Agriculture and Agri-Food Canada
Agriculture et Agroalimentaire Canada

Vol.1 No. 2 April 2009



Agroforestry News from the Atlantic and Quebec

Feedback Please!

Welcome to *Agroforestry News from the Atlantic and Quebec*! We hope that you find this newsletter informative and interesting.

This current issue is the second of two pilot publications. The decision as to when and how often to publish this newsletter in the future depends on what you think. Judging from what we have heard from readers so far, there appears to be significant interest in the discipline of agroforestry in both Quebec and Atlantic Canada. The response to requests for articles has exceeded our expectations. It is very exciting to read about the extent and variety of work that is underway in agroforestry in our own backyards!

The purpose of this newsletter is to assist those involved and interested in Agroforestry in Quebec and the Atlantic to share information and experiences. It is also intended to encourage networking as well as serve as a notice board for upcoming events. In order to help us discern how effective this approach is, we need your ideas and thoughts. We need your input on not only frequency of publication but also on the content you would like to see in future editions.

> You will find attached a short questionnaire requesting your feedback. We encourage you to fill it out and return it to us.

Lastly, we wish to thank all those who so enthusiastically contributed to the success of the two pilot issues.

We look forward to hearing from you!

Chris Pharo
Stéphane Gariépy

Agriculture and Agri-Food Canada's Commitment to Agroforestry

As a land management practice, agroforestry is nothing new to Agriculture and Agri-Food Canada. In fact, although it has often changed names over time, the Agroforestry Division has been involved in the development and promotion of agroforestry practices for over 100 years.

Early settlers to Western Canada were confronted with challenges regarding shelter, food and fuel stocks as they settled onto their newly acquired lands. The establishment of the Shelterbelt Centre at Indian Head, in 1901, provided a federal

Shelterbelt protects a farm garden in Saskatchewan, 1929. Trees were supplied by the Shelterbelt Centre. Photo: AAFC Agroforestry Division

government location dedicated to the development and promotion of trees for agricultural lands. The utility and function of trees in the landscape became quickly apparent to early settlers and over the years, to the succeeding generations of agricultural producers. And while farming practices have changed over time as well as the dependency on trees in the agricultural landscape, trees still play a vital role in providing yard and crop shelter, erosion control, water quality protection, riparian area stabilization, improved grazing in silvopasture systems, habitat establishment, and enhanced biodiversity.

... continued on page 10...

IN THIS ISSUE

Canada

A Successful Agroforestry Forum in the Acadian Peninsula

On January 23, in Shippagan N.B., woodlot owners and farmers were invited to the Acadian Peninsula agroforestry forum to learn and exchange information on various agroforestry opportunities. This event was initiated by a group of local development officers, farmers, and woodlot owners who previously attended the "Agroforestry Serving Communities" conference organized by the University of Moncton in 2006 and believed that this approach had good potential in their community.

Approximately 60 participants were presented various agroforestry concepts ranging going from wild picking to agriculture in a forest setting as well as agroforestry development on agricultural land. Wild harvest of ground hemlock, fiddleheads, mushrooms and berries; cultivation under maple tree canopy; plantations of trees within cultivated farmland; as well as the cultivation of indigenous fruit species were some of the opportunities presented.

Agroforestry Forum participants. Photo: Acadie Nouvelle.

Participants were able to observe, through the presentations, that the opportunities offered by agroforestry could be of an entrepreneurial interest, but could also have potential for regional landscape revitalization.

Speakers also showed, through research, demonstration projects, or actual business stories, that although it is a relatively new concept in this region, agroforestry is starting to show interesting potential.

At the end of the day, it was clear that participants wanted more information and recommended the creation of a regional agroforestry working group that would further investigate the broad possibilities within this field.

Source:
Maurice Basque, NB Department of Agriculture and Aquaculture
maurice.basque@gnb.ca

How Do Hybrid Willows Perform on Hilly PEI Landscapes?

This is the question researchers in PEI are asking as the province continues to see fluctuating furnace oil and electricity costs, and looks for alternate uses for land not suitable for row crop production due to high slopes.

In the spring of 2008, 6,250 hybrid biomass willow clones were planted in four sites with slopes between 6 and 20%. The planting sites are higher sloped areas of potato fields that the owners wish to retire from row crop production due to environmental concerns. If willows are successful in these areas, producers can possibly maintain permanent surface cover on sensitive slopes without sacrificing an economic return.

The clones selected were SX 61, SX 67, SV1, Viminalis and India. All four sites were prepared with tillage and plastic mulch before planting. The spacing between rows was generally 3 meters and the spacing in row was 1 meter. The research sites were set-up in a complete random complete block design. Weed control and grass maintenance were performed over the summer months.

Hybrid willow trial on a slope. Photo: Tyler Wright.

Survival rate data collected in late July showed average survival rates of 89% for viminalis; 68% for SX 67; and 62% for SX 61. In 2009, the four sites will have all the mortality replanted.

The SV1 had the worst survival rates (1% to 85%; average 31%) because those particular cuttings did not have the required vigor. One site was replanted with rooted India stock in August.

This past fall the willows were coppiced to encourage more stem development. Growth rates and disease and insect pressures will be monitored. If the willows perform well, they will be ready for harvest in 2010 or 2011.

Funding support for this project has been provided by the Canada-Prince Edward Island National Water Program. The research proponents are PEI Soil and Crop Improvement Association and PEI Department of Agriculture. Information on this willow project will be available online soon at www.peiscia.ca. Just click on Agroforestry to view this and other PEI Soil and Crop agroforestry research projects such as hazelnuts, pine nuts and serviceberries.

Source:
Tyler Wright, Agriculture, PEI
tmwright@gov.pe.ca

From Our Atlantic Woods

Atlantic Canada and the state of Maine will soon have a new directory of Non Timber Forest Products businesses. The directory **From Our Atlantic Woods** is a collaborative effort of representatives of all four Atlantic Provinces and the state of Maine. Infor Inc. in Fredericton, New Brunswick took the lead on organizing the efforts of everyone involved in the project.

The directory, which was fashioned after one previously prepared in British Columbia, will give market exposure to businesses in the region Listings are free of charge and this would not have been possible without the financial assistance of many government departments, agencies and organizations throughout the region. Sobeys Inc. is the major corporate sponsor for the project.

The types of products listed will be quite diverse; everything from wild edibles (berries, maple syrup and mushrooms) to decorative products (forest florals, walking sticks, Christmas trees and wreaths). Businesses providing services that relate to the forest, such as ecotourism, are also included.

The only products that might be considered as wood (timber) products in the directory are hand-crafted specialty items made from locally gathered "figured woods." Figured woods include: birdseye maple, curly maple and spalted (partially decayed) wood, along with a few others.

The target launch for **From Our Atlantic Woods** is April 2009. Copies of the directory are expected to be available at many tourist outlets, farm markets and Sobeys stores in the region. There will also be an online directory so that new or previously undiscovered businesses can be added.

For more information contact the Infor office Inc. at 506 450-8787.

Study on carabid beetles: Hedgerow and field with lines of pitfall traps. Photo: Christine Noronha.

A PEI Study on the Influence of Hedgerows on Carabid Beetles

Carabid beetles play an important role in the natural regulation of insect pests. Agricultural practices such as pesticide use can reduce population within a field. Numerous studies in Europe have demonstrated that hedgerow can influence the population of carabid beetles however there is a dearth of information on this topic in Canada.

A study was therefore conducted at AAFC's Harrington research farm in PEI to examine the effects of older growth and new growth hedgerows on the movement of beetles within adjacent agricultural fields and also to determine the influence of the crop type on carabid populations.

Pitfall traps were used to collect beetles at varying distances: 1 m into the hedgerow, and 1 m, 3 m, 10 m, 30 m, and 60 m from the hedgerow into the field. Results showed that diversity was highest in the older established hedgerow. Two species—*Pterostichus melanarius* and *Harpalus rufipes*—dominated the population in the fields, especially those adjacent to the new-growth hedgerows. Certain species were more prevalent in the field and others preferred the hedgerow. Diversity was highest at 1 meter from the edge of the hedgerow. This may be the result of the intermixing of the field and hedgerow species in this area.

Pitfall trap. Photo: Christine Noronha.

The crop type had an effect on carabid numbers with a lower population identified in the high-input potato crop compared to the barley and clover crops. *Agonum placidum* used the hedgerow as a refuge when the adjacent crop was a high-input potatoes crop. This species moved into the hedgerow in July when pesticide application began on the potato crop. Thus it appears that the hedgerow does play a role in carabid beetle diversity and is used as a refuge by some species.

For further details please contact Dr. Christine Noronha, Crops and Livestock Research Centre, Charlottetown PEI. http://www.agr.gc.ca/ResearchCentre/Charlottetown/

Pterostichus melanarius: **A Carabid beetle. Photo: Christine Noronha.**

Hazelnuts – A New Crop for PEI

In PEI, interest in agroforestry and concerns over the impact of row crop production on high-slope land has resulted in experimentation with alternative crops, such as hazelnut. Since 2003, a number of research and demonstration plots have been established through the collaboration of the PEI Soil and Crop Improvement Association (PEISCIA) and land-owners. AAFC researcher Delmar Holmstrom collaborated on a number of these projects.

In the spring of 2005, an experiment consisting of native beaked hazelnut and three varieties of hybrid dwarf hazelnuts—Winkler, Northern and Grimo seedlings obtained from Grimo Nut Nursery in Ontario—was established in Orwell, PEI. The project compares three hybrid dwarf hazelnut varieties with the native species under an organic farming system.

Results from this demonstration are published by PEISCIA at : www.peiscia.ca/database/factsheets/Macphailshrub.pdf.

In general, the plants are doing well, although three of the non-treatment (guard) plants have been removed because they exhibited Eastern Filbert blight, a disease which is causing major problems to hazelnut growers in North America. Most commercial orchards in Oregon—the prime hazelnut area of North America—are not resistant to this disease. Nut production started in 2007 but cannot be considered economical at this time. Indication of production levels are not expected until the plants reach the 8 to 10 years of age.

In 2006, another experiment was established in Cornwall, PEI, to evaluate the dwarf hybrid hazelnut varieties Epsilon, Delta, Zeta and New York. The first three of these varieties were developed in Oregon and are considered immune to Eastern Filbert blight. Details of the experiment are found on PEISCIA's Web site at http://www.peiscia.ca/database/factsheets/Cornwall.pdf.

In general, mortality has been very high for the Zeta variety (20 out of 30 plants), high for the Delta variety (7 out of 30 plants), acceptable for the Northern (1 out of 30) and nil for the Epsilon (0 out of 30) varieties. Plant growth has, however, been very slow. No nut production has occurred.

Two-year old Winkler hazelnut in-Orwell, PEI, in 2007. Photo: Delmar Holmstrom.

In the spring of 2008, an experiment was established in Green Road, PEI, to evaluate the following dwarf hazelnut varieties: Geneva, Slate, Epsilon and Grimo 186M. Results have been disappointing. Over half the plants are believed to have died. This may have been a result of high chlorine levels. The source of the chlorine is thought to have come from the compost and fertilizer used at the time of planting. Because hazelnuts are very sensitive to chlorine, it is advised to check chloride levels in the soil prior to planting. Also, it is recommended that growers avoid any fertilizer that contains potassium chloride at the time of planting. If they plan to use compost, they should have it tested for chloride levels prior to use.

Plans to establish two more trials in the spring of 2009 in Kellys Cross and Green Road are in the works. Varieties to be evaluated include: Epsilon, Gamma, Zeta, Grimo 186M, Grimo 208P, Slate, Geneva, and Santiam.

Source:
Delmar Holmstrom, AAFC
delmar.holmstrom@agr.gc.ca

Winds from Quebec

A Very Successful Agroforesty Website

More than 350 people have already suscribed to the *Agri-Réseau* Agroforestry Web site that was officially launched on November 27, 2008.

To access the Web site: www.agrireseau.qc.ca/agroforesterie/

An Agroforestry Booth at the *Salon de la Semaine de l'Agriculture, de l'Alimentation et de la Consommation*

From January 16 to 18, 2009, *Expo-Cité* in Quebec City played host to the largest agricultural trade fair organized by students in Canada: the *Salon de la Semaine de l'Agriculture, de l'Alimentation et de la Consommation* (SAAC).

During the fair, a number of students from the agriculture and food sciences faculty, *Université Laval,* rolled up their sleeves and set up booths to explain a few of the topics related to their studies to the public. This year, in line with the fair's theme—"a spoonful of innovation"—an agroforestry booth was open to the public, much to the delight of organizers and all those who visited it.

Hundreds of visitors stopped by the booth to discover agroforestry, learn a little more about the discipline, and even ask a question or two, all putting the three students' knowledge to the test. Matching games were used to introduce visitors to agroforestry's main applications in Quebec: wind-breaking hedges, riparian buffer strips, and understory cropping.

The booth gave all three students the opportunity to learn more about agroforestry, not only to be able to answer visitors' questions, but also to help develop their own interest in the field. Curiosity and a desire for a deeper understanding of agroforestry applications have spurred the students forward in their research. They were no doubt gratified by visitors' interest in their booth, but the experience most of all a boosted their interest in the work, helping them learn more about what agroforestry can do for the environment. Even though the fair is over, they are still keen to continue their research, broaden their knowledge, and share their discoveries with the public. A master's degree, anyone?

Source:
Nathalie Fournier and Caroline Quintal
Students, Université Laval

Nathalie Fournier, Daniel Venneman, and Caroline Quintal, the students in charge of the agroforestry booth. Photo: Philippe Duval-Baillargeon.

An Agroforestry Committee at CRAAQ

The *Centre de référence en agriculture et agroalimentaire du Québec*, or CRAAQ (Quebec agriculture and agri-food reference centre), announced that a committee specializing in agroforestry has been created. CRAAQ seeks to promote cooperation between its expert members and agricultural and agri-food organizations in order to disseminate integrated knowledge as well as design and distribute reference and networking tools.

The new committee is comprised of approximately 20 agroforestry enthusiasts and practitioners from the agricultural and forestry sectors. Serge Proulx, agronomist, helped launch the committee on behalf of CRAAQ. Members elected Stéphane Gariépy (Agriculture and Agri-Food Canada), Alain Olivier (*Université Laval*), and Bertrand Anel (*Conférence régionale des élus de la Gaspésie et des Îles-de-la-Madeleine*) to the executive committee.

The committee aims to identify knowledge requirements and improve information dissemination via Agri-Réseau's Agroforestry Web site and by organizing conferences and other training activities.

For additional information, please contact:

Lise Lemieux, CRAAQ
Phone: 418-523-5411
Web site: www.craaq.qc.ca

Source:
Stéphane Gariépy, CRAAQ Agroforestry Committee President
Tel.: 418-648-3652
stephane.gariepy@agr.gc.ca

Ginseng Farming Update

Ginseng farming has been a popular topic in Quebec for a little over ten years now. At first, many farmers saw it as a get-rich-quick opportunity, while others brushed it off as a passing fad. Over the years, both groups have had to adjust their perspective. Ginseng farming in forest environments can be an attractive and profitable activity in Quebec provided the site is well chosen and sufficient time and energy are put into follow-up.

Determining the total acreage under cultivation in Quebec is very difficult, since production is not subject to monitoring or registration. Extrapolating from seed sales, it is likely that 40–50 hectares of ginseng are currently under cultivation in Quebec woodlands. In early years, there were many small-scale farmers. Over the years, production has standardized and information on cultivation techniques has become more readily available. Large-scale production has steadily increased. Nonetheless, cultivation of 0.2 hectare of woodland ginseng per year is still considered a major operation.

One threat that has hung over woodland-farmed ginseng sales has been difficulties in obtaining export permits. Given that forest-grown ginseng is produced almost exclusively for export purposes, this is a major challenge. As wild ginseng is

A five-year old ginseng root, not yet at maturity Photo: Isabelle Nadeau.

Four- to five-year old ginseng produced in Québec. Photo: Isabelle Nadeau.

threatened with extinction, the federal government requires a CITES permit before ginseng roots of any origin can cross the border. Previously, the government recognized only two ginseng categories: field-cultivated and wild. As woods-grown ginseng is not field-cultivated, it was considered wild ginseng and export permits were not issued. A great deal of effort was put into resolving this matter. In October 2007, Environment Canada added two new categories to its list: wild-simulated and woods-grown ginseng. A CITES permit is now obtainable, provided you can prove that the roots were in fact cultivated. This represents major progress for the viability of this valuable agroforestry production.

Source:
Isabelle Nadeau, *Ginseng Boréal*
info@ginsengboreal.com

Right and above : Examples of intercropping systems. Photos: David Rivest.

David Rivest Presents His Ph.D. Thesis on Intercropping Systems

On December 9, 2008, David Rivest successfully defended his PhD thesis entitled *Cultures intercalaires avec arbres feuillus : effets sur la disponibilité de la lumière, la qualité du sol et la productivité des plantes associées* (Light Availability, Soil Quality and Plant Growth in Tree-Based Intercropping Systems).

While a certain number of studies on intercropping systems have been conducted in Ontario, United States and Europe in recent years, very few had been carried out in Quebec. Integrating various disciplines, such as ecology, soil science, silviculture, and agronomy, Mr. Rivest's research sheds light on intercropping practices in Quebec. In addition to demonstrating the systems' potential to increase wood production in agricultural regions, his thesis suggests that biophysical resources are used very efficiently in the early stages of intercropping. We congratulate Dr. Rivest for his accomplishments.

For more information on his work, please contact Dr. Rivest directly:

Phone: 418-656-2131, ext. 8746
Email: david.rivest.1@ulaval.ca

Organizations and Resources

Agroforestry.net

The Agroforestry.net Web site compiles practitioner-oriented information about all things related to agroforestry, fostering the use and conservation of trees, and environmentally sustainable stewardship of land and water. Agroforestry.net includes links to several publications and to other agroforestry websites.

You can access the Web site at:
www.agroforestry.net

The PEI Soil and Crop Improvement Association Web site

For more than 40 years the PEI Soil and Crop Improvement Association has been a leader in the agricultural community in evaluating and demonstrating many new farming practices, crops, and soil and water conservation or protection techniques. Check the Events & Notices and Fact Sheets & Reports sections of the website for regular updates on soil conservation and agroforestry publications.

You can access the Web site at:
www.peiscia.ca

Club des producteurs de noix comestibles du Québec Web site

The *Club des producteurs de noix comestibles du Québec* (CPNCQ) is now officially recognized as non-profit organization. The Club also just launched its new Web site.

To access the Web site:
www.noixduquebec.org

Hazelnut tree. Photo: Giulio D. Neri.

Improvements are being made to the economic simulator on agroforestry practices, which has also spawned a new tool…

The Biopterre team is working hard on a new version of the simulator that will integrate new installation and maintenance costs based on a 2007–2008 study on windbreaks and treed riparian buffers. In addition, economic parameters have been simplified to make the simulator more user-friendly.

Lastly, a Prime-Vert grant has allowed us to develop a simulator that evaluates the cost and income for short-rotation cultivation of willow trees for biomass production. This tool will be available online soon.

For further information, please contact André Vézina at:
andre.vezina@biopterre.com

The NTFP Network of Canada

Non-timber forest products (NTFPs) are defined as the botanical and mycological resources and associated services of forests and under-utilized lands other than timber, pulpwood, shakes, or other conventional wood products or agricultural products. Examples of NTFPs include foods such as wild mushrooms and berries, medicinal herbs, and a wide range of other plant products, such as decorative greenery.

Chanterelle.
Photo: Wendy Cocksedge

The Non-Timber Forest Products Network of Canada is a partnership of organizations, agencies, businesses, and others concerned with the sustainable and ethical development of the non-timber forest products sector in Canada. The Network's aim is to enhance the ability of communities, researchers, resource managers, policy makers, economic development specialists and others to develop expertise, share knowledge, make informed decisions, and ultimately work together more effectively to develop and manage these resources for the benefit of rural and remote communities across Canada.

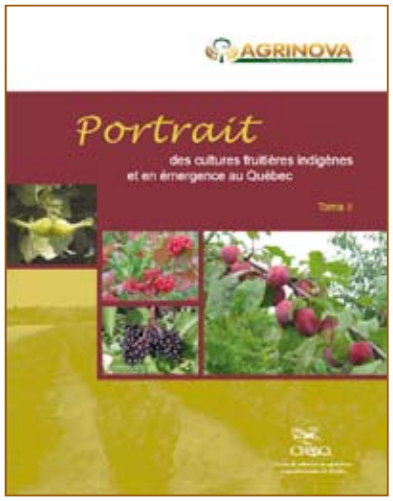
To know more about the NTFP Network of Canada:
www.ntfpnetwork.ca

Publications

Portrait des cultures fruitières indigènes et en émergence au Québec: Reference Guide

Put together by Agrinova and edited by CRAAQ, this outstanding two-volume work presents a portrait of 17 native or emerging fruit cultures in Quebec. These crops could be a source of functional and nutraceutical foods, agricultural diversity, and rural land development, among other attributes mentioned in the portrait. This reference guide to the characteristics of each crop also discusses techniques for producing, harvesting, and marketing each crop as well as tests and experiments conducted in Quebec, development possibilities, and key contacts and organizations.

Both volumes of this work can be downloaded on Agri-Réseau's Agroforestry Web site: www.agrireseau.qc.ca/Agroforesterie/ OR from the CRAAQ Web site: www.craaq.qc.ca/Publications



Le reboisement au Québec : Quelle place pour la ligniculture? Bilan statistique: Statistical report

This document presents a statistical report on the reforestation of fast-growing tree species in Quebec. It also discusses the context of their use.

A 27-year old Japanese Larch planting in the Lanaudière region in Québec. Photo: Julien Fortier, 2007.

This work can be downloaded on the Agroforestry page of the Agri-Réseau's Web site: www.agrireseau.qc.ca/ OR on the Réseau Ligniculture Québec Web site: www.rlq.uqam.ca

PEI Agroforestry Demonstration Summary

PEI Soil and Crop, along with various partners, has established 14 agroforestry demonstration sites in the province. This document provides a brief summary of each.

This summary, as well as more detailed information for most sites (Fact Sheets) can be downloaded on: www.peiscia.ca

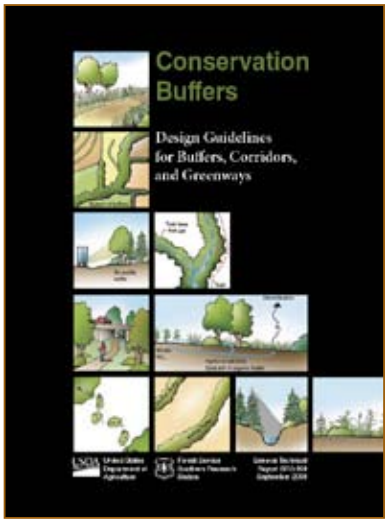
Conservation Buffers: Design Guidelines for Buffers, Corridors, and Greenways

This publication provides over 80 illustrated design guidelines, synthesized and developed from a review of over 1400 research publications.

Each guideline describes a specific way that a vegetative buffer can be applied to protect soil, improve air and water quality, enhance fish and wildlife habitat, produce economic products, provide recreation opportunities, or beautify the landscape.

This document is published by the United States Department of Agriculture's National Agroforestry Center. It can be downloaded on the Conservation Buffers Web site: www.unl.edu/nac/bufferguidelines/.

It is also available for order as a spiral bound field guide.



Upcoming Events

May 31 - June 3, 2009
11th North American Agroforestry Conference: Columbia, Missouri

The 11th North American Agroforestry Conference entitled "Agroforestry Comes of Age: Putting Science into Practice", will be hosted by the University of Missouri's Center for Agroforestry and the Association for Temperate Agroforestry (AFTA) from May 31 to June 3, 2009, at the Stoney Creek Inn, Columbia, Missouri.

For more information about the Conference, please visit: www.centerforagroforestry.org/events/afta/index.asp

August 23 - 29, 2009
2nd World Congress of Agroforestry
Nairobi, Kenya

This conference is a major event with an expected attendance of 1000. It will take place in Nairobi, Kenya, August 23-29, 2009. The First World Congress of Agroforestry took place in Orlando, Florida, in July 2004.

It is hoped that there will be a strong Canadian presence at the Conference: there will be conference support and attendance by Agriculture and Agri-Food Canada. This conference is expected to focus international attention on agroforestry, as practised in temperate regions of the world, such as North America, Europe, South America, China and Russia, and in tropical and sub-tropical regions of Africa, Asia and the Americas.

Further details about the event is posted on the congress Web site: http://worldagroforestry.org/wca2009

August 31 - Sept. 4. 2009
Bioenergy 2009
4th International Bioenergy and Exhibition
Jyväskylä, Finlande

The Conference will focus on the factors affecting the future of the bioenergy and biobased modern technologies and business solutions, including logistic systems, management, total procurement chains, the effects of the energy markets, the influence of green marketing and other trends affecting forestry, agriculture, industry and climate.

Pour further information: www.finbioenergy.fi/bioenergy2009

The University of Missouri Horticulture and Agroforestry Research Center.

Photos: MU Center for Agroforestry.

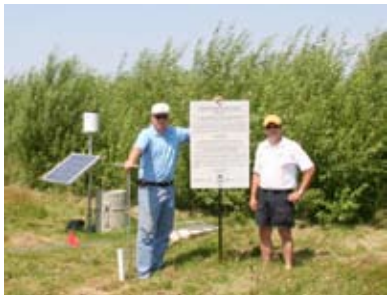
One final thought...

...continued from page 1...

So what is the Agroforestry Divisions's vision for the development of agroforestry in eastern regions of the country? Quite simply, it's a vision of growth. Agroforestry will evolve as a set of land management practices uniquely shaped by the needs of the agricultural producer, as well as by environmental function, regulations, guidelines, social expectations and economics in the region. For agroforestry practices to be successful, they must be driven by local need and initiatives, but also be supported by scientific research and technical advice. This includes Agroforestry Division support in research, information development and extension activities, such as this newsletter. In fact, the Agroforestry Research Unit has been active for a number of years in biomass and willow buffer research in Quebec and Prince Edward Island, and will continue to expand its research activities in the region. Agroforestry must also be relevant to producers and contribute not only environmental benefits but economic ones as well. It does not matter whether you farm in eastern or western Canada; challenges exist for all producers in today's farming environment. Agroforestry must adapt to keep pace with today's farming practices.

We at the Agroforestry Division look forward to continued partnerships and working with AESB Regional Services and others to support agroforestry development throughout the region. The Agroforestry Division is planning to support, through regional partners, a series of regional events across Canada in 2009 to help promote agroforestry practices. Your suggestions for suitable events and advice on needs in research and information development are important. Feel free to contact us at the Division by phone or email. We are always willing to take the time to listen to your thoughts and ideas.

Source: Bruce Neill
Agriculture and AgriFood Canada
bruce.neill@agr.gc.ca



Chris Pharo and Brian J. Murray conducting research on willow buffers in Prince Edward Island. Photo: Bruce Neill.

To Receive this Newsletter

To be notified of the publication of the next issue or this newsletter, please suscribe to the Agri-Réseau Agroforestry mailing list at: www.agrireseau.qc.ca/ OR email Chris Pharo at chris.pharo@agr.gc.ca

Warning:
It may be necessary to upgrade your pdf reader to open newsletter hyperlinks.

Editors: Stéphane Gariépy, AAFC, Quebec Region
Chris Pharo, AAFC, Atlantic Region

Coordinating Editor: Suzanne Campeau, Biologist, M.Sc.

Revision: Isabelle Lamontagne, AAFC
Manon Lavoie, AAFC
Wayne Riley, AAFC

For more information:

Agriculture and Agri-Food Canada
Agri-Environment Services Branch

Quebec Region
Champlain Harbour Station
Room 350-4, 901 Cap-Diamant Street
Québec (QC) G1K 4K1

Telephone: 418-648-3652
Fax: 418-648-7342

Email: stephane.gariepy@agr.gc.ca

Atlantic Region
Room 165
440 University Ave
Charlottetown (PEI) C1A 4N6

Telephone: 902-566-7310
Fax: 902-566-7316

Email: chris.pharo@agr.gc.ca

Web site : www.agr.gc.ca

Photo credits: The three circles on the first page represent, from top to bottom: The Hope River, Prince Edward Island (photo: Lex Vriend, Ducks Unlimited Canada); agroforestery pioneers Bertrand Anel and Aline Hébert in Val-d'Espoir, in the Gaspé Region, Quebec, (photo: Johnny Huntington); blood-root (*Sanguinaria canadensis)* flowers, an understory medicinal plant (photo: Guy Langlais).

ISSN 1918-6967
AAFC Nº: 10903E

Aussi offert en français sous le titre : Bulletin d'information en agroforesterie Québec- Atlantique – Volume 1, numéro 2, Avril 2009