

THE

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SOIL CONSERVATION COUNCIL OF CANADA
CONSEIL DE CONSERVATION DES SOLS CANADA



SCCC 25 Years Old - May 19, 2012

Glen Shaw, Executive Director, Soil Conservation Council of Canada

In the 1980's Senator Herbert Sparrow convinced the Standing Committee on Agriculture, Fisheries and Forestry to examine the subject of soil and water conservation throughout Canada. After two years of study the Standing Committee produced the report "Soil at Risk- Canada's Eroding Future". Recommendation number twenty from the report is as follows:

"That a Council on Soil and Water Conservation be established: (a) to provide a neutral forum within which the participants can discuss the issues and actions necessary to conserve Canada's natural resources; (b) to encourage improved coordination and cooperation between participants; (c) to review methods of dealing with the needs and demands of particular sectors; (d) to aid in the prioritization of research and program demands; and (e) to gather and disseminate information concerning conservation".

Senator Sparrow called a meeting on May 19, 1987 that established Soil Conservation Canada as a national organization that would be a national voice for soil and water conservation in Canada. SCC's name was later changed to the Soil Conservation Council of Canada (SCCC).

Over the past 25 years SCCC has actively promoted soil and water conservation and the importance of a healthy soil to the sustainability of Canadian agriculture. For further information on the Council please visit the website at www.soilccc.ca

National Soil Conservation Week, April 15 – 21, 2012

At one time soil conservation meant simply the protection of soil from wind and water erosion. Today it is much more than that. Soil conservation is now directly linked with water quality, greenhouse gas emissions, carbon sequestration, biodiversity and air quality.

National Soil Conservation Week is a long-term effort to both celebrate the success in soil conservation and to keep the importance of soils in the public's attention. One way that is acknowledged each year by SCCC is to recognize "soils champions," producers and others from across Canada who represent the successes of the soil conservation movement. These people provided leadership when soil management systems were not as popular as they are today.

This will be the 27th year that Canada has recognized National Soil Conservation Week (NSCW). As NSCW is launched April 15 to 22, 2012 it is an opportunity to remind farmers and ranchers and the general public of the value of well managed soil to everyone.

Articles on the 2011 soil champions and soil conservation in general, are available on the SCCC website www.soilccc.ca



Is your soil healthy?

The Cornell Soil Health Assessment Concept introduced to Agrologists in Atlantic Canada

Joan Parker, Club Coordinator, NB

It is widely accepted that crop rotation and cover crops are important ways to improve agricultural soils. A Cornell University team has carefully selected parameters which can be easily measured to quantify the health of a soil. In September, 2011 at the Abbey in Rogersville, New Brunswick, Robert Schindelbeck introduced the Cornell Soil Health assessment to over 30 Agrologists and producers from 3 provinces.

This soil health assessment quantifies four parameters in each of 3 aspects of soil: physical, biological and chemical. The group learned how these measurable parameters provide important information needed to identify the constraints facing any given soil that diminish its production capability and sustainability.



Robert Schindelbeck, Cornell University

There were demonstrations of a soil penetrometer used to show compaction, and the Cornell Sprinkle Infiltrometer, used to determine aggregate stability.

Tying the pieces together into a plan of action followed.

Participants were divided into groups and used actual soil health tests, background farm information such as crops to be grown, equipment available on farm, nearby to borrow or rent, or possibly purchase, the Soil Health Manual and agricultural experience to choose suitable remediation steps. These recommendations were then presented to all participants and participants could ask questions about why certain options were chosen.

The workshop was organized by the Miramichi Soil and Crop Improvement Association with funding provided by the New Brunswick Growing Forward Program.

SCCC Consulted on Nutrient Management

Although information is available about nutrients and their impact on the environment, more research and knowledge is required to better understand how nutrients are lost from agricultural sources and what can be done to intercept nutrients and reduce the impact on the environment..

The Agri-Environmental Services Branch (AESB) of Agriculture and Agri-Food Canada (AAFC) has proposed a series of workshops to assess the issues regarding nutrients and identify gaps in the scientific knowledge. The intent is to facilitate collaboration in an effort to address the gaps and enhance on-farm management of nutrients.

AAFC has invited 3 SCCC board members to participate in three regional stakeholder workshops – Western, Central and Atlantic Canada to share information and recommend actions to address the gaps in knowledge and the management of nutrients. The workshops are planned for March, 2012.



Manitoba’s 2011 Fall Soil Moisture Survey

Marla Riekman, Manitoba Agriculture, Food and Rural Initiatives

During the last two weeks of October 2011, a soil moisture survey was completed across Agro-Manitoba. Knowing the fall soil moisture status can be helpful for agronomic decisions such as crop selection, determining potential yield, and estimating fertilizer requirements. The amount of moisture within the root zone just prior to freeze-up provides a good indication of what can be expected in the spring. With snow cover and freezing temperatures, soil moisture content remains relatively stable throughout the winter. This is especially true in frozen moist soils whose pores become “sealed off”.

Soil samples were taken from 101 locations chosen based on soil properties that best represent the landscape and crossing system of each region. Soil was sampled to a depth of 4 feet to determine soil moisture within the root zone. In general, east-central Manitoba was consistently drier prior to freeze-up than other areas of the province. A major impact on soil moisture was the 2011 crop – a number of the higher moisture readings coincided with sample locations where the fields were left fallow due to excess moisture conditions in the spring.

The 2011 Manitoba Fall Soil Moisture Survey is an initiative of the Manitoba Ag-Weather Program, funded in part by Growing Forward. Soil moisture maps will soon be made available at <http://www.gov.mb.ca/agriculture/news/climate/waa07s00.html>. For more information on the survey, contact Marla Riekman, marla.riekman@gov.mb.ca.

Notice of Annual General Meeting

The annual general meeting of the Soil Conservation Council of Canada will be held at the Extended Stay Suites, Ottawa, Ontario, March 21, 2012. The meeting will commence at 8:30 am and will conclude by noon. A board of directors meeting will be held on Wednesday afternoon and on Thursday.

Everyone is welcome to attend the AGM and paid members are eligible to vote on resolutions. Anyone wishing to receive an agenda for the AGM should contact the SCCC office in Indian Head (306) 695-2231 or email: info@soilcc.ca

Sponsors

Soil Conservation Council of Canada greatly appreciates the support from Agriculture and Agri-Food Canada and the corporate sponsors of SCCC in 2011 – CropLife Canada, Duck Unlimited Canada, Farm Credit Canada and John Deere.



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PEI Soil Conservation Farmer Awards

PEI Soil and Crop Improvement Association recognized two farmers for their soil conservation and general sustainable agriculture efforts at an event held in Charlottetown, February 23, 2011.

James Evans of Burlington was the recipient of the 2011, Soil Conservationist of the Year Award in the Livestock Category; and Martin Visser and Sons Ltd of Victoria was the recipient of the 2011, Soil Conservationist of the Year Award in the Cash Crop Category.

Jim Evans has been farming for 29 years. Starting off in dairy as he took over the family farm, he later specialized in beef production. "We must say that Jim has made a true commitment in reducing soil erosion rates and building the tilth of his soil resource", says Chris MacAulay, President of PEI Soil and Crop.

The second recipient of the award from PEI Soil and Crop was Martin Visser and Sons Ltd. They have operated a successful potato operation in Victoria for over 30 years. Among the first producers on the Island to implement an integrated erosion control system on their farm, the Vissers continue to address soil & water conservation issues on their land holdings with a wide variety of both structural and agronomic approaches. For a detailed description of the award winners visit; www.peiscia.ca

Canada and the United States Co-operate on Conservation Agriculture

In 2007 the Conservation Technology Information Center (CTIC) in West Lafayette, Indiana facilitated the formation of the Conservation Agriculture Systems Alliance (CASA). CASA is a network of North American conservation agriculture organizations that have a shared goal of increasing conservation and sustainability in agriculture. Soil Conservation Council of Canada is a member of CASA as well as other conservation organization in Western Canada. Each month CTIC hosts and facilitates a conference with CASA members and partners to share information and collaborate on events and projects. In partnership with CASA, the Soil Conservation Council of Canada will host the **6th World Congress on Conservation Agriculture** in Winnipeg in June of 2014. Additional information on the Congress will be in the March edition of the Protector. For more information on CASA's objectives and members: www.ctic.purdue.edu

New SCCC Board Members

SCCC is pleased to announce two new industry members to the board of directors. **Pierre Petelle** is Vice President, Chemistry for CropLife in Ottawa. petelle@croplife.ca
Kristian Stephens is a senior manager of technical affairs with the Canadian Fertilizer Institute, located in Ottawa. kstephens@cfi.ca



Building Soil the Cowboy Way

Peace River Forage Association

A popular producer event of the Peace River Forage Association is what we call a Forage Friendly Field Day. A Forage Friendly Field Day involves a group of producers meeting at a peer's operation to look at special or even routine practices on the farm.

John and Patt Kendrew hosted a group of producers last summer to take a look at improvements John has been making to his soil by the intensive grazing systems that have become standard practice on the Kendrew farm. The tour involved four completely different fields all with distinct management practices and located side by side.

Field 1 was really three fields that have been owned by the Kendrews for many years. The fields are seeded to a mixed grass and alfalfa crop with a high percentage of grass. For at least the last 10 years John has been using a fairly intensive rotational grazing system. Leaving a high amount of residue has always been a goal. The soil profile showed 3/4 to 1 inch of humus layer.

Fields 2, 3 and 4 were recently purchased. Field 2 was a stand of native grass. The field had never been cultivated. In the past the field was grazed heavily in spring and fall. The profile showed approx 1/2 inch of humus.



Left side of photo shows humus build up.

Field 3 was an alfalfa field that was used for hay production. The profile showed a zero humus layer.

Field 4 was a field that the previous owner used for calving and winter and spring feeding of his cows. Feeding was done across the entire field. The plant population was a stand of native grass and a small percentage of varieties introduced from the hay fed to the livestock. The grass stand was severely overgrazed. The soil profile showed about 1 1/2 inches of humus.

The result of the tour demonstrated two major management practices that livestock/forage producers need to keep in mind. One important practice is to look after your grass. This was demonstrated on Field 1 where John's

grass management technique of leaving residue resulted in building a humus layer. To make fast and dramatic improvements to soil, manure and feed residue is the key. Field 4 demonstrates the value of hauling nutrients to the field in the form of feed. The manure and feed residue quickly improve the soil.



Sustainability at Sunrise

Ducks Unlimited Canada, Nutrients for Life and the Soil Conservation Council of Canada co-sponsored a breakfast for participants at the GrowCanada conference in Winnipeg on November 30th, 2011. GrowCanda has become the premier agriculture conference in Canada where industry and producer groups meet to discuss the future of agriculture. The event provided a great opportunity for the 3 organizations to talk to industry representatives on the importance of sustainable agricultural practices and the soil resource. SCCC would like to thank CropLife Canada for sponsoring SCCC's executive member's registration at the conference. www.growcanadaconference.ca

Events - 2012

- Feb 2, 3** "Managing Soil Moisture to Mitigate Risks", 55th Annual Meeting of the Manitoba Soil Science Society, Holiday Inn South, Winnipeg, Manitoba. Email: msss@cc.umanitoba.ca
- Feb 7, 8** Ontario Soil and Crop Improvement Association Annual Meeting, London, Ontario
www.ontariosoilcrop.org
- Feb 14 – 16** 49th Annual Alberta Soil Science Workshop, Ramada Inn, Edmonton, Alberta
- Feb 21** Peace River Forage Association's Annual Seminar. www.peaceforage.bc.ca
- Feb 22, 23** "Precision AG 2.0: The Next Generation" hosted by the Agricultural Research and Extension Council of Alberta at the Deerfoot Inn and Casino, Calgary, Alberta. www.precision-ag.ca
- Feb 28, 29** Innovative Farmers Association of Ontario Conference, London, Ontario. www.ifao.com
- Feb 28, 29** The Prince Edward Island Soil and Crop Conference, Slemon Park Inn, Summerside, P.E.I. The Agenda will be posted to the web site soon. www.peiscia.ca
- March 5 – 9** Canadian Cattlemen's Association Annual General Meeting, Delta Hotel, Ottawa, Ontario.
www.cattle.ca
- March 21, 22** Soil Conservation Council of Canada Annual General Meeting and Board of Directors Meeting, Extended Stays Suites, Ottawa, Ontario
- April 15 – 21** National Soil Conservation Week. www.soilcc.ca
- June 3 – 7** The Canadian Society of Soil Science and Association Quebecoise de Specialist en Sciences du Sol (AQSSS) Joint Conference in Manoir St-Castin, Lac Beauport, Quebec. www.csss.ca
- Aug 20 – 23** Nutrients For Life Board of Directors Meeting, Queens Landing at Niagara- on-the Lake, Ontario. www.nutrientsforlife.ca
- Aug 21 – 23** Canadian Fertilizer Institute 67th Annual Conference, Queens Landing at Niagara- on-the Lake, Ontario. www.cfi.ca
- 2012** Ducks Unlimited Canada hosts more than 500 events across the country each year to raise funds to support wetland and wildlife conservation. Check for events in your province at www.ducks.ca