



Agroforestry News from the Atlantic and Quebec

From the Editors

Welcome to this latest edition of Agroforestry News from the Atlantic and Quebec! We are very pleased to report that the readership and distribution list for this newsletter has been growing steadily since its inception in 2008. The feedback received by readers has been very encouraging. Subscribers to the newsletter indicate that it is a good source of information on what is an under-developed discipline in Canada. We have also heard from readers that the newsletter is a great way to learn what others are doing in this area to help promote partnerships. For all who have provided this feedback, we say "thank you."

The feature article in this issue introduces the new emerging agroforestry federation in Europe. The European Agroforestry Federation (EURAFF) was created following a meeting in Paris in December 2011 of representatives from various European countries. EURAFF now has about 250 members from 17 different European countries. EURAFF aims to promote the use of trees on farms as well as any kind of silvopastoralism throughout the different regions of Europe. Amongst others, its first challenge will be to have agroforestry better recognized by Europeans laws, namely by the Common Agricultural Policy (CAP).

In this edition, you will also read a report on the biennial Conference of the Association of Temperate Agroforestry (AFTA) which was held in June 2011 in Athens, Georgia. It was at this conference that the United States Department of Agriculture unveiled its Agroforestry Strategic Framework 2011-2016. As you would expect, the challenges and opportunities identified by this framework are very similar to those faced by us in Canada. The strategy outlines a roadmap which emphasizes partnerships and teamwork. Partnerships are seen as critical in developing agroforestry science and tools and delivering assistance to extension workers and farmers to expand on-the-ground application of agroforestry practices.

The strategy also includes an objective of supporting the exchange of agroforestry technology between the United States and other countries. The strategy recognizes that agroforestry practices have been used all over the world for many years and there is much to learn from others.

In this context, we are pleased to continue to offer this newsletter as a means of exchanging information and encouraging partnerships that will enable agroforestry to play an increasingly important role in creating sustainable agriculture systems in Canada.

We are also pleased to note that the next AFTA conference will be held in Prince Edward Island (PEI) in June 2013. This is very exciting news and will provide a great opportunity to showcase work being done in this region, while providing the impetus and inspiration for additional activity. We hope to see you in PEI in 2013!

Stéphane Gariépy
Chris Pharo

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Feature article

European Agroforestry Federation (EURAFF) established

December 2011 was an important month for European agroforestry. On Friday, December 16, representatives of 12 countries¹ were in Paris, France for the creation of the first European agroforestry body, the European Agroforestry Federation (EURAFF). An initial collaboration had already taken place with the Silvoarable Agroforestry for Europe (SAFE) project from 2001 to 2004 to promote agroforestry in advance of the reforms to Europe's Common Agricultural Policy (CAP) in 2005. Six years later, with new reforms to CAP planned for 2013, the same need exists: the need to join forces in order to have a voice with European government authorities and make collective proposals that will contribute to the development of agroforestry in Europe.

Obstacles to overcome

Agroforestry has long been present in Europe in various forms, but it has declined sharply since the 1950s. That decade was a time of major land consolidation and modernization of agricultural equipment, but also included the creation of CAP, which denied agricultural status to plots of land containing trees and thus triggered the gradual disappearance of trees from fields. Agroforestry is a grey area between agriculture and forestry, and agroforestry plots have too long been considered "illegal," leading many property owners to clear their fields of trees in order to qualify for agricultural subsidies. In addition, the prohibition of grazing in forested areas to allow the forest to regenerate has eliminated many traditional silvopastoral systems.

The last decade, however, has seen greater ecological awareness and recognition of the importance of trees in rural areas. Major advances have been made not only in protecting existing traditional systems, but also in encouraging farmers to start planting again. Today, agroforestry plots hold full agricultural status and are therefore eligible for CAP subsidies, provided that they maintain a low planting density (maximum of 200 trees/ha). Since 2005, the European Union has supported the implementation of agroforestry by offering financial assistance for tree planting, covering up to 80% of the investment.² An increasing number of farmers today are interested in planting trees, but their agroforestry plans are hampered by many persistent uncertainties, such as the complexity and duration of the

process, uncertainty about regulatory aspects, disparate and unsuitable subsidies, lack of guidance, lack of information, and uncertainty about the marketing potential of agroforestry products.

Collective promotion, redevelopment and restructuring

In light of these impediments, it is necessary to join forces in order to exchange technical knowledge and experience and build a network of experts and demonstration sites that will be used to educate and guide farmers throughout the process. At the European level, the primary role of this structure will be to urge European government authorities to support the use of agroforestry and encourage policy makers to remunerate ecological services rendered using agro-ecological techniques such as agroforestry. Agroforestry may not necessarily need to be subsidized in order to thrive, but it should not be treated less well than other production systems that are less sustainable yet receive more generous support. That is one of the main objectives of EURAFF: to give agroforestry the same development opportunities by facilitating access to financial support and simplifying the implementation process.



Agroforestry system

¹ Belgium, Bulgaria, France, Germany, Greece, Italy, Kosovo, Portugal, Spain, Sweden, Switzerland, United Kingdom.

² Articles 36(b)(ii) and 44 of Council Regulation (EC) No 1698/2005, measure 222.

The primary purpose of EURAFF will be to submit joint proposals collectively despite the diversity of the existing agroforestry systems and socio-economic and agricultural backgrounds of the member countries. For example, a consensus will have to be reached on defining the limits of agroforestry. Should short rotation coppice be considered an agroforestry practice, as it is in the United Kingdom? What about lands under lease? If an agroforestry project extends over the medium or even long term, would it be in the farmer's interest to plant trees on land he or she does not own? This situation affects some regions more than others, particularly Belgium's Walloon region, where 70% of farmland is leased. Lastly, agroforestry is not consistently recognized as a scientific discipline by all European countries. In order for agroforestry to develop properly, experts must be trained and this discipline must, therefore, be taught in universities. Many discussions are planned to clarify these elements and possibly to harmonize them among the various member countries.

The new association is facing many challenges. With the new CAP on the horizon, agroforestry seems to be at a crossroads. Because it has the potential to make a substantial contribution to agricultural development in particular, but also to rural development and to society as a whole, agroforestry is drawing more and more attention not only from researchers, but from farmers and government as well. The creation of EURAFF should therefore enable policy makers to make the most informed decisions possible on the role of agroforestry in rural areas.

EURAFF at a glance:

- Name: European Agroforestry Federation
- Structure: Federation of national associations *(Since only three countries have a national association, the existence of a federation will encourage the other countries to create their own national bodies)*
- Established on: December 16, 2011
- Elected members: Stephen Briggs (UK), Christian Dupraz (France), Dirk Freese (Germany), Giustino Mezzalira (Italy), Rosa-Maria Mosquera (Spain), Jeroen Watte (Belgium)
- General meeting: Every two years
- Web site: <http://agroforestry.eu>

Source:

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Agroforestry system - EURAFF

Waves From the Atlantic

A fact-finding mission on non-timber products makes headway

For almost a decade, the New Brunswick forestry industry has been experiencing serious difficulties that have led to plant and sawmill closures. Woodlot owners have also suffered from the effects of this crisis.

To revitalize itself and stimulate the forestry sector, CDR Acadie (the Acadian regional development cooperative) asked CoFNO (the northwestern New Brunswick forestry cooperative) to explore the potential of non-timber forest products (NTFPs) in collaboration with the Experimental Forest of the Faculty of Forestry of Université de Moncton's Edmundston campus (UMCE). In March 2011, a pre-feasibility study on the enhancement of non-timber forest products in northern New Brunswick was presented to cooperatives, economic development organizations, producers and woodlot owners to stimulate the launch of projects in this sector.

In the same vein, a fact-finding mission called "Exploring Non-Timber Forest Products Marketed by Cooperatives" was organized. On September 1-2, 2011, a delegation of 20 participants from New Brunswick travelled to Sainte-Rita (Lower St. Lawrence, Quebec) to meet with the Basques and Girardville solidarity cooperatives (Lac-Saint-Jean, Quebec) for a visit to the Girardville forestry cooperative's facilities. The main purpose of the mission was to facilitate the transfer of knowledge from the Quebec cooperatives to the participants in order to help structure the NTFP market niche in New Brunswick.



Delegation from New Brunswick visiting the Sainte-Rita cooperative (Photo: Amélie Jarret)

During the mission, the delegation was introduced to honeysuckle cultivation. After the delegation returned to New Brunswick, CoFNO took further steps to develop honeysuckle cultivation in the area. A number of property owners showed an interest in the crop at an information session held on December 5. Furthermore,

since honeysuckle is considered an agroforestry product rather than an NTFP, local agricultural stakeholders have expressed an interest in starting an agricultural cooperative to step in and take over this project. Stay tuned for future developments!



Field of honeysuckle in Sainte-Rita, Quebec (Photo: Amélie Jarret)

In parallel with the honeysuckle project, CoFNO is working on a business plan to process an NTFP in northwestern New Brunswick. The NTFP has not yet been identified, but it should be selected in 2012. CoFNO is promoting NTFPs through such activities as initiating its members to Shiitake mushroom cultivation on logs. Workshops are being organized to give a field demonstration of how to achieve an optimal yield.

So keep watching the NTFP sector and new crops in the Edmundston area in northwestern New Brunswick because things are on the move!

To learn more, contact Amélie Jarret, Project Officer, Experimental Forest of the Faculty of Forestry, Université de Moncton, Edmundston Campus (NB)

www.umoncton.ca/umce-foresterie

or Robert Ritchie, President, CoFNO

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Source: Amélie Jarret, UMCE

Evaluation of willow varieties for riparian buffers and biomass production in the Atlantic region

Willow is a versatile woody plant that has potential as a feedstock for bio-energy or for use as bio-filters in riparian buffers. In short rotation intensive culture (SRIC), willows are planted at a stand density of 12,000-18,000 plants per hectare. In riparian buffers, willows are planted in double rows spaced 2.5 metres apart with in-row spacing of 0.75 centimetres with a planting density of 8000 plants/hectare.

There is limited information or data on performance of willow varieties in the Atlantic region. Trials in other regions have shown significant growth variation among different varieties, and yield has an impact on the economic feasibility of willow bio-energy systems. The objective of this project was to demonstrate and determine adaptation and yield potential of introduced and native willow varieties in the Atlantic region.

Plant material was sourced from Agriculture and Agri-Food Canada's (AAFC) Agroforestry Development Centre, Michele Labrecque at the Institut de recherche en biologie vegetale (IRBV), Alex Mosseler at the Atlantic Forestry Centre of Natural Resources Canada's Canadian Forestry Service and from the State University of New York (SUNY). The trial was arranged in a randomized complete block design (RCBD) with four replications. Each varietal plot contained 27 trees with an overall density providing each plant with a growing area of 0.875 m². Hardwood cuttings were hand planted into the plastic mulch using a dibble to pre-form the planting hole. All plants were coppiced in the fall (November) of 2008.

The trial was measured in December of 2011. Five measurement trees in each plot were selected, and the height of main stem, number of stems per plant and total fresh weight were determined in the field and recorded. A sample from each harvested tree in a plot was dried at 70°C to constant mass and then weighed to the nearest gram to determine moisture content at harvest. Plant dry weight was calculated using fresh weight and measured moisture content. Productivity (dry matter, tonnes/hectare) was calculated by taking into account the density of the plantation and the dry matter of biomass of each sample.

Results

In this trial we have demonstrated that selection of willow variety will have a significant impact on biomass production in Prince Edward Island. The best performing varieties in this study were SV1, 9870-40 and Sx61. Their above-ground biomass at the end of their first 4-year growing cycle was 58, 52 and 48 tDMha⁻¹, respectively. These values correspond to annual yields of approximately 13 and 14 tDMha⁻¹, which are significant considering that they were obtained during the establishment phase of the plants and in the absence of fertilization. Individual plant mass and biomass yield of all varieties tested are shown in the figures on page 6. Generally, all the hybrid varieties from the SUNY breeding program are well-adapted to Atlantic region growing conditions;

and, the native species in the trial showed low biomass production. Of the native species tested, *S. discolor* ANF-D1 and *S. eriocephala* BRI-E2 were the best performers. Several varieties, particularly Charlie, Pseudo, Hotel and Acute had very poor performance and should not be planted in the Atlantic region.

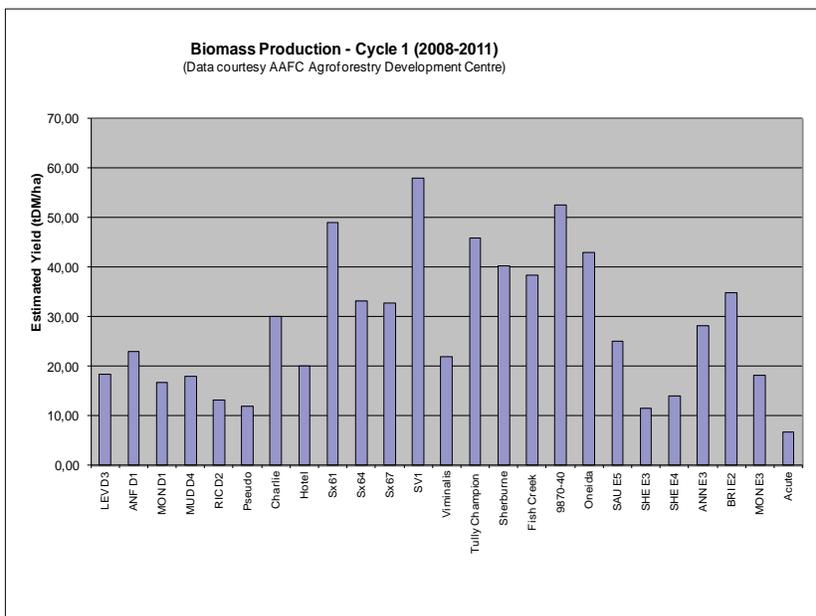
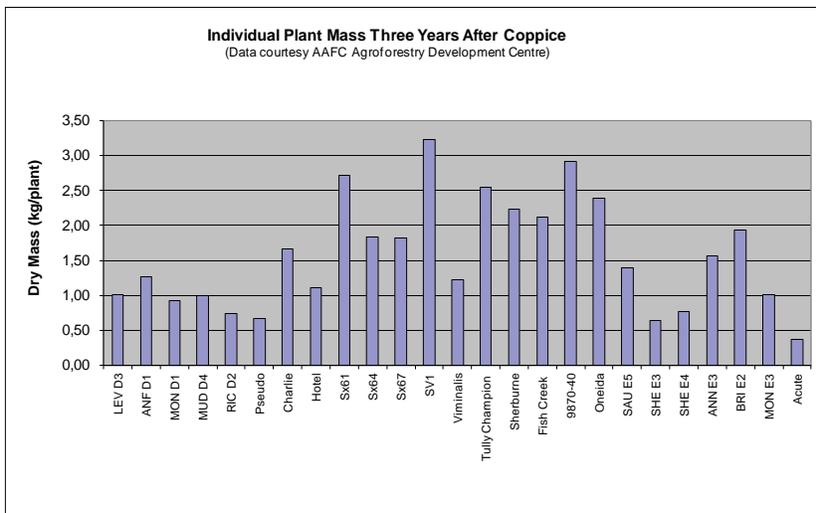
Table 1: Origin of willow varieties planted in PEI trial.

Name	Species/Hybrid Parentage	Origin
LEV D3	<i>S. discolor</i>	CFS - Quebec
ANF D1	<i>S. discolor</i>	CFS - New Brunswick
MON D1	<i>S. discolor</i>	CFS - Quebec
MUD D4	<i>S. discolor</i>	CFS - Ontario
RIC D2	<i>S. discolor</i>	CFS - Ontario
Pseudo	<i>S. alba</i>	Ontario
Charlie	<i>S. alba</i> x <i>S. glatfelteri</i>	Ontario
Hotel	<i>S. purpurea</i>	Ontario
Sx61	<i>S. miyabeana</i>	IRBV - Quebec
Sx64	<i>S. miyabeana</i>	IRBV - Quebec
Sx67	<i>S. miyabeana</i>	IRBV - Quebec
SV1	<i>S. dasyclados</i>	IRBV - Quebec
Viminalis '5027	<i>S. viminalis</i>	IRBV - Quebec
Tully Champion	<i>S. viminalis</i> x <i>S. miyabeana</i>	SUNY - USA
Sherburne	<i>S. sachalinensis</i> x <i>S. miyabeana</i>	SUNY - USA
Fish Creek	<i>S. purpurea</i>	SUNY - USA
9870-40	<i>S. sachalinensis</i> x <i>S. miyabeana</i>	SUNY - USA
Oneida	<i>S. purpurea</i> x <i>S. miyabeana</i>	SUNY - USA
SAU E5	<i>S. eriocephala</i>	CFS - Quebec
SHE E3	<i>S. eriocephala</i>	CFS - New Brunswick
ANN E3	<i>S. eriocephala</i>	CFS - Quebec
BRI E2	<i>S. eriocephala</i>	CFS - New Brunswick
MON E3	<i>S. eriocephala</i>	CFS - Quebec
Acute	<i>S. acutifolia</i>	AAFC - Saskatchewan

There was limited evidence of insect and disease damage in the trial. European corn borer was found on a number of individual trees, but was not dominant on any one variety or caused serious problems. There was no evidence of potato leafhopper (*Empoasca fabae*). Varieties of the native willow *S. eriocephala* were infested with poplar and willow borers (*Cryptorhynchus lapathi*) but no economic damage was evident. In addition to the lack of serious insect problems, there were also no severe disease infestations, with only *Melampsora* rust found at low levels on a few varieties.

This and other projects conducted in Prince Edward Island in recent years have demonstrated that climate conditions in this region are favorable for willow biomass production and that high yields can be attained. The identification of new varieties well adapted to Atlantic region climatic conditions is important to increase the number of varieties that could be used by farmers and land owners interested in woody biomass production. Another 3-4-year rotation will likely be required to fully evaluate productivity and pest resistance in the long term.

Source: Bill Schroeder, AAFC Agroforestry Development Centre



PEI Harvests its First Crop of Willow

A field demonstration was held in December 2011 to show how willows, planted on high slope land, can be harvested using a mechanical harvester.

Hosted by Agriculture and Agri-Food Canada (AAFC), in partnership with the Prince Edward Island (PEI) Department of Agriculture and Forestry, and the PEI Soil and Crop Improvement Association, the demonstration took place at the farm of Martin Visser in Shamrock, PEI.

The province has approximately 11,000 hectares of high slope land that cannot be used for row crop production.

“There are a lot of areas not suitable for farming in the province, so an efficient mechanical harvester opens the door to new land-use opportunities for farmers,” said Tyler Wright, with the PEI Soil and Crop Improvement Association in Charlottetown.



Demonstration (Photo: Chris Pharo)

The demonstration was part of a larger project on PEI to evaluate the use of hybrid willow to protect surface and groundwater from nitrate contamination and provide a source of renewable energy.

Chris Pharo, with the AAFC office in Charlottetown, sees willows performing two functions on the farm – environmental protection and renewable energy.

“The willows absorb nutrients from fields and protect groundwater from pollution by taking up fertilizer not used by crops,” said Pharo.

“As a biomass, willows, have heating value comparable to many hardwoods, and can be harvested for fuel to reduce fossil fuel consumption on the farm.”

“The most logical use for the willows is as a fuel on the farm for heating and hot water,” said Wright.

The PEI Food Technology Centre is among the interested parties in exploring the potential of willow.

“The Food Technology Centre people took a sample of the willow chips to see if they can be turned into ethanol,” said Wright.

“If this concept is ever going to fly on PEI we need something that is farm scale and works with existing equipment.”

The Ny Vraa Type 192 willow harvester developed in Denmark was put through its paces in the demo, cutting and chipping willows in one operation.

AAFC has been working with the PEI Soil and Crop Improvement Association since 2006, demonstrating the value of willows on the farm.

The willows can be harvested every 2-4 years and are cut into chips by the harvester for burning as a fuel in farm buildings.

The cost of the willow cuttings for planting runs from 20 to 40 cents per cutting. Plant densities range from 12,000 to 18,000 cuttings per hectare.

“Willows are being tried out on several farms and 24 different willow species are being tested to see which does best in PEI conditions,” said Pharo.

The long term goal is to encourage some farm operators to adopt the burning of wood chips to displace fossil fuel on the farm.

“It would be nice to see someone step up and make wood pellets out of the willow biomass,” said Wright. “Anything that would reduce nutrients from the system is a goal of everyone.”

Source: Chris Pharo, AAFC



Willow harvest (Photo: Chris Pharo)

In the wind from Quebec

Contribution of multifunctional agroforestry systems to the climate change adaptation capacity of agroecosystems

Multifunctional agroforestry systems are likely to be more resistant than traditional agricultural systems to the expected changes in the future regional climates. Such systems help counteract the harmful impacts of wind, reduce thermal amplitude, augment water infiltration into the soil, encourage beneficial predator and pollinating insects, and increase biodiversity. Multifunctional agroforestry systems are not well known in Quebec, but they may offer interesting potential for responding to expected climate change impacts.

Objectives

The goal of this project is to determine the potential contribution of multifunctional agroforestry systems to the adaptive capacity of agroecosystems to climate change. In particular, the project will consist of assessing the impact of such systems on the production of ecosystem services that minimize the negative consequences of climate change, with particular attention paid to the effect of the anticipated largest climate fluctuations.

Approach

Relevant agroforestry options in the operational context of agricultural enterprises will be selected. To maximize the scope of the project results, contrasting agroforestry land uses (e.g., fast versus slow growing trees) will be compared. The choice of these land-use options will be influenced by the climate change scenarios for the 2050 horizon. The project will assess the role and impact, within the context of climate change, of the establishment of multifunctional agroforestry systems on biodiversity, hydrology, microclimate, tree and crop productivity, and the production economics. This will involve — depending on the variable — an exhaustive review of the literature concerning climate change impacts, collection of field data, and the development of various models.

Expected results

This study will provide different results depending on the land-use options selected:

- An inventory and quantification of the ecological services delivered by the chosen multifunctional agroforestry systems;
- Integration of the results into models that will link the selected systems and their impacts on the different variables of biodiversity, microclimate and hydrology as well as economic aspects such as the yield of forested and agricultural sections;
- A calculation of the monetary benefits associated with different land-use types;

- Recommendations of agroforestry models for agricultural lands in Quebec.

Various activities will lead to the widespread dissemination of project results (e.g., fact sheets, seminars, reports, etc.).

Lead scientist:

- Alain Olivier, Université Laval

Other participants:

- Agriculture and Agri-Food Canada (AAFC)
- Institut de recherche en biologie végétale (IRBV)
- Institut national de la recherche scientifique, Centre Eau Terre Environnement (INRS-ÉTÉ)
- Ministère des Ressources naturelles et de la Faune (MRNF)
- Université du Québec à Montréal

Impact

The project will produce an assessment of the productivity and ecological services of agroforestry systems under various land-use options for agricultural land. It should give policy makers the tools to guide the implementation of comprehensive strategies required in both agriculture and forestry to improve the strength of agroecosystems and minimize the negative impacts of climate change on these agroecosystems. Project results will also be of interest to those involved in land-use planning, farmers, those involved in the development of private forests, watershed management organizations, and professionals in the agricultural and forestry sectors.

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Source: Alain Olivier, Université Laval

Strategic Workshop on NTFPs: challenges and solutions

The Agroforestry Committee of the Centre de référence en agriculture et agroalimentaire du Québec (CRAAQ) hosted a strategic one-day workshop on non-timber forest products (NTFPs). The event took place in Quebec City, at the Laurentian Forestry Centre of the Canadian Forest Service (Natural Resources Canada), on November 25, 2011. The workshop was an opportunity for some 30 stakeholders in various fields to exchange views on the future prospects of the NTFP sector. The primary objectives of the workshop were to discuss the sector's issues, validate its needs and identify projects to be developed.

The main solutions identified by the participants as potential means of jump-starting the development of the NTFP sector included the following: develop ways to encourage networking (e.g., directory of stakeholders, virtual library, regional round tables); conduct exhaustive market research on NTFPs with high commercial potential (e.g., forest mushrooms); increase knowledge of the ecology of NTFPs (e.g., optimal biotic and abiotic conditions for their development); create development strategies that promote the harmonization of NTFP harvesting with other forest uses; create an NTFP-specific strategic funding program; and further develop collective and professional marketing, focusing on export products, the industrial model, and certification. The main consensus of the group of stakeholders who participated in the workshop is that a consultation committee should be created to galvanize the emerging NTFP sector. The committee would be made up of industry stakeholders and representatives of various government departments, and its primary mandate would be to identify the main actions to be taken to structure NTFP production and promote business partnerships. The workshop boosted inter-sector networking, which is constantly on the rise, while significantly influencing current views of the future of NTFPs in Quebec.

Source: David Rivest, AAFC

News from the CRAAQ Agroforestry Committee

The objectives of the Agroforestry Committee of the Centre de référence en agriculture et agroalimentaire du Québec (CRAAQ) are to promote collaboration between stakeholders developing agroforestry practices and to ensure the dissemination and transfer of information. The Committee continued to be very active in 2011. It published a document on agroforestry-related terminology, held a forum on non-timber forest products (see the article about the event on this page), organized a field trip, and launched projects for compiling a directory of agroforestry expertise and building a network of demonstration sites. The directory is already available online and the development of the demonstration site network will continue in 2012.

For more information, visit:
<http://www.craaq.qc.ca/comite-agroforesterie>.

Source: Stéphane Gariépy, AAFC and
Joanne Lagacé, Project Leader, CRAAQ

Echoes From Around the Planet

Woody Biomass Burner Project

A research initiative underway at the Agriculture and Agri-Food Canada (AAFC) Agroforestry Development Centre (ADC) in Indian Head, Saskatchewan is studying sustainable production of biomass in agroforestry systems. The pilot project focuses on using woody biomass, which is a significant renewable biomass source on Canada's agricultural landscape, as an energy source and will assist with the reduction of greenhouse gas (GHG) emissions. This biomass system is the first of its kind at AAFC, and is the product of over six years of planning and research.

A woody biomass boiler has been set up and commissioned to supply heat to some of the buildings located at the ADC. The biomass boiler uses fuel supplied from trees and shrubs grown in agroforestry systems, such as the native willow rings around wetlands and willows grown by the ADC. These willows are a renewable energy source that can be harvested every 3 to 5 years and grow back without replanting. The willows are harvested using a modified baler that cuts and bales the willows in a single pass. The bales are then stored for 6 months to dry before they are ready to be processed. A Haybuster tub grinder is used to convert the bales into wood chips that are transferred to the storage silo using a blower. The chips become the fuel for the biomass furnace. The biomass boiler will offset 90% of the natural gas used in the existing heating system.



Biomass Boiler (Photo: Ian Pickering)

The biomass heating system has been operating for a short time, with initial findings indicating the biomass boiler is performing at 94% efficiency. There has also been a significant reduction in the amount of natural gas used at the ADC. Employees are excited about the biomass heating system and are pleased to be a part of reducing the carbon footprint of the ADC. The sustainable production of the woody biomass that will supply fuel to the biomass boiler is also something that the employees take pride in.



Biomass Heating System
(Photo: Ian Pickering)

Experience and knowledge gained from this project will eventually be transferred to agricultural producers and small rural communities across Canada as an alternative renewable energy source and a method to help reduce GHG emissions. Landscape benefits will also be seen as wetlands and their surrounding native willow rings can be preserved when incorporated into a woody biomass system.

This pilot project is just one innovation among many at the ADC, which has been planting trees for 110 years. The ADC promotes the environmental and economic benefits of integrating trees with agricultural systems through research and extension.

Source: Ian Pickering, AAFC

The 12th North American Agroforestry Conference in Georgia

Four Agriculture and Agri-Food Canada (AAFC) staff from the Agroforestry Development Centre (ADC) attended the 12th North American Agroforestry Conference (NAAC) in Athens, Georgia in June 2011. The conference, which is held every two years, was sponsored by the Association For Temperate Agroforestry (AFTA), and ran from June 4-9 at the University of Georgia. There were keynote addresses and presentations and field tours of farms in northeastern Georgia where participants could see alley cropping practices at Spring Valley Eco Farms (Figure 1) and silvopasture systems at Nature's Harmony Farm (Figure 2) and Grove Creek Farm (Figure 3).

Figure 1. Alley cropping research at Spring Valley Eco Farms: vegetables planted between hedgerows of the leguminous shrub *Amorpha fruticosa* (Photo: John Kort)



Figure 2. Nature's Harmony Farm uses silvopasture as a tool to manage livestock (hogs, cattle, turkeys, rabbits) with trees (Photo: John Kort)



Figure 3. Silvopasture at Grove Creek Farm; managing cattle with trees (Photo: John Kort)

AAFC's former Assistant Deputy Minister AESB, Jamshed Merchant, delivered one of the three keynote plenary speeches. The other keynote speakers were United States Department of Agriculture (USDA) Deputy Secretary of Agriculture, Kathleen Merrigan and Dr. Dennis Garrity, Director General of the World Agroforestry Centre, headquartered in Nairobi, Kenya (Figure 4). Ms. Merrigan and Mr. Merchant announced that the two agriculture departments would draw up a Memorandum of Understanding (MOU) to improve agroforestry partnerships between Canada and the US. Deputy Secretary Merrigan also announced that the USDA will be putting more emphasis on agroforestry, which was highlighted by the presentation at the conference of the department's "Agroforestry Strategic Framework, 2011-2016: Enriching our lives with Trees that Work." The presentation was made by Andy Mason, Director of USDA's National Agroforestry Center. From these announcements, we can expect to see an increased level of cooperation with the US.



Figure 4. Plenary session speakers and hosts (L-R): Bruce Wight, Dennis Garrity, Kathleen Merrigan, Henry de Gooijer, Jamshed Merchant and Andy Mason (Photo: John Kort)

It was great to spend some time meeting and comparing notes with North American and international partners. In particular, AAFC-ADC staff spent some quality time with their counterparts from the USDA National Agroforestry Center (Figure 5), as well as with Dr. Garrity of the World Agroforestry Centre.

Canadians were well represented at the conference, and excellent research and other agroforestry projects were presented by Canadians and Americans. After the conference, a number of the projects were turned into full papers for the peer-reviewed journal *Agroforestry Systems*, which will release a conference-based Special Issue in 2012.

Now – here is the exciting news! Although the conference was a good one and Georgia is a beautiful and hospitable state, the 13th NAAC should be one to remember as it will be held in Charlottetown, PEI! At the conference, AFTA held its general meeting and the board requested that interested parties should prepare proposals to host the next conference. Some hallway discussions by the Canadian contingent were followed up with telephone calls and, by August 2011, the AFTA

board had received and approved a proposal for Charlottetown. The NAACs are purposely held in different places in Canada and the US to highlight and showcase what agroforestry looks like on different landscapes. It has been held at Guelph, Ontario; Ithaca, New York; Quebec City, Quebec; and as far west as Saskatchewan, Idaho and Oregon. PEI will be the farthest east that the conference has been held, representing a great opportunity for those involved in agroforestry in eastern Canada to show their stuff. The committee organizing the conference includes AAFC staff as well as other PEI committee members.

AAFC-ADC staff presented the following talks and posters at the conference:

- John Kort – Agroforestry's role in snow distribution and management; Biomass species evaluation; The use of flowering agroforestry species by bees.
- Henry de Gooijer – Canadian/US update: The emerging visibility and role of agroforestry in national and international climate change strategies; Conquest, a 75-year legacy in agroforestry plantings.
- Gary Bank – Analysis of the state and trend of trees in the agricultural landscape of Alberta over 60 years.
- Laura Poppy – Innovative agroforestry systems: Ecobuffers and more.
- Bill Schroeder – Willow buffers for biomass production and riparian protection (Bill did not attend the conference but Laura and Henry presented his poster).
- Joey Pankiw – University of Regina Master's student under the co-supervision of John Kort also presented during the conference.

Source: John Kort, AAFC



Figure 5. Staff from the USDA National Agroforestry Center and AAFC Agroforestry Development Centre meet to discuss joint agroforestry initiatives. (L-R): Andy Mason (NAC manager), Jim Chamberlain, Henry de Gooijer (ADC manager), John Kort, Bruce Wight, Gary Bank, Jamshed Merchant, Mike Dosskey and Laura Poppy (Photo: John Kort)

Publications and Resources

Conservation Buffers: Design Guidelines for Buffers, Corridors, and Greenways now available in French

The French version of the guide Conservation Buffers: Design Guidelines for Buffers, Corridors, and Greenways is now available. This guide 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 publication is available for order in English and Spanish as a spiral-bound field guide, and as a downloadable PDF in English, Spanish, Simplified Chinese, Korean, Mongolian and – most recently – in French, from the website: <http://www.unl.edu/nac/bufferguidelines/>.

To obtain a French version of the field guide, please contact:
Sylvie Tailleux
Agriculture and Agri-Food Canada
By phone: 418-648-4773
E-mail: sylvie.tailleux@agr.gc.ca

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To Submit an Article

We invite you to submit your short news, publication or website announcements, resources relevant to agroforestry for publication in the newsletter.

Please send your material by email to the editors, Stéphane Gariépy: stephane.gariepy@agr.gc.ca or Chris Pharo: chris.pharo@agr.gc.ca

Digital images must be good quality and high resolution, and provided as separate files (jpg format). Please provide a caption or descriptive title for each image and indicate the name of the person and organization to which the image should be credited.

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