

STEWARDSHIP INDICATORS WORKSHOP

FEBRUARY 7th 2012

DISCUSSION PAPER



**Stewardship
Network of
Ontario**

INTRODUCTION

Voluntary stewardship by citizens, mostly on private lands, is one of the primary vehicles to protect and restore ecosystem health and biodiversity in Ontario. Many government agencies and NGOs are in the business of facilitating stewardship, through incentives, resources, education and training. Most of them do some kind of reporting on their stewardship programs, for example by recording the number of participants or the number of trees planted. Such measures of progress are important tools to help make the case for ongoing investment, build capacity, develop a long-term vision for stewardship and provide accountability to both funding partners and landowners.

However, there is concern that the indicators typically used to report on stewardship progress are not adequate to properly assess the collective contribution of stewardship programs to biodiversity conservation. Reporting on the numbers of participants or acres involved in stewardship does not provide enough information about the environmental, biodiversity, economic and social benefits of stewardship activities. These limitations were highlighted in 2010 when the Ontario Biodiversity Council collected data from a variety of sources to prepare a report on the State of Ontario's Biodiversity (SOBR).

Since then, the Stewardship Network of Ontario (SNO) has facilitated several discussions about ways to improve the usefulness, reliability and consistency of stewardship indicators. These included a panel discussion at the SNO Forum in June 2010, an Expert Panel workshop in April 2011 and a workshop at the SNO Forum in June 2011.

Our next step is to host a workshop on February 7th 2012 to provide an opportunity for stewardship agencies to begin developing a Province-wide template for collecting more consistent data on stewardship. This discussion paper summarizes the highlights of recent activities to provide a framework for the February 2012 workshop. Further background information is available in the Summary Report and Appendix D from the 2011 Stewardship Forum (<http://www.stewardshipcentre.on.ca/>).

EXPERT PANEL WORKSHOP APRIL 2011

On April 15th, 2011, SNO and MNR convened an Expert Panel that included representatives from Ausable Bayfield Conservation Authority, Centre for Environmental Stewardship and Conservation, Conservation Ontario, Hamilton Conservation Authority, MNR, OMAFRA, Ontario Stewardship, and Natural Heritage Information Centre. At the Expert Panel workshop, participants discussed stewardship outcomes and targets from the draft 2011 Ontario Biodiversity Strategy, identified audiences for communication, and brainstormed a long list of potential indicators that could be used to show whether targets are being met. The following is a summary of highlights from the workshop.

What makes a good indicator?

A number of factors come into play when selecting indicators. Ideally, they should provide effective measures of progress towards outcomes. The data should be straightforward and inexpensive to collect. The indicators should be consistent across the geographic area being reported on. And they should tell a compelling story and be meaningful to the people who will receive them. The Expert Panel accepted the following draft criteria to assist in evaluating potential indicators of stewardship progress in Ontario:

Table 1: Evaluation Criteria and Considerations

Criteria	Considerations
<i>Effective</i>	Does the indicator measure desired stewardship outcomes?
<i>Compelling</i>	Is the indicator meaningful to the audience?
<i>Reliable</i>	Is there a consistent methodology for collecting the data? Will the data be updated regularly over time?
<i>Practical</i>	Is it easy and inexpensive to collect the data during or following program delivery? How can this be accomplished? (e.g. on a voluntary basis, as a condition of a grant or incentive, through a participant survey etc.)
<i>Accurate</i>	Are the data used to measure the indicator accurate? (e.g., no/little duplication, not based mainly on extrapolation). Is the dataset comprehensive enough to represent the situation in Ontario?

Who are we communicating with?

When considering ways to report on stewardship activities, it is important to think about who we want to communicate with. There are many different audiences for communications about stewardship progress:

- Politicians
- Institutions (corporations, funding organizations, NGOs, government)
- Media
- Stewardship community
- Public (landowners, farmers, First Nations, new Canadians, urban and rural communities)

We need to identify what stories we want to tell to each audience and develop or interpret our indicators to tell those stories. For example, many politicians today are interested in jobs, infrastructure and economic opportunities. If the stewardship community doesn't learn to talk the "language of economics" it will continue to be marginalized.

A common language

Various terms are commonly used to describe different kinds of indicators and what they can communicate. For example:

- Program indicators (e.g. dollars invested, number of participants, number of trees planted)
- Direct environmental indicators (e.g. increase in forest cover)
- Social indicators (e.g. growth in stewardship ethic)
- Economic indicators (e.g. value of ecosystem services provided)
- Proxy or sentinel indicators (e.g. number of rare species as an indicator of biodiversity)
- Lag indicators (report on past activities)
- Lead indicators (project what may happen in future)
- Defence indicators (justify the importance and value of investing in stewardship)

What do we want to know?

Table 2 on the next page presents the results of brainstorming by the Expert Panel. It includes the questions that we would like to be able to answer about the social and cultural results, environmental and biodiversity results, and economic results of stewardship actions. The second column lists some suggested indicators that could address those questions, along with a summary statement about the key challenges associated with each group of indicators.

Table 2. Expert Panel Brainstorming: Suggested Indicators of Stewardship Progress

What we want to know	Suggested indicators
1. What are the social & cultural results?	
<ul style="list-style-type: none"> • Do participants have a new stewardship ethic (understanding, attitudes and behaviours)? • Is stewardship benefiting individuals' physical and mental health? • Has involvement in stewardship activities increased? 	<ul style="list-style-type: none"> • Percent of people volunteering to conserve biodiversity (using % addresses increasing population; but it is difficult to acquire accurate reporting of the numbers of volunteers so there is a tendency to under-report) • Number of participants in "friends groups" (e.g. volunteers in provincial parks) • Number and location of farm and non-farm rural stewardship projects (using GIS) • Implementation surveys (e.g. participation data in voluntary activities from census, Statscan) <p>Challenge: Existing data are not comprehensive nor reliable and there is no guarantee that future data will be.</p>
2. What are the environmental & biodiversity results?	
<ul style="list-style-type: none"> • Is habitat improving? • Is the water clean? • Is biodiversity better protected and/or conserved? • Is watershed health improving? • Has a landscape level target been achieved? 	<ul style="list-style-type: none"> • Percent natural cover, forest cover, and agricultural land • Acreage and percent of restoration (both active and passive restoration efforts) • Percent increase in area of certified forest on private lands • Number of trees planted by acreage • Number of tree planting projects that receive follow up maintenance • Number of acres affected by projects (e.g. planting trees, restoring wetlands) • MFTIP/CLTIP: Percentage of eligible properties/participants that participate; Number of acres involved • Area of land secured through donation (e.g. gifts of property; conservation easements) • Area of land secured through purchase • Percent impervious cover • Water quality improvements (e.g. using data from watershed report cards) <p>Challenges: Need baseline data to demonstrate progress. Difficult to show "cause and effect" link between stewardship actions and environmental/biodiversity results. Possible double-counting among indicators.</p>
3. What are the economic results?	
<ul style="list-style-type: none"> • How many volunteer hours are contributed? • How many people are employed in the stewardship sector? • Other benefits to the local economy? • What is the economic value of conserving biodiversity? (value of ecosystem services) • What is the tourism/recreational value of biodiversity? 	<ul style="list-style-type: none"> • Hours of volunteerism and estimated dollar value (what is an hour worth?) • Expenditure on services provided by contractors • Private investment in stewardship • Grant money invested • Total cost of projects • Leveraging of funds • Value of ecosystem services created/sustained by stewardship actions (need consistent and defensible method) • Avoidance costs (e.g. avoiding clean up, treatment or infrastructure repair costs by undertaking stream rehabilitation) • Contribution to GDP <p>Challenge: May require new research/data collection and therefore resources.</p>

Expert Panel Conclusions

The Expert Panel conclusions included:

1. Relationship between stewardship and direct environmental measures: Stewardship is all about empowering *people* to care for the land, air, water and biodiversity. It is difficult to measure the direct environmental results of stewardship actions separately from the results of other actions such as land securement, government policies and regulations. The *State of Ontario's Biodiversity 2010* report provides a comprehensive picture of the state of environmental quality and biodiversity. It may be most effective for the stewardship community to focus on measuring the social and economic benefits of stewardship actions where the information is available to do this.

In addition, the Expert Panel suggested taking a case study approach to research that would attempt to link stewardship actions to changes in environmental quality and biodiversity. This would help to provide a better understanding of the effectiveness of stewardship activities that could then be extrapolated to other situations.

2. Building on existing indicators: The indicators in the *State of Ontario's Biodiversity 2010* report (SOBR) resulted from a process that used existing information available from groups and agencies across Ontario. They represent a reality check to compare “what we would like to know” with “what information is actually available”. It will be worthwhile to assess these indicators to determine:

- What are their limitations?
- How can data reliability be improved?
- What additional information can be collected to make the indicators more meaningful?

3. Standardized reporting: It would be invaluable to develop a core set of reporting requirements among organizations that fund stewardship programs. This could be designed to reduce “double-counting” and provide meaningful information about the social, environmental and economic benefits of stewardship activities.

STEWARDSHIP FORUM 2011 WORKSHOP

The workshop on stewardship indicators at the Stewardship Forum on June 7th 2011 focused on the second conclusion of the Expert Panel – building on existing indicators in SOBR 2010. Roundtable discussions were held to discuss each of the six indicators in SOBR 2010 that address stewardship. These are:

- Protected Areas and Conservation Lands in Ontario by Ecozone
- Sustainable Forest Management and Certification (area of certified forest)
- Participation in Environmentally Sustainable Agriculture Program (number of participants in Ontario's EFP program)
- Stewardship – Area Enhanced for Biodiversity
- Stewardship – Volunteer Efforts to Conserve Biodiversity
- Participation in Provincial Tax Incentive Program (CLTIP and MFTIP)

Participants addressed the following questions about each indicator:

- How could comprehension and reliability be improved:
- Is the indicator effective and compelling? If not: Could the existing data be presented more effectively?
- What additional information could be collected to make the indicator more meaningful?
- Are there any barriers to participation?

Forum Workshop Conclusions

Workshop participants provided valuable input to help in refining and improving the indicators of stewardship success (see 2011 Stewardship Forum Report, section on Stewardship Indicators, pp 9 – 14). They had specific suggestions about data that could be added to improve the effectiveness of many of the indicators. For example, this might help to identify the economic value of specific stewardship activities, and the leveraging effects of grant programs. In some cases, additional partners were recommended, for example land trusts could participate in providing information about the number of volunteers participating in stewardship. It was also suggested that granting agencies could play a larger role, both in the design of their reporting requirements for grantees, and in directly providing data. Several groups mentioned the value of collecting and presenting information at a regional level, for example by watershed or ecozone.

There was a high level of interest in participating in a collaborative effort to improve the collection and reporting of data about stewardship. Participants also recognized some of the barriers to improved reporting on stewardship. Most frequently cited barriers were concerns about the confidentiality of personal landowner information and the limited availability of resources to collect the information. The issue of double-counting was also raised frequently; it typically arises because stewardship activities are often funded and implemented through partnerships of several agencies. Another challenge is the difficulty of obtaining information about stewardship actions taken by private landowners who are not participating in a funding or education program.

The discussion groups were unanimous in recommending the development of a Province-wide template so that funding and implementing agencies can collect more consistent and comprehensive information. Four of the six indicators that were discussed at the Forum indicators are being addressed by other agencies. Therefore SNO has decided to focus on the remaining two indicators:

- Stewardship – Area Enhanced for Biodiversity and
- Stewardship – Volunteer Efforts to Conserve Biodiversity

Further commentary on the use of these two indicators in the SOBR 2010 is provided below.

SOBR 2011 Indicator – Stewardship – Area Enhanced for Biodiversity

This indicator reported on the acreage on which stewardship activities have taken place in Ontario. Data were presented as both cumulative and annual area from 2002 to 2008 based on information maintained by Conservation Ontario, Ducks Unlimited Canada and Ontario Stewardship. A breakdown of the amount of annual stewardship effort by individual activity (e.g., tree planting, restored wetland) was also provided for the period 2004-2009 based on information from Ontario Stewardship. While the information included in this indicator clearly

does not capture all the stewardship efforts in the province, it does represent the activities of some of the province's larger stewardship organizations and therefore can be used as an index of the level of stewardship activities. Information for this indicator is maintained and regularly updated by the larger conservation organizations leading stewardship efforts in Ontario.

Issues associated with this indicator include:

- The information used in the indicator does not capture all the stewardship efforts in the province (see comments above).
- There is no spatial context identifying where stewardship efforts have taken place.
- The principle measure used for this indicator was area, but different organizations measure stewardship efforts in different ways (e.g., number of trees planted, km of stream restored). It would be useful to develop standard requirements for reporting stewardship effort through agreement of stewardship organizations and funding agencies in the province.
- While the indicator measures the amount of land area where stewardship activities have taken place, the effectiveness of these activities in achieving biodiversity conservation has not been specifically assessed.

SOBR 2011 Indicator – Stewardship – Volunteer Efforts to Conserve Biodiversity

The volunteer effort indicator reported on the number of people who volunteered their time to participate in programs that protect and enhance biodiversity over the period 2006-2008. The data for this indicator were provided by selected conservation organizations that maintain databases on stewardship activities (Conservation Ontario, Ducks Unlimited Canada, Nature Conservancy of Canada, Ontario Nature and Ontario Stewardship). While the information included in this indicator clearly does not capture all the volunteers participating in stewardship efforts in the province, it does capture the activity of some of the province's larger stewardship organizations and therefore can be used as an index of volunteer efforts. Because information on the number of volunteers was only available for a short period of time, it was not possible to assess trends in the amount of volunteer effort. Public participation in biodiversity is one measure of the value Ontarians place on biodiversity and their active engagement in its conservation. Information for this indicator is maintained and regularly updated by the larger conservation organizations leading stewardship efforts in Ontario.

Issues associated with this indicator include:

- The information used in the indicator does not capture all the stewardship efforts in the province (see comments above).
- Volunteerism was reported as the number of people, but it would probably be more meaningful to report the number of volunteer hours.
- While the indicator measures the number of people involved in stewardship activities, the effectiveness of these activities in achieving biodiversity conservation has not been specifically assessed.

STEWARDSHIP INDICATORS WORKSHOP FEBRUARY 7TH 2012

Objectives

The objectives of the workshop on February 7th2012 are:

1. To begin the development of a common template for reporting on stewardship activities, focusing on:
 - Area Enhanced for Biodiversity and
 - Volunteer Efforts to Conserve Biodiversity
2. To discuss potential research opportunities to demonstrate the effectiveness of stewardship

Workbook

The attached workbook will be used during the workshop on February 7th to record and collect your comments on a proposed stewardship indicators template as well as some general questions that will help us with our next steps. Please feel free to print it out and fill out some or all of the worksheets before you come to the workshop. If you are unable to attend the workshop, please email the completed workbook to Suzanne Barrett (suzanne@barrettconsulting.ca).

Draft Agenda

Please see attached.