Abstracts, presentations, discussion summary, speakers biographies and appendices

PROCEEDINGS

Environmental Farm Planning Workshop

March 29 - 30 - 31, 2001

Crystal Palace Convention Centre
Best Western Crystal Palace Hotel
499 Paul Street, Moncton, NB

Hosted by:

Eastern Canada Soil and Water Conservation Centre

&

Soil Conservation Council of Canada

In collaboration:

NB, PEI, NF, NS and QC TAKING CHARGE Teams

Financed under:

Climate Change Action Fund (CCAF)
Agricultural Awareness Partnership Project between PFRA, CCA, CFA, SCC and ECSWCC

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Table of Contents

EFP Workshop Steering Committee ................................................................. 1

Introduction - Jean-Louis Daigle ................................................................. 2

Plenary Session: Environmental Issues and Agricultural Challenges

Atlantic Soil and Water Conservation Challenges - Gordon Fairchild ............... 5

Institutional and Social Change in Management of the Environment by Agriculture - John FitzGibbon .......................................................... 7

Sources and Sinks of Greenhouse Gases in Agriculture - Philippe Rochette .......... 9

Soil Sinks and Agricultural Adaptation to Climate Change - Jim P. Bruce .......... 10

The Environmental Farm Plan and Other Tools for Change

Ontario’s Experiences with Environmental Farm Planning - Andrew Graham ...... 14

Quebec Agro-environmental Strategies - Simon Marmen ............................. 16

The EFP and Other Tools for Change: Atlantic Canada Perspectives - Barry Cudmore ...... 20

Environmental Farm Plan in Eastern Canada: Producers Experience with EFP

EFP in Eastern Canada: Producers Experience with EFP (1) - Blaine Diamond ........ 23

EFP in Eastern Canada: Producers Experience with EFP (2) - Fraser McCallum .......... 27

EFP in Eastern Canada: Producers Experience with EFP (3) - Pauline Duivenvoorden ... 29

EFP in Eastern Canada: Producers Experience with EFP (4) - Mary Lou Garr .......... 31

Integrating Concepts in Whole Farm Planning

Integrating Concepts in Whole Farm Planning - Richard Coombe .................. 34

R & D Initiatives in Agriculture

R & D Initiatives in Agriculture - Les Haley ................................................. 36

Discussion Forum: Where to go from here?

Environmental Farm Planning: Where to go from here? - Jean-Louis Daigle ......... 38
EFP Workshop Steering Committee

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Introduction

The first place that the Environmental Farm Plan (EFP) was adopted in Canada was in Ontario about ten years ago. Ontario adapted and expanded upon the US "Farm*A*Syst" to make an EFP applicable to Ontario farms and environmental concerns. This EFP was in turn re-written and adapted to farming conditions in the Atlantic Canada provinces in the mid 1990's by the Atlantic Farmers Council in cooperation with the Eastern Canada Soil and Water Conservation Centre. A new EFP workbook was created for the Atlantic provinces at that time.

There has been considerable success in some provinces with the EFP as an "awareness" and "self-assessment" tool, and as a tool for the promotion of BMPs, but less in other provinces. The implementation phase (a.k.a. an "Action Plan") of the EFP has been easier to implement in some provinces due to the availability of technical and financial support.

Despite a low rate of adoption of the EFP in some provinces, there appears to be movement in several provincial jurisdictions towards using the existing provincial EFP initiatives as a starting point or part of broader agro-environmental sustainability programs or in cross-compliance with other programs. The EFP is generally well perceived by farmers as a voluntary, proactive, awareness and self-assessment tool.

The EFP has been underway in Ontario for ten years and in the Atlantic for almost six. It seemed timely to bring together the key farm organizations and stakeholders from across Canada to:

1) Share experience and evaluate the progress achieved in the EFP process.
2) Improve regional networking in agri-environmental protection.
3) Identify the need for EFP Workbook revisions including Greenhouse Gas (GHG) risk assessments, coordination mechanisms and implementation processes.

Interest and participation in the workshop was substantial. There were 152 participants present with people attending from all ten provinces. The majority in attendance were producers and professional staff from producer associations. The remainder were mostly from a cross section of provincial and federal government.
We wish to extend our thanks to the EFP Workshop Steering Committee, the volunteers, and the Eastern Canada Soil and Water Conservation Centre staff who organized and ran the workshop, and to Rachel Cassie and Caroline Pagé who were hired under the CCAF Agricultural Awareness Partnership Project to assist before and after the workshop.

The EFP workshop was funded as part of an on-going larger multi-agency project to develop awareness of climate change issues in agriculture. The workshop was in co-operation with the Annual General Meeting of the Soil Conservation Council of Canada, and was supported by the Climate Change Action Fund, Government of Canada.

It is the hope of the Eastern Canada Soil and Water Conservation Centre, as co-host of this workshop with the Soil Conservation Council of Canada, that the workshop has helped to promote the development of EFP activities, focused some light on future directions for the EFP in Canada and helped to further develop awareness of climate change issues in agriculture.

Jean-Louis Daigle, P. Eng. P. Ag.
Director, ECSWCC

Chairperson, EFP Workshop Steering Committee
Plenary session:

Environmental issues and agricultural challenges

Chairperson: Teresa Mellish, PE ID A F, Prince Edward Island

Teresa Mellish (at podium, left), Jim Bruce (at table, right)
Atlantic Soil and Water Conservation Challenges

Gordon Fairchild

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Originally from Montreal, Gordon received a B.Sc. (1980) and a M.Sc. (1983) in soil science from Macdonald College and completed his Ph.D. in soil fertility at the University of Guelph in 1989. Gordon was involved at Guelph with various precision agriculture, manure management, nitrogen management and soil fertility work. He moved to Nova Scotia in 1996 and then to New Brunswick in 1997. Since September 1997, Gordon has been the Soil Specialist at the Eastern Canada Soil and Water Conservation Centre where he has been principally involved with water quality, soil conservation, climate change, soil management and nutrient management issues. Gordon was a contributor and "chapter leader" in the recent AAFC water quality document "The Health of Our Water", a co-delegate on the Agri-Food Industry Discussion Table of the recent federal Climate Change Secretariat consultation process and continues to serve as a resource member on agricultural committees in the Atlantic region.

Agriculture in Atlantic Canada takes place in a humid, cool temperate climate. Much of it is on hilly, rolling land on soils that are naturally acid, leached, sandy or loamy in texture, with dense subsoils that impede drainage and are susceptible to erosion.

The major soil and water conservation challenges and issues in Atlantic Canada are soil erosion, soil degradation, non-point source pollution from fertilizer and pesticide use, water quality and the protection of water supplies, biodiversity and sometimes the quantity of water available for irrigation.

Atlantic agricultural soils are subject to excessive soil erosion by water, excessive runoff, soil compaction, loss of soil organic matter, soil degradation and consequent loss of productivity. The estimated on-farm annual losses from soil erosion and degradation in the Atlantic in 1985 were 40 million dollars.

While the adoption of soil and water conservation practices has been difficult due to market pressures, farming efficiency, land tenure and land availability issues, producers are becoming increasingly aware of the need to adopt agronomically, environmentally and economically sustainable production systems.

There have recently been increasing concerns raised over agricultural impacts on water quality. Events such as the tragedy in Walkerton have heightened public awareness of the need for the protection of water supplies.

The key issues of surface water contamination in agricultural regions are sediments, nutrients, pesticides and bacteria. Sediment enters surface waters primarily from soil erosion. The sediment can reduce aquatic habitat and carries with it nutrients, pesticides and bacteria bound to the sediment. The excess P in runoff may cause eutrophication of surface waters. Pesticide concentrations in surface waters rarely exceed drinking water guidelines, but sometimes aquatic guidelines.

The key issues of groundwater contamination in agricultural regions are nitrates and bacteria. Nitrate concentrations in groundwater can be elevated in some intensively agricultural areas.
Effective soil conservation technologies and strategies may now also have to take into account developing concerns for the potential impacts of global climate change. Serious potential environmental and economic impacts of climate change need to be examined and agricultural adaptation measures considered.

The tools for change and adaptation are things such as the Environmental Farm Plan, BMP development, Codes of Practice, Agri-Conservation Clubs, demonstration of the economic benefits of soil and water conservation and BMPs, precision agriculture, program incentives and support or cross compliance measures.

See the ECSWCC Web site for more information on related topics:

http://www.ccse-swcc.nb.ca

Link - Click here to go to full presentation
Institutional and Social Change in Management of the Environment by Agriculture

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John FitzGibbon B.A. McMaster, M.Sc. Wales, Ph.D. McGill is currently the Executive Director of the College Faculty of Environmental Design and Rural Development, University of Guelph. He teaches in the area of community-based resource management and environmental management, water resources planning and management and land use planning. He has taught at both the University of Saskatchewan and at the University of Guelph. His teaching is primarily at the post-graduate level. He is also involved in delivering short courses on resources management internationally this includes the delivery of courses in Malawi, Egypt, Mexico and Indonesia. John is chairman of the Steering Committee of the Ontario Farm Environment Coalition that has been involved in the development of environmental farm plans on 20,000 farms in Ontario. He is a member of the Rural Round Table on Land Use in Ontario, the Watershed Planning Technical Advisory Committee and the Natural Channel Design Technical Committee. He has been on the executive of the Canadian Water Resources Association for a number of years. At the present time his research program is focussed on community-based resources management in Southern Ontario, restructuring of rural municipalities in Ontario and the impacts of institutional changes on rural/agricultural volunteer organizations. Dr. FitzGibbon is also actively involved in research in Africa on watershed management. This research is being conducted in Malawi and focuses on development of strategies for dealing with drought.

In the past 10 years we have seen many changes impact on the institutions and organizations working to manage environmental impact of agriculture. Recent concerns related to the contamination of water by non-point source pollution, the development of large animal facilities and concerns over animal borne pathogens has focussed the attention of consumers and farmers alike. The issues related to protecting the quality of food, quality of life of the people producing the food and the quality of the environment in which the food is produced will be paramount to the farm community.

As a result there is a great tendency to regulate agriculture so as to protect the environment. A patchwork of municipal by-laws has grown up around nutrient management, large animal facilities and management of pesticides and fuels. Additional concerns over agricultural technology are also being expressed including potential for regulation of antibiotics, genetically modified crops and management of land drainage. New legislation such as Species at Risk (Federal) and The Agricultural Operations Standards Act (Ontario, proposed) promise to increase the level of government control in agriculture. This is a major shift of emphasis from one of stewardship to one of compulsion. It has many implications for the organizations that have made major contributions to improvement of environmental management in agriculture.

These institutional changes are superimposed upon the impact of climate change that will alter the frequency and magnitude of risk and may result in changes in the fundamental farming system that is employed on the farm. In this context the farm community will be asked both to mitigate these risks and to provide opportunities to alter the path of climate change through the implementation of alternative practices which sequester carbon and reduce greenhouse gasses (methane, etc...). The challenges to the farm community will be to both realize and adapt to the altered conditions in which farming takes place.
Farmers will also need to respond to the opportunities that improved farm practice in carbon sequestering offers for added farm income from carbon credits.

At the same time these agricultural organizations have seen significant changes including loss of government support and a shift to funding through projects not programs. In addition there has been increased involvement of many of the producer groups in environmental management which has resulted in competition for funding and lack of coordination of effort.

Based on an assessment of a number of organizations that are committed to management of agriculture and the environment a number of critical steps are required. It should be recognized by both government and the agricultural community that legislation and regulation cannot replace stewardship but should enhance it. Partnerships between governments at all levels and agricultural organizations will be the key to providing for programs in environmental management in agriculture. If governments expect agricultural organizations to develop and maintain programs they must be funded on a program basis.

There will be a need for a new approach to support agriculture if we are to produce high quality food in a high quality environment at competitive costs. Agricultural organizations will have to broaden their partnerships outside of the rural community to include the urban interests. Programs will have to be proactive and precautionary to prevent risk from becoming damage. Communications with the consumer will be essential to getting societal buy in.

The needed changes will require institutional change both on the part of government and agricultural organizations. These changes will also require new attitudes, behaviours and understanding. The challenges we face are significant and the changes will be rapid, however, the greatest challenge we face is to change ourselves.

Link - Click here to go to full presentation
Sources and Sinks of Greenhouse Gases in Agriculture

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Philippe received his B.Sc. in agronomy in 1981 and a Ph.D. in Plant Sciences in 1988 from Université Laval. For the last ten years, he has worked as a research scientist at Agriculture and AgriFood Canada, Sainte-Foy, Québec. His research work concentrating on gas emissions from agricultural sources, utilizing chambers and eddy covariance techniques has been published in 41 scientific articles and presented at many scientific meetings. He has worked on i) emissions of nitrous oxide, ammonia and methane associated with manure and nitrogen fertilizer use, and ii) the impact of agricultural practices on the decomposition of carbon in the soil and emissions of carbon dioxide at the soil surface.

The atmospheric composition has a critical impact on the conditions at the earth surface. In addition to intercepting harmful radiation and playing a role in degrading toxic substances, the atmosphere also absorbs radiation emitted by the earth, thereby increasing global temperature. In absence of this greenhouse effect, global temperature would be approximately 33°C cooler and actual life forms would likely disappear.

The atmospheric greenhouse effect is proportional to the concentration of the so-called “greenhouse gases”. The concentration of these gases (carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O)) has remained relatively constant during the recent millennia. As a result, global temperature has also varied little and life forms have adapted to their local climate. During the last 150 years, human activity has emitted large amounts of greenhouse gases and atmospheric models are predicting an increase in global temperature as the concentration of these gases continue to increase over time. This global warming will change environmental conditions and all living organisms will have to adapt.

On a global scale, the impacts of climate change are predicted to be negative and international efforts have been initiated to reduce the emissions of greenhouse gases. In 1997, Canada has signed the Kyoto protocol and has committed to reduce its GHG emissions in the 2008-2012 period to a rate equal to 94% of its emissions in 1990. All sectors of human activity including agriculture will need to contribute to the national efforts in order to reach this goal.

Agricultural activities are estimated to emit 10% of anthropogenic emissions in Canada. There are four main sources of emissions of greenhouse gases from agriculture in Canada: 1- CO₂ emissions from the decomposition of soil organic matter and combustion of fossil fuel for farming operations; 2- N₂O emissions from the transformation of nitrogen in soils; 3- CH₄ emissions from the enteric fermentation of ruminants, and 4- CH₄ and N₂O emissions from manure management. In my presentation, I will describe the processes involved in each agricultural source of greenhouse gases and review the options for reducing emissions on farms.

[Link - Click here to go to full presentation]
Soil Sinks and Agricultural Adaptation to Climate Change

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Jim Bruce is Canadian Policy representative of the Soil and Water Conservation Society and senior associate of Global Change Strategies International, Inc. He served as assistant deputy minister in Environment Canada for Environmental Management Services (Forestry, Wildlife, Water and Lands) and later the Atmospheric Environment Service, but his first job after graduation was forecasting the weather at the Moncton airport. After leaving Environment Canada in 1985, he worked for the World Meteorological Organization in Geneva, and more recently back home as a consultant on water, disaster mitigation and climate change. He is an officer of the Order of Canada and a fellow of the Royal Society.

A growing challenge to farm communities everywhere lies in responding effectively to climate change. The farmers of Atlantic Canada are no exception. The evidence is increasingly compelling that human activities are drastically changing the chemical composition of the atmosphere. These global increases in carbon dioxide, methane and nitrous oxide augment the natural greenhouse effect, trapping more energy near the ground, and warming the planet.

The mean temperature of the Northern Hemisphere for the past 1000 years shows slight declines up until about 1900 and strong warming of about 1°C since then. The graph also shows the range of the trends predicted for this century – with temperatures rising by another 1.5°C by 2100, according to the consensus of the Intergovernmental Panel on Climate Change (IPCC).

The uncertainty in this future rate of warming is strongly affected by uncertainties in future emissions. These are, in turn, affected by - economic development, population growth, energy use and rate of introduction of new energy technologies. If we proceed on our present path, - i.e. “business as usual”, we will see warming in the upper part of the range. Even implementation of the Kyoto Protocol by all industrialized countries would slow the warming by only a decade or two.

Temperature trends over the past 50 years have been more moderately positive in Atlantic Canada than in more western regions of the country. Indeed over Labrador and adjacent regions, the temperature trend has been downward. Over New Brunswick and Nova Scotia, warming has occurred in spring and summer but cooling in winter and fall. Projections of the future with Global Climate Models, with continuing greenhouse gas increases globally, suggests an annual warming of the order of 3°C in much of Atlantic land area, but continued cooling off Labrador due to ocean circulation and sea ice changes.

Precipitation has increased by about ½ of 1% of the mean precipitation per decade over the past 100 years and this small upward trend is projected to continue. However, the recorded experience of average annual flow of rivers in the region suggest that increased evaporation with higher spring and summer temperatures have overwhelmed the small precipitation increase, yielding declining mean annual flows in most rivers, especially since the mid 60s. Runoff in future is expected to continue to decline slightly. Spring breakup will continue to be earlier.
However, it is not so much these long-term changes in seasonal conditions that are important for the farm community to consider, but the changes in extreme events.

The Intergovernmental Panel on Climate Change carefully assessed both the past changes in frequency of extreme climatic events and the projections for the future of climate models. They rated their confidence in the assessments from 5* (stars) very high confidence to 1* (star) very low. So 4* means a high confidence in the event, and 3*, a medium confidence in observations or projections.

The IPCC Working Group II also identified the systems or sectors likely to be most affected. The results given in the Table indicate that for almost all types of events considered, impact on crops, either positive or negative, is likely to be important. So, higher temperature and fewer frost days are likely to be advantageous for farmers especially allowing earlier planting. But remember, the upward temperature trend in this region is likely to be less than in Central and Western Canada.

More frequent intense precipitation events have already been observed in this region especially in spring and early summer. For real deluges, >100 mm (or about 4”) per day, studies have shown a rapid increase in frequency of occurrence in northeastern U.S.A. near Atlantic Canada. The Canadian Climate models project a reduction of return period by half, of very heavy rains, in the latter half of this century. This will mean more flash flooding and land erosion.

This winter has seen frequent intense winter storms in this region. A number of climate models suggest that this will continue in a greenhouse forced world. Combined with these effects, a rising sea level is an important issue in Atlantic Canada. This region is rated among the most vulnerable in Canada to sea level rise, in part because in some areas, the land continues to subside by as much as 30 cm a century. Expansion of seawater as it warms, and melting of ice on land is expected to raise mean sea level 40 to 50 cm in this century – and continue beyond. This will result in shore erosion, more frequent flooding in storms with high tides, and salt water intrusion into fresh water aquifers. There could be serious problems for farms in Prince Edward Island, and for those along the Bay of Fundy and elsewhere still depending on aboiteaux.

Given this picture of changes in the past decades, and projections for the future, what responses can the farming community make? The potential responses fall into three categories:

i) how to adapt to the changes, now almost inevitable,

ii) how to reduce emissions of greenhouse gases from farm operations, and

iii) how to increase sinks of carbon in agricultural soils, thus lowering atmospheric C02 concentrations.

**Adaptation**

Farmers, over many years, have shown great skill in adapting to changing conditions. For farm operations in Atlantic Canada, a number of adaptation options should be considered. These are based on the most likely future scenarios that spring will likely be earlier and warmer, minimum night-time temperatures will increase more than daytime maxima, atmospheric C02 will continue to increase, precipitation totals, soil moisture and water supply will not change greatly, that sea level rise and severe storms will continue to increase, and that the frequency is increasing of high intensity rainfalls. Some of the adaptation measures that need to be considered include taking advantage of the “good news” aspects of climate change and preparing for the “bad news”. It will be noted that most of the latter options mostly provide one more urgent reason for emphasizing land and soil conservation practices.

**Reducing Emissions of Greenhouse Gases**

While the agricultural sector in Canada emits slightly less than 10% of Canada’s total of greenhouse gases, there are several “no regrets” options that farmers can apply that will pay off in reduced operating costs.
or other benefits, and at the same time reduce greenhouse gas emissions. Unlike other sectors, the gases involved are primarily methane (CH₄) from ruminants, etc. and nitrous oxides from fertilizer and manure. Carbon dioxide is mainly from tractors, farm machinery and heating of barns and households.

To reduce these greenhouse gas sources, farmers in several regions of Canada, have adopted positive measures. Nutrient management plans, using appropriate timing and amounts of manure and chemical fertilizers, has been estimated to be able to reduce fertilizer requirements by an average of 20% in Atlantic Canada. It should be noted that this also reduces nitrogen contamination of ground waters. Improved manure management can also reduce methane emissions. To reduce methane from ruminants, alternative feeding strategies and other means of improving performance efficiency of livestock animals are being further evaluated. Reduction of summer fallow can also help. Conservation tillage or zero till practices can reduce tractor fuel consumption and thus CO₂ emissions. On each farm this may seem to be a small contribution, but for the 250,000 producers in Canada it could really add up. Replacement of fossil fuels with bio-fuels from crops (e.g. ethanol, bio-diesel) can be a valuable contribution as well.

**Increase Soil Sinks of CO₂**

One of the most promising ways in which agriculture can contribute to reducing atmospheric CO₂ is through increasing carbon storage in soils. The means of achieving this include zero tillage, reduced summerfallow, converting cropland to shelterbelts or agroforestry. These measures, plus replacement of fossil fuels by bio-fuels (ethanol, bio-diesel, etc.) on a global basis would by 2050 serve to offset 10 - 20% of world fossil fuel emissions. It should be noted that conservation or zero tillage is both an adaptive measure to reduce soil erosion in heavier rains, and a mitigative measure to help sink more CO₂ into agricultural soils. More carbon in the soil also supports increased productivity.

**Conclusions**

It is evident that the farm community through environmental farm plans including nutrient management, reduced tillage, more shelterbelts, and other measures can contribute to reduction in the rates of climate change. At the same time these measures can also increase productivity, farm and soil sustainability, lower input costs, and provide for water quality improvements. Let us hope that wise governments will assist farmers with the initial capital costs of introducing these measures, and that many farmers will adopt such conservation practices.
THE ENVIRONMENTAL FARM PLAN AND OTHER TOOLS FOR CHANGE

Chairperson: Harold Rudy, Program Manager, OSCIA, Ontario

(left to right) Andrew Graham, Simon Marmen, Barry Cudmore
Ontario’s Experiences with Environmental Farm Planning

Andrew Graham

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Andrew has invested his twenty-year career in soil and water conservation and working with Ontario farmers. The most recent ten years have been with the Ontario Soil and Crop Improvement Association (OSCIA) from the provincial office in Guelph, currently as Stewardship Programs Coordinator. Recent projects address: Environmental Farm Plan (technical reviews, Award Contest, Incentive Program, promotion, evaluation, reporting, etc.), contributions to several Best Management Practices publications, nuisance wildlife, wildlife species at risk, Emergency Tubes, drinking water protection programs, and household septic systems. After graduating in 1980 from the University of Guelph, majoring in Resources Management, Andrew spent seven years as a Conservation Specialist with the Upper Thames River Conservation Authority, and the three following years in a similar extension position with the provincial agriculture ministry in the Oxford County office. Andrew resides in Woodstock with his wife and two teenage daughters.

Research findings confirm that the Ontario Environmental Farm Plan (EFP) is a comprehensive educational and motivational program that is leading to considerable voluntary actions by farmers—actions that are benefiting the environment, and that are not a detriment to production. The survey also indicates that Ontario’s Environmental Farm Plan (EFP) is influencing farmers’ sound environmental decisions.

The survey report was issued by the School of Rural Planning and Development, University of Guelph, in March 2000. It confirms that involvement in the EFP has increased awareness, education and commitment by farmers in addressing environmental concerns. The EFP is the main program of the Ontario Farm Environmental Coalition (OFEC) led by: Ontario Federation of Agriculture, Christian Farmers Federation of Ontario, Agricultural Groups Concerned About Resources and the Environment (AGCare), and the Ontario Farm Animal Council. EFP is delivered by the Ontario Soil and Crop Improvement Association (OSCIA) in partnership with the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). The program is federally funded through Agriculture and Agri-Food Canada’s Canadian Adaptation and Rural Development (CARD) fund, administered in Ontario by the Agricultural Adaptation Council.

One of the most significant findings reported by the survey is the EFP’s impact on farmers’ environmental stewardship: over 41% of the farmers surveyed reported that their participation in the EFP has prevented an environmental peril from occurring on their farm. That finding confirms the commitment of Ontario farmers to safeguard the environment, and the success of the EFP in influencing farmers’ daily management decisions.

Most respondents reported that the EFP has had a “strong” impact on their farm. They ranked soil resources, water resources, and family health and safety as the factors most improved by their participation in the program.

The EFP has generated an impressive level of follow-through from participants: more than half of the environmental actions indicated in the action plans of survey respondents have been completed or
started. Almost two-thirds of the respondents have undertaken more environmental actions than their action plans indicated; and over 90% of survey respondents are willing to attend follow-up workshops.

To date, nearly 20,000 farm families have voluntarily participated in the EFP since it was introduced in 1993. This represents between 35 and 40 percent of Ontario’s farmers. Farmers develop on-farm environmental action plans after completing risk assessments which address up to 23 different areas of environmental concern.

Following a peer review, action plans deemed appropriate are eligible for a $1,500 incentive. Typically, farmers invest triple the total grant through purchases of materials and services that go towards the claimed project(s). About 8600 farmers have claimed over $11 million EFP incentive dollars. The survey shows that Ontario farmers completing the peer review exercise have spent to date, about $112 million towards actions that are contributing to on-farm environmental improvements.

The data was obtained through interviews conducted by OSCIA Program Representatives with EFP participants. The survey involved a random stratified sample of 179 farmers across eight counties and regions.

OFEC hopes to secure funding that will support the continued evolution of EFP. Next steps include development of a Third Edition of the EFP Workbook, and introduction of follow-up workshops with an opportunity for farmers to engage in an Ontario-grown certified environmental management system.

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Quebec Agro-environmental Strategies

Simon Marmen

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Simon Marmen obtained his Bachelor’s degree in agronomy (1991) and his Master’s degree in soil conservation (1995) from Université Laval. His thesis title was « Valorisation des liisiers de porc par épandage en post-levée sur céréales de printemps ». He then worked as an eco-counsellor for the Club-conseil Pro-vert in Saguenay Lac Saint-Jean region from August 1993 to July 1997. In the green plan (Plan vert) of the Club-conseil, his duty was to offer counselling to 25 agricultural enterprises in order to develop and adjust sustainable management practices. From May 1997 until February 1998, he acted as Project coordinator for the Centre de développement d’agrobiologie located in Warwick. There, he participated in the writing of the guide for an environmental process for hog production « Guide pour une démarche agroenvironnementale en production porcine » for the Fédération des producteurs de porcs du Québec. Since April 1998, he has been the coordinator of the Entente CDAQ-MAPAQ which is financing the Agro-environmental Clubs located in Longueil. He supports the eco-counsellors in their work with the Agro-environmental Clubs members through the creation of formative activities adapted to their needs and in promoting knowledge, tools and information transfer and sharing. He is also the secretary of the Management Committee.

“Forum des décideurs”
Development 1998-2005

! double the value of exports ($4 billions)
! increase employment in agriculture and in the processing industry (15 000)
! farm investments and investments to the processing industry ($7.5 billions)
! grow environmental sustainability

Agro-environmental objective
Four elements in support

! professional support
! recognition and acknowledgement
! partnership
! concerted actions

Agro-environmental objective
Three targets

! environmental survey of Quebec farms
! implementation of sustainable agricultural practices
! recognition and certification
Target 1
Farm agro-environmental portrait

! Quebec farm survey
< partnership
< 17,915 agricultural producers
< action plans

Target 2
Environmentally sustainable agriculture

! Sustainable agricultural practices implementation on Quebec farms
< manure storage
< agro-environmental fertilizer plan
< soil conservation
< integrated pest management

Target 3
Recognition and valorization

! Best Management Practices
! Certification system

Agro-environmental objectives
Among three targets

! sustainable agricultural practices implementation on Quebec farms

The CDAQ-MAPAQ agreement towards funding of the Agro-environmental Advisory Clubs

How it works
A voluntary grouping of producers to promote the sustainable development of their operations by adopting environmentally friendly farming practices.

Agreement objective
The agreement should enable 4,000 farmers to use the advisory club formula and benefit from group advisory services on agriculture and environmental issues up to March 31, 2001.

Outcomes of the agreement

! take charge in agro-environmental issues
! support producers towards sustainable agricultural practices
Funding

- three-part funding ($15 millions) (CDAQ-MAPAQ-producers)
- maximum amount of $500 per producer
- start-up help for new clubs up to $8 000

Structure and organization

- Management Committee
  - 2 representatives of Advisory Clubs
  - 2 representatives of MAPAQ
  - 2 representatives of CDAQ (UPA)

- Coordination team
  - coordinator
  - development officer
  - secretary

- Advisory Clubs
  - 4 000 members
  - 150 advisors

Starting an Advisory Club

- require at least 20 members
- form a board of directors
- hire an advisor
- design an action plan
- request MAPAQ recognition

The objectives

- induce a change in attitude regarding sustainable development
- rationalize / minimize inputs
- optimize and maintain the farm’s resources
- control and minimize losses to the environment

The Advisory Club approach

- group support
- information, demonstration, training
- technology transfer and trial networks
- study visits and trips
- group analysis

- individual support
- on-farm diagnostics
- cultivation and fertilization plan
- studies of field crops, extension
- farm tests
Agro-environmental Advisory Clubs - Statistics

! 11.6 % of Quebec farms
! 20% of targeted farms
! 18% of animal units
! 18% of cultivated area
! 54 member - Advisory Clubs
! 26 member - Advisors

Agro-environmental Advisory Clubs - Conclusion

! voluntary basis
! neutral advising
! managed by farmers
! for members benefit

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The EFP and Other Tools for Change: Atlantic Canada Perspectives

Barry Cudmore

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Barry Cudmore was born in Charlottetown and graduated from UPEI with a B.Sc. in 1972. Barry is from a farm family and has been involved full time with the farm operation since 1975. Their farm includes a 200 sow (farrow to finish) operation, 400 acres of grains, 50 acres of hay and 55 acres of elite seed potatoes. Barry has been very actively involved in agricultural sustainability and in supporting family farm issues in PEI. He has had a leadership role on a number of committees including past-chair of the PEI Environmental Farm Plan Steering Committee; a committee member on the PEI Round Table on Resource Land Use and as a member of the National Agricultural and Environment Committee. Barry was an agricultural industry spokesperson on PEI for the Canadian Federation of Agriculture and a founding member of an international development group “Farmers Helping Farmers”. Since 1999 Barry has been a member of the board of directors of the Eastern Canada Soil and Water Conservation Centre. Barry was inducted into the Agricultural Hall of Fame in 1999.

The initial Environmental Farm Plan (EFP) material was based on the US program “Farm*A*Syst”. In Ontario this was adapted by the Ontario Farm Environmental Coalition (OFEC) to be the Ontario EFP. The Atlantic EFP process was producer driven and led by the Atlantic Farmer’s Council (AFC) with assistance from OFEC and the Eastern Canada Soil and Water Conservation Centre (ECSWCC).

Atlantic producers felt that they needed and wanted a EFP tool. They wanted to develop such a voluntary tool before public pressure mounted for legislation and they felt that producers must lead the effort. Consequently, AFC with the cooperation and permission of OFEC and the OSCIA, proceeded to transfer and adapt the Ontario EFP to the Atlantic.

In 1993-1994, the AFC struck an EFP Steering Committee and an EFP Workbook Committee. There was also a PEISCLA-led effort to evaluate the Ontario EFP in PEI. During 1994-1995, there was extensive discussion and consultation, workshops with help from OFEC, and consensus-building meetings on the Atlantic EFP Workbook content and environmental risk assessments schemes. The content of the Atlantic EFP Workbook was prepared by the AFC EFP Workbook Committee in cooperation with the ECSWCC. The AFC also published a support document “Our Green Agenda” in May of 1995. In October 1995, the AFC EFP Workbook Committee published the Atlantic EFP Workbook which was then to be tested on 5 selected farms in each province. Implementation of the Atlantic EFP began in 1996-1997.

The objectives of the AFC Atlantic EFP initiative were:

- that the farming community should take a leadership role in resource management and environmental issues
- that farmers should integrate resource management and environmental stewardship in everyday business decisions
to increase competitiveness of the agri-food industry through environmental risk assessment and promotion of BMPs

that the farming community should better position itself to take advantage of greener GATT and international trade rules

The Atlantic EFP is a producer-driven, proactive, voluntary, environmental risk assessment and awareness tool that assisting in identifying on-farm environmental risks and in implementing appropriate Best Management Practices (BMPs).

The EFP has been a substantial success in PEI. EFP initiatives are also underway in NB, NS and NF. Acceptance of the EFP requires a good, qualified and experienced EFP Workshop coordinator, promotion and recognition of the positive benefits of the program to producers, and significant partnership and support for the process.
ENVIRONMENTAL FARM PLAN IN EASTERN CANADA:

PRODUCERS EXPERIENCE WITH EFP

Chairperson: Eugene Legge, President, Newfoundland and Labrador Federation of Agriculture & SCC Director, Newfoundland

(at podium) Eugene Legge
(left to right at table) Mary Lou Garr, Pauline Duivenvoorden, Fraser McCallum, Blaine Diamond
EFP in Eastern Canada: Producers Experience with EFP (1)

Blaine Diamond

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Blaine Diamond was born and raised in Prince Edward Island. While growing up on the family farm in Winsloe, Queens County, he developed a strong desire to become a full time farmer upon graduation from high school. He and his brother Wayne farm with their father Russell in a partnership known as Diamondale Farms. Their farm has very much remained a family farm - his parents, now in their 70's, both farm full-time with them. The current operation has a yearly production of 220 acres of potatoes, 235 acres of cereals and 285 acres of forage crops. As you can tell, he is a strong believer in a minimum three-year crop rotation and given the ability would prefer a one in four year rotation. Besides the crop production mentioned, they raise approximately 170 head of beef cattle per year and are currently shipping for the Atlantic Tender Beef Classic market, through Co-op Atlantic. Blaine has been active in various farm organizations, having served two terms on the Potato Producers Association (1990-1993) (1998-2001), as well as a member of the Farm Centre Board of Directors (1990-1998, serving as Chair 1996-1998). Blaine is currently in the second year of a term as the Chair of the Prince Edward Island Environmental Farm Plan Steering Committee. Blaine was one the first 40 farmers in Prince Edward Island to complete an EFP. Today, Blaine will highlight some of the activities of the PEI Committee as well as outline from a producer's perspective, the impact that completing and implementing an EFP has had on him and his farm.

During the past few years, I have had the opportunity to represent the Potato Producers Association of Prince Edward Island on the steering committee for the Environmental Farm Plan Workshops.

The Environmental Farm Plan has been an initiative of agricultural organizations in PEI since 1993. Like many other jurisdictions, EFP’s were designed by farm groups to create awareness and provide education on agricultural practices and the environment. Through an action plan, producers are able to set realistic goals and recognize sensible and practical management solutions.

Throughout the year, our committee, through funding from the PEI ADAPT Council, has been able to offer workshops for producers. These producers complete a workbook that leads them through five major areas of consideration including:

- Farmstead and Homestead
- Livestock and Poultry Production
- Soil and Crop Practices
- Ecological Resource Areas, and
- Windbreaks, Hedgerows and Shelterbelts

Our committee serves to oversee the ongoing operations of the staff involved with the delivery of workshops, implementation of the initiative in terms of overall delivery, promotion and the status of progress being made (for example, number of farm operations completed, commodity specific data, etc.). Members of the Steering Committee include the PEI Federation of Agriculture, the PEI Soil and Crop Improvement Association, the PEI Cattlemen’s Association, the PEI Hog Commodity Marketing Board, the PEI Dairy Producers Association, the PEI Potato Producers Association, the Bedeque Bay
Environmental Management Association, the Southeast Environmental Association, Ducks Unlimited, the PEI Department of Agriculture and Forestry and the PEI Department of Technology and Environment. As you can see from the list of groups mentioned here, we are a diverse group voluntarily working together in order to secure a healthy environment.

I was specifically asked to highlight the personal experience on my farm of having an environmental farm plan completed. Time permitting, I would also like to add a few items pertaining to the EFP steering committee in PEI.

I was one of the first 40 producers to have completed an EFP in Prince Edward Island (this was in the spring of 1996). On behalf of my partners in my farming operation, I completed an action plan complete with time tables. I would like to take a few minutes and review some of the items we have been able to complete on the farm, how we were able to do each, as well as highlight the importance of completing each item.

The first item was the construction of a 15' x 18' pesticide storage - this was done in December 1996. I felt that this was the most important item to undertake at the time. While I feel that where we were storing our pesticides up until that point had minimal risk to the environment through leaching, it was an unsecured site that would have potential harmful impacts should a spill occur. As well, it was nearby cattle and hay. Our new storage was built on a solid slab of concrete with a sloped floor to the center of the building should a spill occur. The building is fork-lift accessible, ventilated and locked to keep unauthorized persons from entering. Funding was provided in part from the Green Plan.

The second item undertaken was the construction of drainage ditches and grassed waterways on two properties in the fall of 1999. These areas were very high on the priority list for our farm because of soil erosion risk. Funding was through the AERC program.

In the spring of 2000, we began to make improvements on another property which also had a high risk of soil erosion. When completed, this 150-acre parcel of property will have 106 acres strip cropped. This involved the construction of some diversion terraces and grassed waterways. Funding, once again, was in part from the AERC program. Work on this property will continue this year coming.

In July of 2000, we constructed an Alternate Water Filling Station at the home farm. This will enable us to extract water for use when spraying our crops. Until then, we were accessing water from a local stream. This was time consuming and caused problems because of sand contamination in the water. The station consists of a 2500 gallon storage tank inside of a 14' x 14' building. Keeping the water inside the building prevents the formation of algae in the tank. The storage tank is equipped with a sewage pump which pumps water (100 gals/ min) 10 ft in the air and then outside via a hingeable boom to either a sprayer or a water truck. Construction of this station reduces stream depletion, reduces time, and I think looks more environmentally friendly. Funding for a portion of this project was received from the PEI ADAPT Council.

I have mentioned the AERC program - this is the Agriculture and Environmental Resource Conservation Program designed to assist producers in making their farm operations more productive and sustainable, while achieving compliance with any new or existing environmental protection legislation. This program is an important component of the Prince Edward Island Food Strategy and is delivered by the Department of Agriculture and Forestry.

All owners of agricultural land are eligible to participate. Assistance comes in the form of on-farm incentives - farmers must have completed an EFP in order to participate. The project must involve an
activity identified in the EFP Action plan and priority issues must be addressed first. The demand for the program has been overwhelming. When originally announced, the program was to deliver assistance of $1 million per fiscal year for three years. Last week in checking with program administrator Patsy Reardon, the statistics are as follows: In year 1 alone, there were 84 completed projects for an allocation of more than $1.02 million. In year 2, up to Feb 28, 2001, more than $2.4 million has been allocated toward a total of 195 projects. To give you some idea of the types of projects approved this past year, there were 70 manure projects, 63 soil conservation, 10 hedgerows projects, 34 involving fencing and watering and 18 storage and structures projects. From a producer’s perspective, this program, which generally covers up to 66% of eligible costs, has been extremely beneficial in allowing us to implement our EFP action plans. Without the program, it would be very difficult for us to make these changes on our farming operations.

Throughout the year, our Workshop Co-ordinator, Will MacNeill, attends a numbers of agricultural events and has a booth which is used to promote EFP’s. Will tells me that as of March 22, we have a total of 803 farms on Prince Edward Island completing EFPs on PEI - this is approximately 40% of all farms on Prince Edward Island. The total agricultural acres under EFPs as of March 6th was 205,595 acres, which is approximately 35% of all agricultural land. So while we continue to make progress, as chair of the EFP Steering Committee, I think we have considerable work ahead of us but we are definitely moving in the right direction.

In the last couple of years, the committee in conjunction with the PEI Soil and Crop Improvement Association has developed an EFP promotional brochure. Funding for this was received from the Primary Resource Development Program (cost shared between ACOA and the Department of Agriculture and Forestry). One other item completed for promotion was to provide the first 40 farmers completing EFP’s with a two sided gate sign. This is approximately 2 x 2 ft; it states Environmental Farm Plan Initiative and underneath that reads “Farming for Tomorrow”. Farmers have a choice to have their farm name inserted below that.

In terms of what the benefits are to the producers in terms of completing and implementing an EFP, from my perspective, there are many. A few that I have jotted down include:

! The ability to, on a whole farm or whole property basis, assess the areas of greatest concern to me as a producer (or land owner); in this way, I am able to determine which areas are of the highest priority. And I am assured that the information I enter into the plan is personal and confidential.

! Upon completion of my plan, I have the ability to apply for funding to various other programs (for example, the Beef Development Program through the Atlantic Tender Beef Classic brand). As mentioned previously, having a farm plan completed now allows farmers to access funding for implementation of items such as manure storage, etc. through programs such as AERC.

! We are also able to assess potential problems on our farming operations and in doing so, perhaps determine whether the problem of one of natural risk or because of a management practice. Knowing this will help the producer with a potential solution.

! As a producer, through completion of items on my action plan, I can minimize the loss of productivity of my land resources. Soil is such a valuable resource - we don’t want to mismanage it through soil or wind erosion. As well, when combined with other management practices such as buffer zones and proper crop rotation we are able to further minimize the risk to the environment.
Through proper manure storage, we are better able to utilize this as a valuable resource and prevent possible surface water contamination.

Any measures I take to improve my soil quality and soil organic matter will make my farm more profitable. Minimizing soil erosion will definitely aid in ensuring that the soil quality is maintained.

Most of all, we as producers are becoming more proactive in ensuring the long-term sustainability of our farms and the environment we share with our families and neighbours. It’s becoming increasingly evident that we need to protect and preserve the environment for future generations. Best of all, it’s very much a win-win for all involved.

Just a small note about the EFP Steering Committee - recently we had the honor of being nominated along with six other individuals or organizations for the first Hon. Gilbert R. Clements Award for Excellence in Sustainable Agriculture. The award recognizes an enterprise which is economically viable, environmentally sound and socially responsible in the production and / or marketing of high quality food from a sustainable system.

If I can finish on one thought, it’s on the importance of partnerships in the move toward a healthy environment. As a producer, I can do my part - but as I have mentioned over the past few minutes, this has only been possible in part because of the financial assistance, incentives and leadership we have had from government - government, which has recognized and supported the move toward improved sustainability. But it is more than programs designed to help us complete our action plans. I hope in the long run, consumers and the general public will recognize and reward farmers who are making efforts to minimize environmental risks.

I have been very fortunate to have served as chair of the PEI EFP Steering Committee - I am proud of the committee’s efforts, our accomplishments to date, and thankful for the staff assigned to the delivery of EFP workshops. I feel strongly that we will continue to make progress in the future. As a producer, I feel that having completed a plan, enables me to look ahead at the changes I can make on my farm; knowing those changes will help in ensuring the sustainability of my farm and resources. Once again, thank you for the opportunity to participate on this panel.
EFP in Eastern Canada: Producers Experience with EFP (2)

Fraser McCallum

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Fraser, his wife Helen and their four children, farm in Tabusintac, NB. Both Fraser and Helen are graduates of NSAC. Strawberries and beef cattle are the main commodities along with feed grain and sunflowers. Irrigation is utilized with the strawberry operation and intensive pasture grazing is practised in the cow-calf operation.

We completed the Environmental Farm Plan in the winter of 1998. This process quickly brought home to us two important facts. The location of our livestock facilities at the time was not environmentally safe and expansion at this location was not feasible.

Our old buildings are not far from the nearby brook and the prevailing slope carried any runoff into the water. The soil at this location has high clay content, which compounded the problem. Our well was drilled by hand, had little casing and was located down slope from much of our manure storage. Property lines prevented us from moving further back from the brook. It was with the completed Action Plan and our own nagging conscience that we made the decision to relocate our livestock facilities to a more environmentally sustainable area.

In choosing the new location we took in many considerations derived from the EFP. Our first priority was recommended distance from any surface water. We also chose an area that had very little slope and would allow locating our well up hill from the barn at a safe distance. Site preparation began in August 1998. Grading was carried out to maximize diverting of clean water from barnyard. A contractor drilled a new well in excess of 100 feet from the nearest corral.

The new barn was constructed in the summer and fall of 1998. All water fountains installed were of the type that prevented backflow of water. Eavestrough was installed to divert clean water from yard area. The end result was a much-improved facility with lower environmental risk. We applied for funding under the Environmental Farm Plan Implementation Program and this allowed us to cover the costs of drilling a new well and site preparation.

By completing the EFP workbook we became more conscious of little things that we could do to reduce potential problems. Simple things such as anti-backflow devices on water taps, and respecting separation distances when spreading manure and applying pesticides became more clear and important. Inadequate fuel storage is of an immediate concern for us and we hope to correct this in 2001. Long term planning will include proper manure storage and a detailed Nutrient Management Plan.

Prior to completing the EFP we had undertaken various projects to improve our land stewardship. Cattle are fenced out of brooks and streams and water is supplied by either nose pumps or a gravity flow system. This has fit in well with our intensive grazing system and I feel has actually returned money to the farm with higher weaning weights. Within our pasture system we have installed a grassed waterway and improved cattle crossings.
We have had some positive feedback from the general public. Many associated the moving of livestock facilities away from the river as a positive move. When people make assumptions that our cattle wade in streams and pollute, we are quick to point out the steps we have taken and hopefully improve the perception of agriculture in general.

In summary, becoming involved with the EFP has allowed us to actually document potential risk areas and prioritize these according to their cost and urgency. Cost will continue to be an obstacle as very few of these actions will result in increased profit.
EFP in Eastern Canada: Producers Experience with EFP (3)

Pauline Duivenvoorden

Milk producer, Newfoundland
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Dr. Pauline Duivenvoorden, with her husband Phil Maclean, own and operate Headline Holsteins Ltd, a 220 cow dairy farm near Deer Lake, Newfoundland. Pauline graduated from the Ontario Veterinary College in 1986, and practised large animal veterinary medicine in Western Newfoundland for nine years before becoming fully involved in the dairy farm in 1995. She served on the Board of Directors of the Canadian Federation of Agriculture for several years, including its Environment Committee, and completed the Canadian Agricultural Lifetime Leadership Program in 1999.

As the media reminds us almost on a daily basis, environmental issues are becoming increasingly significant in how we live our lives. Whether its sunblock because of ozone depletion or a boil water order due to water supply contamination, the concerns are more real than ever. As citizens we are therefore more diligent - as agricultural producers we are accordingly more scrutinized.

Agriculture is a constantly evolving industry. Standing still is rarely an option for continued viability. Important and responsible decisions need to be made regularly regarding daily, seasonal and long-term operations. In order to make these decisions, we gather the necessary pieces of information. These essentially become tools of the trade.

While practicing veterinary medicine, the tools for me were primarily the farmer’s history of the animal and a general physical exam of the animal using a stethoscope and thermometer. The information gathered determined my next step. My view regarding the environmental farm plan is no different - it is a tool in combination with other tools to arrive at sound conclusions. A key component of the environmental farm plan is that it stimulates a critical analysis of areas which may have not been considered before. Is the duckpond growing an abundance of algae for any reason in particular? Is it really necessary to travel through the community at 5 AM? Do the crows overhead mean someone didn’t bury the deadstock properly? Has anyone really figured out how much that hot water leak is costing? Do our equipment operators fully understand our instructions or do we simply assume they do? I am reminded of a friend of mine in Manitoba who left pesticide application instructions with an employee while he was away for a few days. The employee ended up putting Round-Up on some not so round-up ready canola. An unnecessary and expensive error.

In order to provide you with a little insight regarding our own situation, I should offer a bit of history.

My husband Phil and I have been farming in Newfoundland since 1989. Initially, we leased a 70 cow tie stall operation while I continued to practice veterinary medicine. In 1995, we entered into a second leasing agreement, a 100 cow freestall barn, and then I too began dairy farming full-time. As it became financially feasible and we decided that Newfoundland would be our permanent home, we began planning the consolidation of our two herds to a permanent location. We purchased our first block of land in 1996, which was in a designated agricultural development zone. Recognizing the need to have an ample landbase for the size of operation we were contemplating, we purchased additional land in 1998 and now own 1000 acres, with 250 acres in production and another 250 planned for development. It was in 1996, that I participated in the Environmental Farm Plan initiative, organized by our Federation of Agriculture.
Upon learning of the workshop, I had absolutely no reservations about participating. I did not consider confidentiality an issue, nor was I concerned that the exercise would lead to imposed standards and regulations. This was simply an opportunity tailored to provide us with information and ideas specific to our individual situations - designed to stimulate thinking and assist in decision making during farm planning discussions.

Phil and I had the luxury of building on an undeveloped but ideal piece of agricultural ground several kilometers away from the nearest residential area. Along with that though came a totally unserviced location and the need to consider a whole farm planning approach. In planning our facility, we attempted to incorporate some best management practices directly, while maintaining a significant number of others on the shelf for future integration. Keep in mind that our current focus is on the farm layout and buildings primarily with attention to soil, crop, wildlife and waterway issues planned in the next few years.

Our manure storage is a concrete structure (150'D X 12'H) engineered to hold 240 days of manure for 300-head of mature dairy cows including allowance for wash centre water and natural precipitation. We are currently milking 185 cows, so there is still significant room for growth.

Farm water is supplied by 2 drilled wells providing 20 gallons of water per minute. The wells are located distant from any potential source of contamination and directly opposite to the manure storage. Water sampling occurs annually.

The milking system washwater is stored and then utilized through a high pressure hose to washdown the milking parlor and holding area. I’ve calculated that we use less than 10 litres of water per cow per day for cleaning. About 500 cows pass through this parlor, so thorough clean-up is critical in a food producing facility. Stretching the water usage is the challenge. In the milkroom, cold water is run through a plate cooler for more energy efficient milk cooling and improved milk quality. The resulting water, warmed up by passing over the warm milk, is stored and gravity fed to barn water troughs for livestock watering. During the winter months the cows noticeably drink more of the warmed water than the deep well water.

The barn’s lighting system was designed to maximize natural light sources by installing window panels along the length of all walls. Artificial lighting within the barn is supplied by 3 rows of sodium lights, with the centre row controlled by a timer. The windows, or solar panels as they are called within the industry, along with nineteen chimneys, provide thermostat-controlled natural ventilation. Eliminating the need of fans, this provides an efficient passive and noiseless ventilation system.

I won’t claim that we’ve done everything right or in fact scratched the surface of the numerous areas identified by the Environmental Farm Plan for consideration. And as yet, I actually don’t think we’re particularly good examples of environmental responsibility. But I do believe we’re quite typical. It must be emphasized that adopting the Environmental Farm Plan is a process. It is designed to influence our perceptions and therefore our decisions regarding environmental responsibility. And conveniently enough, many practices are not only common sense but also cost effective. For example, there would be little argument against routine soil sampling, regular equipment maintenance, strategic fertilizer application, livestock ration balancing, matching tractor horsepower with equipment requirements or diligent record keeping. These areas are undoubtedly twofold in their benefits - financial and environmental.

I’ll conclude by suggesting that responsible environmental stewardship is a reality we cannot ignore. Proaction now will ensure preparedness in the future.
Mary Lou Garr
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Mary Lou Garr has farmed in the Niagara region for 25 years. The family farm operation includes several hundred acres of field crops as well as juice grapes. Mary Lou is vice-chair of AGCare (Agricultural Groups Concerned about Resources and the Environment) and represents the Ontario Federation of Agriculture on the AGCare Board of Directors. She has been actively involved with both provincial and national committees dedicated to environmental issues in agriculture, and currently serves on the Canadian Federation of Agriculture’s Environment Committee. Mary Lou also acts as representative to the Environmental Farm Plan Working Group and Contract Management Advisory Committee and serves on the Advisory Committee for the “Healthy Futures for Ontario” program.

As farmers, most of us believe that we are conducting our agricultural operations in a responsible and environmentally sustainable manner using best management practices. Still, we are increasingly being subjected to public scrutiny. And that public, which is three generations removed from farming, is holding us accountable to levels never seen before. The idea that, as farmers, we might need to prove due diligence became focussed in Ontario in May 2000 as a result of “Walkerton”. That incident and the public inquiry that followed highlighted one of the real values in doing a farm environmental risk assessment.

Although we did an EFP on our farm well before the Walkerton incident, we were not among the earliest entrants to the farm assessment program. From a personal perspective, we had some barriers to overcome first – standard arguments that most farmers would probably understand. We didn’t have the time. We believed we were already environmentally sound. The incentive of $500 wasn’t significant enough to entice us, and the concept of someone examining our personal information in conducting a peer review was, frankly, unwelcome. However, as in all things, time has a way of changing attitudes. Eventually, EFP became an integral part of our farm operation, first as an educational tool then as a documented reality.

I believe the primary benefit of environmental farm planning is as an educational tool. Once the program was well underway in Ontario, the concept of risk assessment and the triggers for concern on the farm seeped into the psyche of farmers, even before they became formal participants in EFP. Coffee shop discussions, farm newspaper articles and EFP awards contests disseminated knowledge to a much broader audience than just the attendees at workshops. In our own case, increased awareness and environmental vigilance led us to dispense with those gravity-fed fuel tanks and build proper containment, create safe pesticide storage, examine our tillage practices along a municipal drain which we used to work close to, in order to make it ‘neater’, and replace a well that was located inside the barn and supplied both barn and house. Thirty-five years ago none of these actions was at the top of our priority list. Now, they’ve been addressed, and we realize that we are better prepared to stand up to any public scrutiny we may face, even if we were partially forced into it.

That second reality became clearer as the years went on. The need to provide societal assurance around our farming practices and the food we produce is readily apparent in an area such as ours, where non-farm land uses outnumber the production farms. In that atmosphere, the most important benefit of farm environmental assessment may well be the sign we put at the end of our farm driveway when we had
completed our EFP. However, we fully realize that doing an EFP is not a panacea. There is a clear link with other initiatives: HACCP, pesticide certification, nutrient management planning. All these, as components of a food safety and environmental assessment certification, could benefit producers by giving our products an identifiable edge in the marketplace. Or they might do no more than provide the public with the assurances they demand around the level of responsibility practised by those of us who feed them. In either case, I benefit.
INTEGRATING CONCEPTS IN WHOLE FARM PLANNING

Richard Coombe
Chairman of the Watershed Agricultural Council, New York, USA
Integrating Concepts in Whole Farm Planning

Richard Coombe

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Richard I. Coombe earned his Bachelor of Science degree in Agricultural Economics from Cornell University. He also holds a Master of Science degree in Economics from the State University of New York at New Paltz. Mr. Coombe is a beef and crop farmer, businessman, economist, speaker, and public servant. He continues to work on the farm that has been in his family for three generations. He was a professor at Sullivan County Community College and from 1982-92 was a member of the New York State Assembly. He has received a variety of awards including: the USEPA Region II Environmental Quality Award for protecting and enhancing environmental quality, the Sullivan County Soil and Water District's Conservation Farmer Award, and the Environmental Action Coalition Green Star Award. Dick is a member of the Watershed Protection Partnership Council and the USEPA National Drinking Water Advisory Council, Inc. He serves as the Chair of the Watershed Agricultural Council, Inc.

Outstanding water quality links farmers in the Catskill Mountains to more than nine million consumers of New York City's water supply. This link is manifested in the Watershed Agricultural Program, managed locally by watershed farmers with assistance from New York City. The Program promotes "whole farm planning". This holistic approach, which balances water quality protection and economic viability for farmers, is a reliable and cost-effective partnership for protecting water quality. The Watershed Agricultural Program reconciles environmental, economic and public health concerns based on scientific research and local leadership. It is endorsed by New York State, New York City Department of Environmental Protection, the US EPA, and the scientific/environmental community. Forestry, Easements, and Economic Development programs have been implemented to encourage agriculture and forestry as preferred land uses.

Link - Click here to go to full presentation
R & D INITIATIVES IN AGRICULTURE
R & D Initiatives in Agriculture

Les Haley

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Dr. Les Haley served as the vice-principal of Nova Scotia Agricultural College and later as the Nova Scotia Deputy Minister of Agriculture. He was the co-chair of the Agriculture and Agri-Food Discussion Table of the federal Climate Change Secretariat process discussing agricultural options for Canada’s response to the Kyoto Accord. He has acted as a senior advisor to Agriculture Canada on Climate Change issues and is currently the Chair of the Climate Change Funding Initiative in Agriculture Committee (CCFIA).

The Climate Change Funding Initiative in Agriculture (CCFIA) was announced in February 2000 by the federal Minister of Agriculture and Agri-Food Canada in response to two of the recommendations of the Agriculture and Agri-Food (AAF) Climate Change Table. The mandate of the AAF Table was to examine the options for reducing Canada’s Greenhouse Gas (GHG) emissions as part of the Government of Canada’s commitment to the Kyoto Accord. The AAF Table identified the need for public resources to support basic research activities for net GHG reduction particularly in the areas of crop nutrient management, livestock nutrient management, manure management, carbon sequestration and biofuels, and a need for refinement of national inventory, measurement and verification systems for net GHG emissions and to reflect improvements in technology. The CCFIA is a four-year, $4 million program funded by Agriculture and Agri-Food Canada through its Canadian Adaptation and Rural Development (CARD) II program. The Canadian Agri-Food Research Council (CARC) is responsible for managing the CCFIA for AAFC’s Environment Bureau. The presentation will discuss the program goals and the type and nature of projects funded and underway.

Link - Click here to go to full presentation
DISCUSSION FORUM:

WHERE TO GO FROM HERE?

Chairperson: Jean-Louis Daigle, ECSWCC Director, New Brunswick
Environmental Farm Planning: Where to go from here?
Opening Statement

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Jean-Louis Daigle was appointed Director of the Eastern Canada Soil and Water Conservation Centre in April 1998. He received his Bachelor’s Degree in Applied Sciences in Agricultural Engineering from Université Laval, Québec, in 1976. He quickly demonstrated his interests and conviction of the need for soil erosion control activities and for the protection of agricultural land at local, regional and national levels throughout his extension abilities and implementation of on-farm soil conservation systems. He is well-known to the agricultural community since he spent part of his professional career as an engineer and soil conservationist in Grand Falls, NB, from 1976 to 1991. Mr. Daigle was then named Head of the Agricultural Engineering Section, Land Resources Branch, with the NB Department of Agriculture and Rural Development. He was responsible for the direction and coordination of engineering services and programs related to land improvement, soil and water conservation and environmental stewardship. He has been very active among several national and international associations related to his area of expertise such as: the Soil and Water Conservation Society of America, the Canadian Society of Agricultural Engineering, Soil Conservation Canada, the Canadian Water Resources Association and the Canadian Irrigation and Drainage Association.

At this stage, the EFP Workshop participants have had “a first hand opportunity” to hear various experiences and the progress achieved in various jurisdictions specially in eastern Canada. It is now timely to address in an open forum format the fundamental question: Where to go from here? We have with us a number of resource speakers and panelists who have accepted voluntarily the challenge to participate actively in the discussions. Each panelist has been asked either to address a specific question or to share his or her experience with EFP delivery process challenges or matters of importance to producers or the community.

As you have heard today, levels of success with the EFP process have varied from province to province in the region due to a number of factors, either resource limitations, producer acceptance, new regulations, public pressure, lack of awareness or coordination mechanisms. To date, the EFP process has appeared to be highly regarded by the farming community leaders as an awareness and educational tool for producer-led proactive agricultural and environmental sustainability.

The ECSWCC feels that further consideration should be given to the EFP process to include GHG emission risk assessments to address climate change issues in agriculture. The EFP process could possibly provide the basic tool from a “Whole Farm Planning” approach building on EFP experiences already gained here and elsewhere. However, we believe that a consultation with industry stakeholders is required before such initiative could be fully undertaken. Therefore, this national EFP Workshop should serve as a basic reference to direct any future actions provincially, regionally or nationally. We want to ensure your suggestions, comments and/or concerns from today’s sessions will be recorded and considered.

The Centre’s staff and the EFP Workshop planning committee have identified 6 key fundamental questions that need to be addressed as follows:

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Eastern Canada Soil and Water Conservation Centre

Environmental Farm Planning Workshop
Moncton, NB, March 29-30-31, 2001
Need for coordinated approach?
Who leads the environmental agenda?
Educational mechanisms for change?
What decision making tools are needed?
Can we effectively integrate GHGs into EFP planning tools?
What are the research gaps or needs to better define practical BMPs?

Tools for change in environmental farm planning or whole farm planning can be presented from different perspectives, however they can be generally represented as the "EFP Tool Box." where we include the EFP Workbook, BMPs, IPM, Integrated Soil Conservation Plans, environmental guidelines and standards. The basic understanding and other key consideration in the discussions this afternoon will be that practical BMP solutions or EFP actions must be acceptable to producers and must be environmentally, economically and socially responsible.
Environmental Farm Planning - Need for a Co-ordinated Approach

Harold Rudy

Program Manager, Ontario Soil and Crop Improvement Association (OSCIA)
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Harold Rudy is Program Manager with the Ontario Soil and Crop Improvement Association (OSCIA) since 1987. He is working with county/district committees to deliver educational and financial incentive programs to farmers such as Land Stewardship, Permanent Cover and Environmental Farm Plan. OSCIA is a grass-roots farm organization formed in 1939 to specialize in field trials, farm tours and information days for new technology and research results. Harold also organized investigative studies including Farm Ground Water Study and Wildlife Impact on Agriculture. He works with many partnerships with the Ontario Ministry of Agriculture, Food and Rural Affairs, Agriculture and Agri-Food Canada plus other government agencies and farm organizations. Harold is currently enrolled part time (M. Sc.) in the School of Rural Planning and Development, University of Guelph. He obtained his B. Sc. (Agricultural Economic and Business) at University of Guelph. He has some work experience with vegetable canning and freezing, farm construction and family farm operation.

-----------------------------------------------

Why Co-ordination is Essential

There are many organizations that have a vested interest in environmental protection in agriculture. They have staff, finances and expertise to contribute. There is a lot of energy expended in communicating among these organizations.

In Ontario, there are at least three provincial Ministries and four federal departments (especially now that greenhouse gases are federal priorities) who are investing in environmental protection in agriculture. Add to that the local Conservation Authorities, Municipalities, Stewardship Councils, plus community and other interest groups, farmers are challenged to determine whose requirements should be followed.

Ontario has made great progress, lead by the Ontario Farm Environmental Coalition (Ontario Federation of Agriculture, Christian Farmers Federation of Ontario, Ontario Farm Animal Council and AG Care). Developing “Our Farm Environmental Agenda” has provided a focus for the industry and the Environmental Farm Plan (EFP) has been the tool for co-ordinated delivery.

Farmers Require a Clear and Consistent Message

There is one owner/manager who is the ultimate decision-maker for what happens on their property (subject to by-laws and regulations); therefore, environmental protection in agriculture becomes very site specific. There is nothing wrong with several groups providing resources (staff, technical resources and funding), but the message to the farmer should always be scientifically and technically correct. The frustration farmers have faced for years has been the shifting tide of opinion, conflicting messages or unrealistic expectations which have often resulted in the farmer unable or unwilling to do anything. The EFP provides a realistic focus for farmers to assess their farms, establish a long-term vision for their farms (Action Plan) for environmental protection and begin the lifelong process of implementation.

Clearly Defined Roles and Responsibilities

The abundance of resource information may be overwhelming for farmers. EFP brings it all together in a neat, organized package, which under the guidance of the Ontario Ministry of Agriculture, Food and
Rural Affairs establishes a clear framework to lead the agricultural industry. Farm leaders, working in cooperation with government and research, co-ordinate the effort. The University of Guelph provides a neutral Chair.

**Co-ordination of Resources to Take Action**

Resources need to be made available to farmers in several ways:

1. Technical information providing options for addressing environmental concerns.
2. Training to those who assist in the decision making.
3. A facilitated learning environment to encourage participation by farmers.
4. Government contributions are essential to assist farmers in their transition to more rigour that society demands and expects. Standards and expectations of society have been changing at a more rapid pace than the ability of the farmer to fund environmental improvement projects from market proceeds.

**Industry Vision**

Co-ordination involves a vision for Canada, a vision for each province and a vision for each farmer’s property over which they have management responsibility. EFP and the actions that farmers initiate provide the grass roots involvement which keep the many partners organized and focused.
Success and Challenges with the Nova Scotia Environmental Farm Plan Program

Shawn Smale

Nova Scotia Federation of Agriculture
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In January of 1999, Shawn was contracted by the Nova Scotia Federation of Agriculture to coordinate the delivery of the Nova Scotia Environmental Farm Plan Program. A graduate of NSAC (1990), he has been involved in a number of projects including completing environmental quality assessments in the Pictou Harbour watershed, coordinating a community based water quality monitoring program and in the development and implementation of an ISO 14001 Environmental Management System for an international forestry company.

The livelihood of farming depends directly on the conservation and protection of natural resources. Because of this relationship, farmers have historically demonstrated a unique respect for the environment. Farmers in Nova Scotia have expressed that environmental management is a priority for them in their business planning process. Environmental farm planning is a process through which farmers examine their operation from an environmental management perspective.

The Nova Scotia Federation of Agriculture first introduced the Environmental Farm Plan Program to the Nova Scotia agri-food industry in 1997. Although environmental issues were important, the program structure was quite complex and therefore resulted in limited participation by farmers.

A survey was conducted with those farmers that participated in the initial workshops. Based on input received, the structure was modified to make the process (i) simple, (ii) less time consuming, (iii) provide outside experience in assessing environmental risk (actual and potential), (iv) no cost to the farmer, and (v) confidential.

The structure was modified to include the following components:

- an initial farm visit;
- an on-farm environmental review;
- documentation of review findings;
- presentation of findings and environmental action plan; and
- a follow up visit.

A total of 28 farms have participated in the Nova Scotia Environmental Farm Plan Program to date. Farmers from different areas of the province and various commodity groups have participated. We are continuing to promote the program to Nova Scotia farms. We are planning to complete at least fifty on-farm environmental reviews in the next year.
EFP Workshop Discussion Panel

“Where to go from here?”

Summary notes
EFP Workshop Discussion Panel  
“Where to go from here?”

Summary notes

Panel:
Les Haley, Jim Bruce, Mary Lou Garr, Barry Cudmore, Eugene Legge, Shawn Smale, Fraser McCallum

Summary of introductory comments from panelists:

Mary Lou Garr:

! need to do analysis with best info available
! need to do EFP, EFP a key tool to bring research to farmers
! need technology transfer and supporting research
! how do you transfer technology and information to the farm? Is the EFP the tool?
< need information on emerging issues such as:
   T biotechnology
   T GMOs
   T GHGs & climate change
   T nutrient management
   T etc
! farmers should review EFP process, but now no funding
! need a national process for the EFP
! need money to support EFP, core funding

Barry Cudmore:

! need a win-win approach
! needs more than cooperation, it requires collaboration (farming community, government and environmental groups may not be that far apart)
! need money/funding to support process
! society supports farmers and will help farmers reach their goal?
! riparian zones, a component of EFP and sustainable agriculture in PEI
! if the cost to producers were as low as in NY, farmers would consider actions

Eugene Legge:

! farmers in NF feel that the EFP is worthwhile
! feel that a proactive, not reactive approach is required
! funding to support the process is a key to success
! there is too much regulation, we need more “carrots” than “sticks” to have more people “buy-in”
Fraser McCallum:

- the NB Agricultural Coalition was a good example of cooperation
- cooperation is required within agriculture for a farmer-driven environmental initiative

Jim Bruce:

- if Kyoto is dead, then is C-sequestration worthwhile? However, soil sinks (10-15% emission reduction targets) and biofuel (10-20% off fossil fuel) together are too large to ignore
- GEMCO/TRANSALTA effort already active
  - already some compensation for farmers in NW USA
  - government driver could be trading efforts, and/or stewardship co-benefits
- need to demonstrate effectiveness of EFP, both on-farm and off-farm
- need improved research to know impacts downstream and figure out ways to measure it

Les Haley:

- agricultural BMPs are positive and also reduce GHG emissions
  - co-benefits rationalization
- can reduce GHGs and make money (better management, C-trading, etc.)
  - biofuel replacing fossil fuel
  - BMPs can lead to maximizing plant growth, to saving money, increasing efficiency and GHG emission reductions
- need a whole farm approach to GHG emissions
  - GHGs part of a series of environmental issues
  - research needed
  - cannot do everything at the same time
- involvement of farmers in decisions responsible for funding of climate change research is imperative

**Summary of “common threads” of the general discussion:**

- need for technology transfer and supporting research
- need for communications / networking / cooperation / collaboration
- a national approach / mechanism required
- funding required
- coordination gaps (NAEC gone, technology transfer, etc.)
- government role vs producer role
- need for updates and follow-ups to EFP workbook and process to add new agri-environmental challenges, including GHGs
Much of the discussion focussed on three subjects:

**Need for coordination**

- It was emphasized that there is a need for a coordinated approach at a national level. Some provinces are ahead of others in development of an EFP process, but there is significant interest in all provinces in agriculture in developing a voluntary process that will avoid restrictive legislation. We should therefore communicate and share information before there is legislation.

- It was suggested quite strongly that NAEC was an excellent advisory mechanism that would have been the logical place to have this kind of networking and communication, if it still existed. Consequently, other means do need to be established.

- It was recognized that a challenging issue for national coordination is that we are a big country where all the provinces are different, and there are regional differences. Those different types of agriculture at different scales mean that we are not all going at the same speed nor do we all have exactly the same issues to address.

- It was also suggested that maybe the task should be done at the provincial or regional (ie: Atlantic or Prairie) level.

- Cooperation should include all the interested stakeholders from different perspectives; government, farm community, environmental groups.

**Need for Resources**

- The resources available (funding) is a big factor for implementing EFP Action Plans. If it was inexpensive, farmers would certainly consider more BMP implementation. There is a need for investment dollars from the government and society; without the support of society the farmers won’t reach their goal or be able to compete.

- It is important to demonstrate the effectiveness and benefits of the EFP off-farm. BMPs could be cost efficient and also help reduce GHGs but the off-farm economic impacts need to be clearly demonstrated. We need to educate people and convince them that food quality is important. We have to keep in mind that farmers represent only 2% of the population. Will the other 98% decide to invest or not.

- Money is required for the EFP. Society won’t pay more for food. Society will pay for bottled water, flowers, donuts, coffee, landscaping, hockey programs, housing, etc. There is money out there but we have to work together to educate people ourselves, and convince them of the need and importance of quality food and food security.

< We have to work as a national group.
Without education efforts, other efforts won't work because agriculture is too small (2% of population)

Need to go more “basic” for the other 98% non-farmers in the population. There is a need for education efforts.

However, education efforts shouldn’t be carried by farmers alone? Costs?

R & D, Education and science

- There is a need for a better communication link between scientists and farmers and for a mechanism for farmers to provide input into research. Both have their own way of doing and seeing things: farmers are observers, scientist are explainers; how can we bring them together?

- The scientific research concerning emerging issues and new technologies should be communicated to farmers. The expertise is there but we need more technology transfer and adaptation at the farm gate.

- Moreover, it was emphasized that farmers should be included in research priority setting in programs; that this could be a good way to disseminate the scientific information and raise awareness of emerging issues.

- Information could also be disseminated through education activities. The EFP and the associated workshops are a key awareness tool.

- Emerging issues like GHGs and others environmental issues should therefore be addressed within the EFP process as it is a good tool to deal with this kind of issue from a “Whole Farm Planning” perspective. It won’t fix everything but raise awareness of issues and support the development of action.

- There is a need for a follow-up and review mechanism for the EFPs after they are put in place to adjust / adapt them to new realities and issues. (nb. Once every five years was suggested)
EFP Working Group Session

Saturday March 31

Chairpersons: Nicole Allain & Jérôme Damboise, New Brunswick
The objective of this informal session was to provide a general overview of what is involved in the Environmental Farm Plan process. To initiate discussions, the workshop approach used in New Brunswick was demonstrated using the Atlantic EFP Workbook. Another objective of this session was to demonstrate how a group of producers in New Brunswick are effectively using the EFP process as the basic tool to protect water quality and the environment in their community. Nineteen participants attended the Anglophone session and there were seven at the Francophone session. The conservation club concept as a means to implement Environmental Farm Plans and Nutrient Management Plans initiated a lot of positive comments and discussion from the participants.
POLICY SESSION ON CLIMATE CHANGE AND ENVIRONMENTAL FARM PLANNING

Chairperson: Glen Haas, P.Ag., SCC Executive Director, Saskatchewan

(at podium) Glen Haas,
(left to right at table) Ed Trychniewicz, Alrick Huebener, Bruce Beattie, David Coburn
Climate Change Policy: What Does Society Expect of the Producer?

Ed Tyrchniewicz

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Ed Tyrchniewicz was born in Manitoba in 1941. In 1962, he received his B.S.A. (Honours) degree from the University of Manitoba. He completed his M.Sc. degree in 1963 and his Ph.D. in 1967, majoring in Agricultural Economics. After working at Kansas State University for a year, he joined the staff of the Department of Agricultural Economics at the University of Manitoba in 1967. He was appointed Head of the Department of Agricultural Economics at the University of Manitoba in 1977, and served in that capacity until 1984. In 1988, he was appointed Dean of the Faculty of Agriculture and Forestry at the University of Alberta. In 1993, he was appointed Dean of the Faculty of Agriculture, Forestry, and Home Economics at the University of Alberta, and served in that position until 1996. He was appointed a Senior Fellow at the International Institute for Sustainable Development in Winnipeg in 1996 - a position he held until December 1999. He served as a member of the National Climate Change Secretariat’s Agriculture and Agri-Food Table on Climate Change during 1998-99, and a member of the Integrative Table since 1999. He was Vice-Chair of the Board of Directors of the Great Plains Institute for Sustainable Development located in Minneapolis until March 2000. He is a member of the Board of Manitoba Habitat Heritage Corporation and a member of the Prairie Habitat Joint Venture’s Land Use Committee. He is currently an Adjunct Professor in the Dept. of Agricultural Economics at the University of Manitoba, where among other things he is teaching a course in world agriculture.

In general, the growing perception of society is that agriculture is the source of environmental problems, especially related to water and air quality. Accordingly, there is little likelihood that agriculture can expect to “get off easy” in the discussions on adjusting to climate change. The challenges to agriculture are complicated by a number of factors including:

- increased climate variability has implications for risk management,
- the agricultural sector generally operates in global markets with narrow margins and limited opportunities to pass costs on to customers, and
- policy focus is on dealing with solutions to income problems rather than longer term solutions

Meeting the challenges of climate change requires a communication strategy that better explains the issues facing agriculture. Progress can be made by thinking and acting in the context of sustainable agriculture - economic viability, environmental stewardship, and social awareness. Some practical “win-win-win” solutions include:

- conservation tillage,
- manure management,
- shelterbelts and permanent cover programs, and
- promotion of carbon sinks.

Agriculture has a history of adapting to changes in technology, markets, and policies. It can also adapt to climate change with appropriate incentives and institutional changes.

[Link - Click here to go to full presentation]
Potential Impacts at the Farm Gate

Bruce Beattie

Milk producer and Chair of the Alberta Environmentally Sustainable Council (AESA)
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Bruce Beattie owns and manages West Hawk Holsteins near Sundre, Alberta. He is a board member and past chairman of Alberta Milk Producers, a director of Dairy Farmers of Canada, and represents Alberta Milk Producers at Canadian Milk Supply Management and Western Milk Pool Co-ordinating Committees. He is a member of Wild Rose Agricultural Producers and was a delegate to Agri-Foods International Co-op. He is chairman of the Alberta Environmentally Sustainable Agriculture (AESA) Council responsible for developing Climate Change Central, which is expected to be the major player in developing and implementing Alberta's greenhouse gas strategy. As part of its mandate, AESA is required “to encourage the industry to proactively address environmental issues”. Bruce is a member of the Alberta TAKING CHARGE team and he is a graduate of the Canadian Agriculture Lifetime Leadership Program (CALL).

The Alberta Environmentally Sustainable Council (AESA) has 29 members appointed by the minister representing the diversity of the agriculture industry from cropping, livestock, processing, environmental groups and government.

The mandate of AESA is to identify environmental challenges and opportunities facing the industry, to encourage a proactive approach by industry to address these challenges, to direct the AESA program and to advise the minister on agro-environmental issues. The goal of the AESA program is to facilitate the adoption of management practices by farmers, ranchers and processors which reduce the environmental impacts of production systems.

The AESA program has four program areas: resource monitoring (including soil quality and water quality); processing based; farm based; and emerging issues. Priority management issues for AESA are nutrient management, grazing and riparian management, integrated crop management systems and rotations, responsible pest management and pesticide use, intensive livestock operations and GHG awareness. AESA Council initiatives include the Environmental Chair at the University of Alberta, an Environmental Science Plan, Communications, Climate Change and Environmental Farm Plans.

Why should agriculture care about Climate Change? Agriculture is target, we are 10-12% of total Canadian emissions and Alberta represents 30% of that. Growth in the livestock and value-added sectors may be limited by climate change issues. The impact of climate change is the subject of speculation (disease, drought, extremes of weather), but farming is a long term investment. “In reality, agriculture is vulnerable to even current variability in climate” (Smit, Harvey and Smithers, 2000).

Possible negative impacts on the farm include increased input costs due to regulation, disease, insects and weather related problems. Possible positive impacts on the farm include incentive for increased efficiencies and conservation practices, improved soil quality and fertility, improved water resource management, increased investment in agriculture, and recognition of environmental stewardship.

Agriculture can help to mitigate climate change through reducing GHG emissions by using nutrient management and feeding strategies, through carbon sequestration in shelterbelts and other farming practices, and through the use of riparian management. Alberta's response has been the Summit on
Climate Change; the formation of Climate Change Central, a clearing house for information on climate change issues, recognition of programs and support of projects; and AESA, which is involved with workshops, education, technical assistance and provision of expertise. Adaptation requirements in agriculture may include: financial risk management, including crop insurance, future contracts, etc.; crop and livestock diseases; water management; and new technologies.

The EFP is being examined in Alberta now because of an expanding livestock industry, growing urban centres, urban vs rural perceptions, environmental responsibility, accountability and an ag-summit process. Farmers are interested in the EFP for reducing neighbourhood concerns, an increased social acceptance of farming practices, developing confidence in the industry, confidence in the food supply, an opportunity for expansion and trade and WTO reasons. AESA is involved because of its broad representation, and a focus on reduced impacts in the environment, whole farm approach, and a recognition for being proactive. At AESA, the EFP Task team is led by John Kolk, a council member and industry leader. There is a specific budget for the EFP, with consultations, partnerships and education.

[Link - Click here to go to full presentation]
Environmental Risk Management Systems

David Coburn

Eggs and apple producer, New Brunswick
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David Coburn is a resident of Keswick, New Brunswick. He is manager of W. B. Coburn & Sons, a sixth-generation family farm which is now a 25,000 egg layer operation. They have a computerized feed mill for the layer operation, make apple cider which is distributed throughout Atlantic Canada, grow organic peppers in a greenhouse and have invested in an in-vessel composter system to compost their farm organic wastes. A past-president of the New Brunswick Federation of Agriculture, he received the Outstanding Young Farmers of Atlantic Canada Award in 1995, was the first runner-up for the Canadian Healthy Environment Award (corporate category) in 1996 and was named an Honorary Associate of the Nova Scotia Agriculture College in 1999. He is on the National Farm Products Council, was a member of the National Agricultural Environment Committee (NAEC) and was a past chair of the New Brunswick Agricultural Advisory Committee on the Environment.

Over the past 15-20 years we have seen the development of codes of practice, best management practices, good management practices, HACCP based plans, HACCP plans, Environmental Farm Plans, Conservation Plans and other environmental programs.

HACCP has been examined as a sanitary and phytosanitary measures, particularly in moving the eggs from barns to grading stations. Predictions are that the egg industry will be fully HACCP in a few years.

It is advocated that all manure should be composted. This is a good idea, but runs afoul of inconsistencies and incompatibilities with other standards, such as the NB Apple Cider Code of Practice, which states that no compost may be used in orchards. We have also seen protocols that have been handed down by our customers. One example is the Macdonalds directive on animal welfare. Animal welfare issues must now be included with the environmental and food safety issues. These are all linked together. All of these plans are at varying degrees of implementation by commodity and by province across this country.

We have seen an increase in demand over the past few years for organic food. It is perceived that it is safer because it is grown without chemicals. This is a plus from an environmental perspective, but is it from a food safety perspective? We have seen integrated pest management, zero till, minimum till, and no till. Confused? I know I am and I am a producer. What about the consumers? The people who buy our products?

The agriculture industry is very concerned about low commodity prices, subsidies and trade agreements. These are very legitimate concerns, but the environmental and food safety issues are just as important, if not more so.

How do we address these concerns?

We have to look at an environmental management system that can combine the environment with food safety. Here in New Brunswick it has been proposed to the agriculture industry that we adopt ISO 14001. We realize that this could take 10 years to implement and to be successful we would need buy-in from everyone. Also, we are aware that the conclusion of the report prepared for the Ontario Farm
Environmental Coalition and the Ontario Federation of Agriculture was that this should not be pursued at this time. That report was written in 1998. A lot has happened since with food safety and environmental issues.

I am not saying that ISO 14000 has all the answers. What I am saying is that we need a National Environmental Management System that will address environmental, food safety and animal welfare issues. This EMS must address these issues and maintain our economic viability. We must also be able to maintain the mixed commodity farms. Mixed commodity farming is one traditional safety net that we can rely on.

We have to look at on-farm food processing and make sure that it fits into our diversified operations. At the end of the day, we may have to sell our industry to the consumers of the country, proving to them that we do produce food in a safe, environmentally friendly way.
Policy Session on Climate Change and Environmental Farm Planning

Summary of Discussion Session

Climate change is more than an agricultural issue. There are several government infrastructures involved. The PFRA is bringing more awareness at the grass-roots level, but is specific to the western region and specific to agriculture. It is a major infrastructure involved in climate change awareness, but not the only infrastructure involved (ie: energy? NRCAN?)

Concerns were expressed regarding the effects of selling carbon credits. There is no official emission trading system. We are a long way yet from market emissions trading. Credits may be created in several different fashions. Is the reason for promoting such a system global climate change or soil conservation? There were concerns that this applies more to other sectors than to agriculture, eg: the lobby from petroleum. It is the big companies that want this. Carbon emissions are not large in agriculture.

If you want profits, you take risks. If you reduce tillage, you may reduce yields. What is the impact on water quality? Policy people should be careful when they say they know the BMPs for climate change. What should be done in research to help farmers?

There are different issues in different parts of Canada. BMPs have to be regionalized. They should not come from Ottawa. Recommendations should be from area.

Setting of research priorities should be a decision of scientists, farm organizations and committees, industry and science community. Funding initiatives are a good way to set priorities.

In Alberta BMPs are referred to as Beneficial Management Practices, not Best. This might be better?

It is a challenge to know/set priorities. There is no good mechanism in Canada to set priorities. With limited resources, we have to select where we invest.

There is a need for more basic research in all fields. The decisions have to come from science.

Farmers are asked to match research investment dollars. This is difficult if the government does not invest in agriculture. Industry should also be included.

If the target is not zero emissions, but emissions reductions, then there should be no fear; it is feasible. We have GHG emissions like other industries, but we have also have removal, which is unique to our industry.

Should we get credit for sending grain (carbon product) or transforming carbon? Society will have to decide where to allocate resources. We should keep in mind the full carbon cycle to approach this. Whole carbon cycle accounting in agriculture can include removal and displacement of carbon. For example, providing “fuel” for humans or producing strawboard. However, there are a lot of serious accounting issues (including what counts as true carbon sequestration or removal from the atmosphere). Society will have to decide what it wants from different sectors. There is an education challenge.
The carbon cycle is important, but how do you convince the US and others that are not prepared (to participate or examine the issue and accounting). That is the challenge.

We should get credits for production efficiency as well. This is a complex issue, international in scope. We need more people involved.

The EFP is a tool. BMPs are being put in place. How can we find a long-term solution with a design planned for 3 years? We need to find/demonstrate the economics of these practices. Should there be sharing of the full costs? How do we get the message out?

recommendation: bottom line of farms should be profit.

should not discount the EFP from the farmer’s perspective. They are willing to do it, if they are provided with the tools.

How do we marry long-term policy with the short-term? There have always been budget restrictions on the past. You can be nervous, or see the opportunity presented. We should be part of the discussion.

It is up to Canada to look to the USA. It is not that detailed or difficult. All of the agricultural programs have to be taken out, reviewed or reassessed and worked on in partnership with the provinces.

ISO 14000. Given the complexity of it, can we include GHG management?

It is not the complete answer. We shouldn’t put all our eggs in one basket

We must look at a long-term vision for a complicated problem.

This should not be done without the support of the government.

The dairy industry is going through it (ISO 14000?), but with the costs, who will buy into it? Voluntary participation?

Should Canada go ahead with Kyoto? (ie: first? alone?).

We did (ie: lost, negotiated away) our subsidy in WTO . We should not be the first again with GHG emission reductions and Kyoto.

We should not go into this. It is an issue we have to deal with, but it should not have an economic impact on us.

We need to be prepared.

There are big questions from other industries regarding Kyoto.

There is a lot of uncertainty

We should do stuff that makes sense and can have co-benefits, not necessarily costly solutions
List of participants at the EFP Workshop

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<thead>
<tr>
<th>Name</th>
<th>Address</th>
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<tbody>
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## List of participants at the EFP Workshop

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| ** Total participants & speakers ** | ** 152 ** |
APPENDICES
Appendix 1

Where to go from here?

Comments from questionnaire circulated after panel discussion (25 responses)

Please indicate your occupation or affiliation:

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1. Is there a need for a coordinated approach?

*The consensus was yes. Specific comments were:*

- EFP will only be well recognized if it follows a standardized format.
- Need much better co-operation between all the involved agencies, ministries, etc.
- Yes - as long as local grassroots approach is maintained.
- Need another National Structure such as the National Ag. Environ. Comm. to link farmers. Need for unity and co-operation provincially.
- Farmers must back the agenda on environmental agriculture.
- Re-inventing the ‘wheel’ in each province isn’t useful/helpful/sustainable
- It must be a coordinated approach with government, led by the farm community.
- University research should be transferred and incorporated with policy holders, gov. organizations and farmers into EFP.
- Absolument, autrement beaucoup d’énergie sera perdue en duplications.
- Coordonnée oui mais pas au niveau national. Devrait tenir compte des particularités et des compétences des provinces.
- Absolutely, both nationally, regionally, within each watershed and within each community group.

2. Who leads the environmental agenda?

*The consensus seemed to be that farmers should lead the agenda. Specific comments were:*

- Best to be led by producers (with support, tech and financial from govt). Specific sections of plan should be developed by commodity groups.
- The provinces - with a national flare. Attempt to keep the program in some similarity across Canada.
- Farmers in cooperation with govt., non-govt, community
- Farm groups should, with govt groups in collaboration with community
- For agriculture, farmers with consultation with public, environmental groups and government
Farm groups need to lead the agriculture environmental agenda or someone else will set the agenda for you in a crisis situation.

Les groupes de producteurs en collaboration avec les intervenants (stakeholders) du milieu agricole.

Un comité national avec un de membre de chaque province.

A joint effort between producers, consumers and government.

SCC or others but must have majority input and delivery.

Collaboration producteurs - ministres provinciaux.

The Alberta AESA model looks like a very effective approach and would be great to see developed within each Atlantic province.

Producers through a National Group with input from many stakeholders.

3. What are the educational mechanisms for change?

The EFP and BMPs were highlighted. Specific suggestions were:

All ag. students should be required to be acquainted with EFP. All financial implements could require cross-compliance with EFP.

Awareness first - peer support.

EFP education in schools, partnerships with all stakeholders.

demonstration farm tours, sustainability centers, EFPs, multi stakeholder conferences, workshops; non-farmer info sessions, outreach by community-based agri-environmental groups.

Financial incentives / disincentives.

Research on farm, demonstration sites, coordinated provincial, regional, national info distribution links, et Internet.

Since provincial governments have severely reduced extension services, the federal government should provide $ to hire Canada-wide extension workers.

Better management practices and environmental farm plans.

Incorporate the findings of importance into university curriculae.

Les plans agro-environnementaux, les magazines agricoles, les séances d’information.

Use the producer groups in each province as the main tech transfer mechanism. They will need core funding to pay for this service and this funding needs to come primarily from federal dollars.

Ag producer groups., producers to producers.

Besoin de continuité.

Through ALL stakeholders.

EFPs that will provide that opportunity.

4. What decision making tools are needed?

Research, technology transfer and expertise were highlighted. Specific suggestions were:

Funding availability! Public pressure.

Risk assessment, priority assessment tool.

Need access to expertise, research science, tech support, training, need commitment to long-term data and analysis, consistent funding to help bridge gap between farming and non-farming community.
Understanding the solutions and options to address the issues

Consistent cost of production to encourage farmer participation at meetings and commitment of time

Research and trials on farms

Research, transfert de technologie, sessions d’entraînement

Je pense que le plan de ferme est bon mais avec les ajouts de clubs de conservation tel qu’au Québec, il y a beaucoup de potentiel si le financement est là

The main tool(s) needed is/are people that have the expertise and ability to work between policy makers, consumers and producers. The other necessary tool is the model from which other localized programs can be designed

Info, good leadership, choices, education

Budget pour opérations et recherche

Background research, applied research, information exchange and ongoing monitoring of implementation programs and strategies

5. Should greenhouse gases be integrated into the EFP planning tools?

There seemed to be mostly consensus that the GHS issue or risk assessment could be integrated into the EFP, however some minor disagreement over whether we should implement GHG emission reduction practices for economic and scientific reasons. Specific comments were:

Possibly too early until current research projects are complete

YES- there is a natural fit

NO- it’s not necessary since all the BMPs lead to reduced GHG plus a section on GHGs will turn farmers off the EFP process

Yes, but only in a complimentary way

yes, as part of existing worksheets

Yes, but a lot can go into existing sections

To some degree - but little complete info is available so could possibly do more harm than good without practices. Present info is presenting some conflicting info and directions.

Possibly but it seems premature to introduce GHG issues when the data is still to be developed, however, in corporate, be concerned with nutrient and waste management

GHGs need to be included in an EFP as an indicator of how efficient a farm is using its farm fertility

Eventually once sufficient research has been done and the science has some sound recommendations

Certainement car on ne peut parler de plans environnementaux sans considérer cet aspect

Oui, parce qu’ils vont devenir un aspect très important de l’environnement

Yes, even in absence of an American buy-in

Oui, c’est un sujet qui s’intègre naturellement

Yes but only as relevant local research provides some basis for recommendations

It would be foolish to not work towards this. It may help agriculture to position itself to take advantage of money coming from R & D and GHG reduction strategies implementation.
Appendix 2

ENVIRONMENTAL FARM PLANNING WORKSHOP
ASSESSMENT QUESTIONNAIRE

March 29-30-31, 2001
Moncton, New Brunswick

Please note that this survey results is based on 43 questionnaires that were returned after the workshop meeting from the 152 participants. From the total participants list we estimated greater than 50% producer and producer organization participation.

1. How did you hear about this workshop?

1 - newspaper 18 - invitation 18 - personal contact 2 - telephone 6 - e-mail
3 - other (specify)

2. Please indicate your occupation or affiliation:

14 - government personnel 6 - agricultural association / organization
14 - producer 2 - non-agricultural association
1 - consultant 3 - agri-food industry
1 - student 2 - other (specify) university

3. Were you satisfied with the workshop arrangements? Please indicate your comments.

- 23 were satisfied with the facilities and catering service.
- The roller coaster noise was raised as a distraction
- Workshop very well conducted / run on time
- Need to diversify the nutrition break (with milk, juices)
- Good selection of speakers
4. Please rate the workshop sessions using the following scale:

(5 - Excellent  4 - Very Good  3 - Good  2 - Poor  1 - Inadequate  0 - Did not attend)

FRIDAY MORNING

Environmental issues and agricultural challenges

<table>
<thead>
<tr>
<th>Rating (Avg)</th>
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<tbody>
<tr>
<td>Atlantic soil and water conservation challenges</td>
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<tr>
<td>Sustainability, societal and community issues</td>
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<tr>
<td>Understanding greenhouse gas impacts in agriculture</td>
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<tr>
<td>Soil sinks &amp; agriculture adaptation to climate change</td>
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The EFP and other tools for change

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<th>Rating</th>
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<tr>
<td>Ontario’s experience &amp; perspectives</td>
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<tr>
<td>Quebec agri-environmental strategies</td>
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<tr>
<td>Atlantic Canada perspectives</td>
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FRIDAY AFTERNOON

Producers experience with EFP

<table>
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<th>Rating</th>
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<tr>
<td>Integrating concepts in Farm Planning</td>
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<tr>
<td>R &amp; D initiatives on greenhouse gas (GHGs)</td>
</tr>
<tr>
<td>Panel Discussion: Where to go from here?</td>
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<tr>
<td>Banquet Speaker</td>
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SATURDAY MORNING

Policy session on climate change and Environmental Farm Planning

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<th>Rating</th>
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<tbody>
<tr>
<td>What does the society expect of the producer?</td>
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<tr>
<td>Potential impacts at the farm gate</td>
</tr>
<tr>
<td>Environmental risk management systems</td>
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<tr>
<td>New federal initiatives with climate change</td>
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</tbody>
</table>
5. **What subjects related to environmental farm planning and climate change would you like to hear about at future workshops?**

1. More on actual EFP updated from the last planning meeting held in Moncton
2. BMPs applying on farm, precision farming, groundwater protection
3. Should have had some opportunity for workgroups to discuss possible changes to current EFP. ie: inclusions and adaptation to computers
4. Comment préparer un plan de ferme adopté à notre province. Un rentable exercice afin de voir et comprendre le besoin d’une telle mesure. Peut-être même avoir un atelier sur une ferme
5. Qui assure le suivi de ces plans ? A quel rythme doit-on les reviser ? Quelles sont les recherches en cours?
6. Results of studies / pilot projects that show implementation, mitigation or adaptations. The “how to” get the job done.
7. A workshop allowing more interaction of speakers and audience participation re: new developments / knowledge of a) nutriment management, b) manure management c) alternative amendments (industrial, composts, alternative wastes). Soil quality issues (eg. Evaluating soil quality)
8. More response and commitment from all levels of Government on the EFPs workshop on selling the program and getting buy-in
9. Actual costs, benefits
10. Climate change - more on science and technology of CC & related BMPs
11. Env.Farms Plans how they are working ?
12. Disappointed that governments - federal & provincial don’t have a more advanced long term plan for handling issues such as this. Also interested in fact policy is often put in place with lack of science-based info to back it up.
14. More focus on next steps for a rational EFP. How agricultural might coordinate all the issues environmental, food safety, economic “all risk management” - systems approaches.
15. Mode de financement pour les fermiers
16. Update research information on how much carbon can be sequestered in conservation tillage and specifically in a residue managed potato rational on a three-year potato grain and hay rotation.
17. Best Management Practices - Adapting to climate change
18. Particularly interested in GHG issues
19. Examples of what has happened in other provinces, successes and failures. It would also be interesting to know what is happening in the US. Also, would it be very useful to have representatives from consumer groups, urbanists or other non-farm organizations to hear their concerns.
20. Already included in existing plans. Perhaps dealing most communication with urban people.
21. Implementation of the plans ? Budgets required ?
22. Atelier sur les résultats de recherche à long-terme.
23. More discussion on sharing EFP systems among provinces possibly moving toward a national system.
24. Building partnerships to obtain outside funding to accomplish EFP goals & implement climate change improvements (example - watershed groups who help fund riparian zone restoration)
25. Expériences / approches beyong Eastern Canada (i.e. western Canada, U.S., etc.)
26. Leadership
27. Updates on going success of program

6. **What would be the best month for a future workshop?**

In general, November to March with many repling same time in March.
7. **Additional comments:**

1. Very very good conference. Need more local conferences - training session etc. In local areas.
2. I would prefer fewer presentation and more opportunity for small group sessions. Very informative & valuable. Good Job!
3. Pour ce qui est de l’organisation de la conférence, je vous lève mon chapeau et tire ma révérence ! Vous êtes fantastiques !!
4. Well managed session, speakers & topics. I learned a lot about the process of implementing EFPs and as a westener, see a need to develop a fit for that region.
5. More time to meet informally. Enjoyed producer perspective. Pauline Duivenvoorden did a great job!
6. Très belle organisation - Quelques absents nos députés et pas leur représentants mais eux-même.
7. Moncton is a good central location. Registration cost was very reasonable (no one could complain about the cost). Keep up the good organizational work. Good use of producer speakers, but need more workshops and less lecture format.
8. Good Job ESCWCC and all your helper. Great to have a Canada wide conference again with excellent discussion and commitment.
9. Very well run, well organized conference, very good speakers. Would like to see the presentations included in the proceedings.
10. Good conference
11. Excellente conférence ! Qualité des speakers remarquables. Sujets à points et bien décrit.
12. Well organized. Excellent speakers. Remote for data projector a problem too often - new batteries ?
13. Ceci est probablement le meilleur atelier auquel j’ai participé si ce n’est pas le meilleur, je ne me souviens pas lequel aurais pu être mieux. Félicitation aux organisateurs.
   Bravo! Bravo! All NB farmers should have attended that workshop.
14. Considering the diversity of experience and expertise, I think that everyone came away with something.
15. There should be more time allocated to allow for networking. I realize the time and cost constraints but these opportunities for networking are valuable.
16. Good conference input from all across Canada
17. A very well organized workshop.
18. Future EFP workshop should be western Canada. I believe EFP will be a hard sell there and we need to increase to increase discussion and awareness. The single big question for EFPs in western Canada is simple - its “incentives” (ie. $ to implement changes)
19. Good workshop
20. Climate change is not seen as “important” enough by farmers to take a whole lot of action on, but if the principles are incorporated into EFPs and normal, farming practices, then progress will be made.
21. Bon mélange de producteurs, gouvernement - recherche
Appendix 3

EFP Workshop Discussion Panel
“Where do we go from here?”

Panel:
Les Haley, Jim Bruce, Mary Lou Garr, Barry Cudmore, Eugene Legge, Shawn Smale, Fraser McCallum

Summary of specific questions and comments:

! In the context of dissemination of information to farmers, how does Zero Tillage / No-Till fit into GHG emission reduction? How do we apply research, transfer it to the field?

< need on-farm research, and at commercial on-farm scale to be useful

! Need to continue improving EFP, putting different environmental issues together. How do we create a continuous BMP dialogue between science and producers? If both are involved, then farmers observe and ask why, while scientists explain. This needs to be done on-farm.

! Farmers need a focus on emission reduction per unit of production and need environmental groups to understand this link.

! Communications between all groups and stakeholders is a key. Need money to build up the communications required. We know how to farm, science can help, but we need a coordinated approach.

! What is AAFC doing/role in dissemination of information?

< The federal government role is research funding, funding, technical cooperation, research, etc. Coordinating gaps still exist.

! NAEC was lost, but NAEC was valuable

! Is there a way to select or prioritize farms for doing the EFP? In terms of numbers, and a process to select, which farms should be in the process?

< EFP is voluntary and intended to be inclusive.

! What is the “best bet” for agriculture to get the public to pay for these changes? Air? Water? Food? Wildlife?
The governments are not likely to supply more money/funding. Society needs to pay to support the environment. A key question is which “goods” could support this? Suggestions for “goods” to support this were:

- water and water quality
- tourism and agri-tourism

We cannot compartmentalize the agri-environmental issues. ie: the “hot issue” or the “issue” itself changes periodically from a government and public point of view. Things that can be “hot issues” and EFP drivers are:

- water quality
- pesticides
- biotechnology
- etc

There is a public education issue. Farmers get blamed for any environmental problems, but the public should not “pin-point” farmers.

Agri-environmental issues are also more broadly issues of “Health and Family Safety”. Consequently, farmers should not have to pay a majority of the costs.

Do we need an apolitical process for environmental issues in agriculture? Funding is needed, but not everyone is at the same starting point or level, province to province or group to group. It is particularly hard to interest farmers in GHG issues. How do we deal with environmental legislation?

The EFP was started in Canada in Ontario to avoid legislation. Walkerton has resulted in new upcoming legislation in Ontario. NAEC was the apolitical organisation to do this sort of thing (EFP coordination). We also all need to advance at the speed our particular province can advance.

We have to be careful when we talk about the “Energy” sector to place motivation on government and industry. ex: GHG emission reductions per unit of production. There is a need to educate farmers on these issues. Should we sell carbon credits?

There are barriers to communication and coordination for the EFP. There is a breakdown in communication. We need to share information before we have legislation.

Do we have the infrastructure required to address the issues? Or do we need a new organization?

In NB, we do not need new organizations, we just need to modify the EFP workbook. Existing organizations could do it. If there is something missing, we can create it.

Agricultural industry steering committees are a good idea. Not necessarily new ones, but a coordinating role. Different provinces have different ways. Job should be done at a local level.

We need a new coordinating organization. We should go back to AAFC and tell them that there is a need since NAEC disappeared.
What does the whole global warming issue mean if the USA has dropped out of Kyoto? People think that Kyoto is dead. We don’t want Canada to be the good guy and say we’ll do it, and then don’t have the subsidy.

There is an opportunity to do EFP in Alberta without pressure. GHGs will be included. A lot of work has been done by others on EFP. Alberta has the ability to do EFP, but doesn’t expect people to bring it in, so they will go and get it and adjust it.

For the existing EFP in place, is including GHGs a concern? The discussion and consensus was that it should be included into the other topic sections of the EFP (soil, water, manure, etc).

The EFP is a good tool to deal with environmental issues, but issues less “hot” could be dealt with by the EFP too. The EFP won’t fix everything, but more emphasis should be put on it. Other things, like education need to be done too.

AEC was something nice. We need something national to cooperate and talk. Let’s bring it back.
Appendix 4

Workshop announcement brochure and Programme
Motels in Moncton

A limited number of rooms are available under "EFP Workshop" at the following motels and until the dates indicated. Please book soon.

Best Western Crystal Palace Hotel
499 Paul Street, Moncton
tel: (506) 858-8584, fax: 858-5486
1-800-561-7108

Chateau Moncton
Main Street, Moncton
1-800-576-4040; (506) 870-4444
(Reservation code EFP 045397, before March 8)

Coastal Inn
502 Kennedy, Dieppe
1-800-561-3939; (506) 857-9686
(Reservation code EFP, before March 2)

Comfort Inn
Maplewood Dr., Dieppe
1-800-424-6423; (506) 859-6868
(Reservation code EFP, please book before March 2)

Listing of other motels in Moncton is available at:
http://www.moncton.worldweb.com/WheretoStay

Environmental Farm Planning Workshop

&

Soil Conservation Council of Canada
Annual General Meeting

March 29 - 30 - 31, 2001

Crystal Palace Convention Centre
Best Western Crystal Palace Hotel
499 Paul Street, Moncton, NB

Hosted by:

Eastern Canada Soil and Water Conservation Centre

&

Soil Conservation Council of Canada

In collaboration:

NB, PEI, NF, NS and QC TAKING CHARGE Teams

Financed under:

Climate Change Action Fund (CCAF)
Agricultural Awareness Partnership Project
between PFRA, CCA, CFA, SCC and ECSWCC

The Eastern Canada Soil and Water Conservation Centre is a non government organization affiliated with:

EFP Workshop

Goals & Objectives:

Bring together the key farm organization leaders and stakeholders from across Canada to:

T Share experience and evaluate the progress achieved with the Environmental Farm Plan (EFP) process.

T Improve regional networking in agri-environmental protection.

T Identify the need for EFP Workbook revisions, including GHGs risk assessments, coordination mechanisms and implementation process.

Who should be attending this Workshop?

T Agricultural producers, farm organization leaders from Federations of Agriculture, Soil and Crop Improvement Associations and Commodity Groups.

T Agri-environment conservation groups such as Provincial Environmental Councils, EFP Steering Committees, Conservation Clubs, ADAPT Councils and SCC TAKING CHARGE Team Leaders.

T Representatives from governments, industry, agribusiness and institutions from Canada.

EFP Workshop Steering Committee

Jean-Louis Daigle, Director, ECSWCC, NB
Glen Hass, Executive Director, SCC, SK
Teresa Mellish, PEI Dept of Agriculture & Forestry
Harold Rudy, General Manager, OSCIA, ON
Barry Cudmore, SCC, PEI TAKING CHARGE Team
Laurence Nason, SCC, NS TAKING CHARGE Team
Eugene Legge, SCC, NF TAKING CHARGE Team
Jim Wheaton, SCC, NB TAKING CHARGE Team
Daniel Guay, SCC, QC TAKING CHARGE Team
Programme

March 29 - Thursday night - Scoudouc Room
7:00 p.m. 
- Registration & Reception
- SCC Board of Directors Meeting

March 30 - Friday - Republic Ball Room
8:00 a.m. Registration

8:30 Welcome and introductory remarks
Jean-Louis Daigle, Director, ECSWCC, NB
Bill Poole, President, SCC, SK

8:40 Environmental issues and agricultural challenges - Plenary session
Chair: Teresa Mellish, PEIDAF
- Atlantic soil and water conservation challenges: Gordon Fairchild, Soils Specialist, ECSWCC, NB
- Sustainability, societal and community issues: John Fitzgibbon, Director, School of Rural Planning and Development, University of Guelph, ON
- Understanding greenhouse gas impacts in agriculture: Philippe Rochette, Researcher on GHG, AAFC, QC
- Soil sinks & agricultural adaptation to climate change: Jim Bruce, Can. Policy Rep., SWCS, ON

10:15 Break

10:30 The EFP and other tools for change
Chair: Harold Rudy, General Manager, OSCIA, ON
- Ontario’s experience & perspectives: Andy Graham, EFP Coordinator, OSCIA, ON
- Quebec agri-environmental strategies: Simon Marmen, Provincial Coordinator, Agri-environmental Clubs, QC
- Atlantic Canada perspectives: Barry Cudmore, PEI, Hog and Potato producer

12:00 Lunch - buffet style

Note: Translation service provided

1:00 Producers experience with EFP:
Chair: Eugene Legge, SCC Director, NF
Blaine Diamond, Potato & grain, PEI

March 31 - Saturday: Republic Ballroom (SCC AGM)
8:00 • SCC Annual General Meeting
• Concurrent EFP Working Group session

10:00 Break

10:30 Policy session on climate change and Environmental Farm Planning:
Chair: Glen Hass, Executive Director, SCC, SK
- What does the society expect of the producer?
  Ed Tychniewicz, Adjunct Prof., Univ. of Manitoba
- Potential impacts at the farm gate
  Bruce Beattie, Dairy producer & Chair of the Alberta Environmentally Sustainable Council
- Environmental risk management systems
  David Coburn, Egg and Apple producer, NB
- New federal initiatives with climate change
  Michael Presley, Director, AAFC Env. Bureau, Ottawa

12:30 Luncheon - wrap up

Please pre-register before March 15th

Name: _______________________________
Address: _______________________________
Tel: __________________ Fax: _____________
E-mail: ______________________________

Pre-registration:
(before March 15th ($50) $______
(after March 15th ($65) $______

I plan to:
9 attend the reception Thursday night (included)
9 attend the Lunch Friday noon (included)
9 attend the banquet Friday night (included)
9 attend the Luncheon (Sat. noon- $20) $______

Total: ___________

Please make your own room reservation as soon as possible (a detailed listing is available at the Centre)