



## Sustainable Peatland Management (SPM)

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### Summary

Sustainable peatland management (SPM) is the **“Balanced stewardship of the environmental, social and economic values of Canada’s renewable peat resource.”** Healthy peatlands are dependent on this balance.

In response to challenges principally from environmental organizations, the Canadian industry has to date focussed primarily on the environmental portion of the sustainable peatland management equation. To achieve sustainable peat management the CSPMA members are committed to initiatives related to Environmental Stewardship; Social and Cultural Stewardship, Economic Well Being.

The Paper develops more fully the initiatives being considered by the CSPMA to achieve SPM.

**Key index words:** sustainability, environment, social, economic, peatland management

### Introduction

Sustainability reporting, creation of sustainable standards, certification requirements of sustainable peat production are significant and growing expectations for managing peat harvesting and corporate accountability. The Canadian horticultural peat industry’s leadership in accounting for the environmental, social and economic outcomes of peatland management form the basis of the paper. Key has been the industries recognition of the concept of Sustainable Peatland Management.

### Background

Management of natural resources and market trends have demanded a change to reflect a “sustainable” approach to use. This demand is not only in Canada but globally. Since the 1970’s trends have included the need for organically grown products, ethical treatment of workers, locally grown products, and a stronger emphasis on environmental protection. To these trends were added food safety requirements, sustainable production, and corporate social responsibility beginning in the 1980’s.

Standards and certification systems have been emerging in response to these trends. These schemes have often vied with each other and have been promoted by interest groups with different and often conflicting interests. An example is North American Forestry: there exists the Forest Stewardship Council (FSC), the Canadian Standard Association CAN/CSA Z809, Sustainable Forestry Initiative (SFI), as well as Pan-European Forest Certification Council, PEFCC.

Accountability for proof has fallen to the producer of the products. In the case of natural resource this principally has become an expectation of industry. Market forces, particularly consumer demand has been growing for the evidence of proof to be made clear through the adoption of accredited certification standards.

### Sustainability

In response to these pressures other renewable natural resources managers, have adopted the three pronged definition of sustainable management. The Canadian Council of Forest Ministers (CCFM) in endorsing the National Forest Strategy 2003-2008 have included a statement regarding sustainable forest management “... that brings together diverse values and that ensures the conditions that lead to **environmental health, social and cultural well being and economic robustness...**”

Members of the CSPMA have historically supported the principles of sustainability but have not fully implemented all elements of sustainable peatland management.

The book “Wise Use of Mires and Peatlands – Background and Principles including a Framework for Decision Making” has become a foundational document in the discussions of the management of peatland resources not only in Canada but globally.

Within the book the Regina Conference, 1987 is referenced in defining Wise Use of Wetlands as “their sustainable utilization for the benefit of mankind in a way compatible with the maintenance of the natural properties of the ecosystem.” This statement includes all three measures of sustainable management; **environment** – *“the maintenance of the natural properties of the ecosystem”* **social** – *“benefits of mankind”* **economic** – *“sustainable utilization.”*

In the United States the recently proposed Sustainable Agriculture Standard has raised significant concern. The Sector-Specific Annex: Potted Plants of the draft Standard is the most challenging with regard to peat moss.

The draft Annex proposes *“a recording of the amounts and sources of peat moss used and where alternatives exist development of a policy for substituting peat moss with renewable substrate materials”*.

Scientific Certification Standards (SCS) the entity that has proposed the Sustainable Agriculture Standard has



already developed (2007-2008) a certification process for cut flowers and potted plants. The VeriFlora certification program was established to provide stringent sustainability performance standards for growers and handlers of cut flowers and potted plants. The certification indicates that it meets the draft American National Standard for Trial Use (SCS -001) Sustainable Agriculture.

The Draft Standard itself challenges the CSPMA to evaluate its capability to respond to measures set out in the Draft to assess “sustainability”. The three measures that provide the framework are environmental sustainability, social/economic responsibility and product integrity.

In response to challenges, the Canadian industry has to date focussed primarily on the environmental portion of the sustainable peatland management equation. Since the early 90’s restoration research, through joint funding efforts has, under the Industrial Chair in Peatland Management, University of Laval, concentrated on the restoration practices needed to return harvested peatlands to functioning peat accumulating ecosystems. This has been highly successful and provides a solid science based response to the restoration and renewal concerns of Environmental Non Government Organizations (ENGOS), government agencies and consumers.

Clearly sustainable peatland management (SFM) can’t be measured on environmental stewardship alone.

## Sustainable peatland management concept

The members of the CSPMA support the concept of sustainable peatland management (SPM) as “*the balanced stewardship of the environmental, social and economic values of Canada’s peat resources*”. The peatland ecosystems approach captures all the environmental values together with the ecologic relationships of natural systems and their contribution to social, cultural as well as economic well being. To achieve SPM the members have agreed to engage in and promote the following initiatives related to environmental stewardship, social/cultural stewardship, and economic well being.

## CSPMA Mission

In recognition of this endorsed concept the CSPMA has recently adopted the following mission statement.

*“CSPMA is an association of peat moss producers and related enterprises devoted to promoting the sustainable management of Canadian peatlands and the industry. We provide leadership in environmental and social stewardship and economic well-being related to the use of Canadian peatland resources.”*

To fulfill this Mission the CSPMA has built on existing programs and identified additional activities.

## Environmental stewardship

The basic elements of environmental stewardship include national and regional research programs, partnerships, outreach, and extension programs.

## National and Regional Research Programs

- Restoration, reclamation and renewal (Industrial Research Chair in Peatland Management, additional 5 year 2008-2013 program)
- Natural disturbance regimes (wildfire, permafrost melt, climate change, coastal erosion): Natural disturbance regime research will assist in understanding the ecosystem relationship of the peatlands as they have been formed by natural conditions and processes. Natural disturbance management strategies have been developing within the resource industries particularly forestry. A significant link to carbon sequestration and emission management challenges associated with climate change will be critical in evaluating opportunities for emissions trading and energy budgeting related to industrial sustainability reporting.
- Industrial impacts (energy, hydro). research of heavy industrial (oil sands, hydro, p&ng, diamond mining) impacts on wetland and peatland ecosystems caused by exploration, development and production combined with reclamation and restoration techniques is needed. Commercial horticultural peat production and best management practices will provide a measure of comparison between industrial footprints.
- Life Cycle Analysis (LCA). Life cycle evaluations will be examined as a tool for comparison between different products such as peat, bark, coir, composts from various sources (dairy, straw)

## Partnerships

- Environmental Non Governmental Organizations (ENGOS), (Ducks Unlimited Canada). Strengthening our working relationships with other wetland/peatland interest groups who are directly or indirectly impacted by commercial use of peatlands.
- National and provincial natural resource associations (Forest Products Association Canada, Canadian Association of Petroleum Producers).
- International associations (International Peat Society, United Nations natural resource agencies).
- Federal and provincial governments (natural resources).

## Outreach and Extension Programs

- Media (newsletters, television, and magazines): articles through existing agencies such as the Garden Writers of America Association.
- Initiate a National restoration sign campaign on restored or reclaimed harvest sites.
- Internet: web-based initiatives (blogs, net links) linked to the existing CSPMA web site.

## Social and cultural stewardship

This is a critically important element of the CSPMA sustainable peatland management initiative.

## Research

- Identify social and economic benefits attributable to the commercial peat industry at a local, regional, provincial, and national level.



- Investigate with a consulting firm the possibility of conducting a Canadian Sphagnum Peat Moss Industry Sustainability Benchmark Study in 2008.
- The results of this research would provide strategic directions and indicators of sustainability for the members of the CSPMA.
- Consideration in three to five years of a Canadian Peat Harvesting Standard through the Canadian Standards Association (CSA) with possible adoption by the Canadian Standards Council.

## **Partnerships**

- Strengthen local, regional community based ties with industry.
- Establish linkages to national community based agencies and government (Federal and Provincial) agencies responsible for rural development.

## **Outreach and Extension Programs**

- Promote the value of commercial peat development to local, regional and national communities both rural and urban.
- Develop media and internet information material to promote the social values of commercial peat development.
- Publish a National Peatland Sustainability Report every 3 years starting in 2009 (target).

## **Economic well being**

Markets, financial impacts, corporate and emerging economic opportunities related to climate change and bioeconomy developments.

### **Markets**

- Information on sustainable management practices, research outcomes, product value for production as a key element of the growing medium.
- Provide information and corporate meetings with key commercial outlets (Home Depot, Lowes, and Wal-Mart).
- Internationally track market demand trends such as environmental product certification, non financial barriers or limits to trade.
- Engage with the development of the American Sustainable Agriculture Standard.
- Engage through the International Peat Society (IPS) in

the challenges involving international sustainable peatland standards, and certification as they relate to sustainability.

### **Financial**

- Monitor the growing interest in the financial sector to provide “green” scorecards to qualify for financial institutions environmental lending policies.

### **Corporate**

- Ensure “best practices” information on fire safety systems, manpower safety systems, leadership training and staff training.

### **Emerging Economic Opportunities; Bio-economy**

- Monitor provincial, national and international bioeconomy initiatives for bioenergy, biofuels, bioproducts.
- Focus on research initiatives using peat resource as a cellulosic biomass feedstock for bioeconomy applications.
- Monitor national and international development of Climate Change protocols and carbon trading initiatives.
- In all cases there will be the need to ensure appropriate regulations, policies and programs that meet the needs of the peat industry companies.

## **Conclusion**

The concept of Sustainable Peatland Management calls into account the need for all users of peatlands to ensure they manage for environmental, social/cultural, and economic values. This applies equally to those who manage the natural protected peatlands as it does to the industrial and commercial users. Sustainability reporting and accounting must ensure that all three elements of the concept are addressed. New expectations will be identified beyond the traditional environmental measures. Society’s willingness to continue the wise use of wetlands and peatlands will be dependent on the commitment by all managers and users to the three elements of sustainable peatland management.

## **References**

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