e.g., Algonquin to Adirondacks, Niagara Escarpment). However, for most the response is varied, and influenced by capacity, political, historical or other reasons. Regardless, the need for a more informed, supportive and enabling environment for landscape planning, for approaches that increase connectivity and integrates biodiversity conservation values beyond protected area boundaries, is needed now more than ever. Climate change is already driving species movement across our landscapes and seascapes, the question being, is there adequate refuge in and outside our protected areas and is the obstacle course even passable?

National and international context

By 2020, at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and **well-connected** systems of protected areas and other effective area-based conservation measures and **integrated into the wider landscape** and seascape.

Challenges

While landscape planning with a focus on building resilience and enhancing species flow is essential, it is also important to consider designing networks whose function is to achieve greater coordination of science and monitoring activities, fosters communication and social learning, and effectively integrates governance and conservation approaches at the landscape-scale. Strategies such as buffer zones around protected areas, restoring degraded lands, protecting corridors, and sustainable resource management can be difficult to implement or achieve because of the value and uses of non-protected lands. In addition, the important role of Indigenous communities, private landowners, industry and other sectors (e.g., agriculture, woodlot associations) in managing lands outside protected areas for biodiversity conservation needs to be recognized and leveraged. Very different approaches to landscape integration may be needed in southern Ontario, with a predominance of private land ownership, compared to largely Crown lands in northern Ontario and resource uses, such as commercial forestry and mining.

Questions for Breakout Topic II

1) What are some strategies for integrating protected areas into landscape management?
2) What opportunities are there in Ontario for implementing these strategies?
3) What are the barriers and challenges?
4) What are some key actions for improving landscape integration for protected areas in the province?

Breakout Topic III. Collaborative Conservation Planning

Overview

The purpose of this session is to identify ways the conservation community can effectively work together to design and secure new protected areas in Ontario. In recent years, more groups are getting involved in conservation planning. These groups are diverse, with different interests that guide their land protection objectives. Discussions for this session will explore how conservation organizations, Indigenous communities, and all levels of government can coordinate their efforts to achieve common goals for establishing new protected areas and protecting biodiversity.

Background

National perspective

Aichi, Canada Target 1 recognizes other governance models for protected areas besides government (e.g., Indigenous Protected and Conserved Areas, municipal lands, conservation authority lands, land trusts). This is an important consideration for conservation planning – different systems for land protection can work together to achieve the goal of Canada Target 1. Local and regional level conservation planning and the important role of Indigenous communities and governments is gaining in prominence as governments work towards achieving national and international targets.

Local and regional conservation planning

Conservation planning by local groups and organizations has a long history in Ontario. Many ecologically significant areas have been protected through the efforts of private land trusts, Indigenous communities, non-government organizations and industry. There are several excellent examples of collaborative conservation planning initiatives in Ontario and elsewhere. However, often groups are working in "silos" to achieve similar conservation objectives, leading some to call for a more collaborative and coordinated approach in working together and with all levels of governments and stakeholders.

Challenges

Some challenges to collaboration include diverse interests and mandates of various conservation groups and government agencies, and limited funding and capacity to undertake conservation planning. It is important to understand the social, economic and political context. Conservation planning is unlikely to be successful unless communities, stakeholders and decision-makers are engaged.

Questions for Breakout Topic III

1) What are the critical elements that are necessary for successful collaboration in conservation planning for protected areas?
2) Who should be involved in collaborative conservation planning?
3) What are some "best practices" for collaboration?
4) What are the respective roles of conservation organizations and agencies, Indigenous communities, municipal, provincial and federal governments, other sectors (e.g., agriculture, forestry), private landowners?