



Alternative Land Use Services
Growing a healthier environment

June, 2010

ALUS E-Newsletter



**Join us
this August
19th in
Norfolk
County, to
celebrate the
2010
International
Year of
Biodiversity
Visit
[www.norfolk
alus.ca](http://www.norfolkalus.ca) for
more
information**

Greetings from Norfolk ALUS,

We've just wrapped up another successful spring planting season! With over 90 farm families and 700 plus acres of marginal farmed land converted into ecological services, we are beginning to think our policies have been refined to the point that we know the ALUS mechanism and principles are an effective way to engage rural communities in restoration of our natural capital. Ontario is planning for continued explosive growth rates, particularly around the GTA, and with millions more people slated to settle here in the next 20 years landscape management issues are at the forefront of conservation concerns. Particularly, concerns with water quality issues are front and centre in more and more communities we visit. The huge potential problems that society faces with climate change and climate change adaptation can only mean we need more, not less natural capital, and engagement from more members of society.

The ALUS combination of community leadership and incentive mechanisms looks increasingly more relevant, because, quite frankly, what we are doing today as a society does not appear to be enough in facing the challenges to come. There is much work to be done, but I believe our first step is to recognize the role that rural and agricultural communities can play in battling climate change and beginning the process of climate change adaptation. To that end, I will be including a section in the next few newsletters that will educate both farmers and the general public on the important role that farming communities can play in fighting climate change and keeping food on the table for all of us. As I mentioned at a recent OFA board meeting that I was fortunate enough to have been invited to, it is the farmer's time to shine as key solution providers in resource management and climate change mitigation. Farmers have the land and the skills that society will require as we go forward, hopefully you'll find the information pieces useful.

Agriculture and Greenhouse Gases – a Primer

Canadian agriculture occupies a large and important role concerning the Canadian environment. Farm communities are the chief stewards and managers of extensive natural resources. More specifically, agriculture in Canada has a unique relationship with regards to greenhouse gases (GHG). On one hand, the agriculture sector may be affected by climate variability, and, on the other hand, a portion of GHG emissions originate from various agricultural production and management activities. The agriculture sector has the potential to be part of the solution to adverse climate changes by promoting carbon sequestration and by adopting other greenhouse gas reduction strategies.



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It is generally acknowledged that agricultural activities are responsible for about 10 percent of Canada's GHG emissions. Nitrous oxide (N₂O), methane (CH₄) and carbon dioxide (CO₂) are the primary greenhouse gases released, accounting for 62 percent, 34 percent and four percent of agriculture's total emissions respectively.

The nature of the agriculture industry allows for reduction of GHG emissions by encouraging sustainable management practices that are economically viable and environmentally sound. Many participants in agriculture are currently developing tools that can reduce or sequester GHG emissions and provide other environmental benefits like clean water, healthy soils and wildlife habitat. Farmers can alter the carbon cycle and actually promote the storage of carbon in soils by simply choosing different rotation of crops, tillage practices, fertilizer applications and so on. This process called carbon sequestration actually removes excess CO₂ from the air stores it in the soil in what is called a carbon sink.

Experts predict that Canadian agricultural cropland will become a net sink of CO₂ by 2010, if current trends of conservation tillage and no-till are actively promoted.

Reductions in other greenhouse gases can be facilitated by adopting numerous other practices like improved manure management, fertilizer management and better feed analysis. These help farmers use their resources more efficiently while helping to reduce methane, nitrous oxide and carbon dioxide emissions.

On the marginal lands, ALUS projects can also have a significant effect on sequestering carbon. All ALUS projects take marginal farmed land and convert them to ecological services. The establishment of vegetative cover through ALUS projects sequesters carbon at varying degrees. These projects also have the additional benefits of creating wildlife habitat, cleaner air and cleaner water.

The farmer's role is clear as our knowledge grows, they can effectively sequester carbon on both cropped and marginal lands and effectively begin the adaptation process that will make agriculture more resilient as the changing climate begin to effect traditional cropping practices. A win/win scenario could unfold with agriculture providing climate change solutions while effectively adapting to keep food on Canadian's tables.



Richard Leitear, Norfolk County farmer standing in his Tallgrass Prairie field

Information for this piece was sourced from the Good Management Practices: Greenhouse Gases and the Canadian Beef Industry which can be found at www.cattle.ca

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Norfolk ALUS, Next Steps

Now that the planting season is over, we will be turning our attention to refining some of our processes.

1) The ALUS Farmer Liaisons are out visiting with participants, providing extension services and assistance with management issues or questions that crop up.



2) An ALUS tour has been scheduled for **August 19th, 2010**. Please see attached flyer for more information on the event. ALUS tours provide participants with an excellent opportunity to view the contributions our farmers are making through their project sites. In addition to the Demonstration Farm Tours, a series of Twilight Tours has been scheduled for the end of July. Twilight Tours provide local farmers with an opportunity to learn about management options on their project sites, learn from the experiences of other farmers participating in ALUS, and to compare notes and improve our management as time goes on. These tours typically occur in early evenings to accommodate busy farming schedules.

3) One of our key ALUS principles, accountability, has increasingly come to the forefront as a secret to our success. Third party verification of our project sites has always given our funding partners confidence in the ALUS project. We aim to solidify the annual ecological value of our sites by going to a second and third tier verification process. The idea is no longer just to verify acreage planted, but to provide verification of the *value* of ecological flows generated by ALUS project sites. This verification will build upon important work done across North America on the economic value of natural capital. The payoff? We can now begin to consider the restoration of the environment as valuable economic activity, not a drag on government coffers. The environment, and those that can contribute to its wellness, will begin to have more relevance as we develop this evidence. We've always thought ALUS was an "all hands on deck" approach to solving environmental issues, placing real value on natural capital is the first step to widespread, community based sustainable ecosystem solutions.



**Youth Norfolk Environmental Stewardship Team
installing Bluebird boxes on the Peacock Farm**