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Focus on the Future

PEI ADAPT Council Annual General Meeting and Conference
Friday, March 13, 2009
Rodd Charlottetown Hotel
Charlottetown, Prince Edward Island

Since 1999, the PEI ADAPT Council has been a 'pathfinder' for new ideas and sustainability. This conference will feature presentations of successful, innovations occurring across Canada. It is an opportunity to capture the inspiration of the moment, network with progressive leaders and focus on the emerging issues that will define the future of agriculture and agri-food on Prince Edward Island.

Keynote Speakers:

- Joshua Herbin, Nova Scotia Agri-Innovation Award Winner
  'Innovation and the Future of Agriculture in Atlantic Canada'
- Wayne Roberts, Toronto Food Policy Council
  'No-Nonsense Guide to World Food:
  Understanding the Food System and How it Works'
- Laura Rance, Editor Manitoba Cooperator
  'New Ideas for Agriculture'
- Steve Thompson, BC Agr. Council
  'Cooperatives and Collaboration Models of Success'

To Register call: The PEI ADAPT Council: 368-2005; or email adapt@pei.aibn.com

Crop Husbandry Saves Input Costs

By: Laura Rance

(Editors Note: Laura Rance, is one of the keynote speakers at PEI ADAPT's upcoming AGM/Conference; March 13.)

What a difference a year makes.

Last year, as the province's agricultural industry gathered in Brandon to celebrate Manitoba Ag Days, the commodity markets were, in the words of one market analyst, "taking off like a homesick angel."

Farmers were fighting the urge to produce at all costs in a bid to cash in on the heyday. The 500 or so exhibitors selling everything from seed to harvesting equipment were more than willing to help produce more, produce easier or to fight off the annual onslaught of weeds or insects.

Well, that homesick angel has fallen. The mood as an estimated 35,000 people made the rounds at this year's show was a little more subdued.

So were the market analysts. Instead of "the sky's the limit" market outlooks, farmers this year were hearing predictions of more volatility, but generally sideways pricing trends.

In short, nobody really knows what's going to happen to the price and yield side of the equation. Those outcomes depend on factors such as international financial markets and the weather over which farmers have no control.

About the only thing farmers can control is their costs. And if the turnout at some of the seminar sessions is any indication, you could say the hottest new "product" at this year's Ag Days didn't come in a box. It is good, old-fashioned crop husbandry.

"Husbandry" is somewhat of an outdated term, but farmers like Colin Rosengren of Midale, Sask., prefer it to its modern version -- "agronomy."

"Agronomy" is too often used interchangeably with "technology," the 30-something farmer told a standing-room-only crowd. It's not that he shuns technology on his 4,500-acre mixed grain and oilseed farm. Far from it.

He's talking about "techniques" that harken back to the very beginnings of time; strategies that are helping him use technology more strategically and reduce his reliance on costly inputs.

In the natural environment, the soil is never left exposed to wind and water erosion. Rosengren, like thousands of farmers across the Prairies, stopped tillage on his farm ages ago.

Another thing Mother Nature doesn't do is monoculture. "And there's a reason," he said. "If we add diversity, we add stability."

Five years ago, Rosengren tried a move away from monoculture cropping. He sowed peas and canola in the same field. Many predicted one crop would simply choke out the other.

Besides, "what do you spray that with?" was a commonly asked question. Different products are specified for different crops, and they aren't always compatible.

But that's only a problem if you have to spray. Rosengren's experience with intercropping is that two species in the same field out-compete the weeds and confuse the insects that drop in, planning to feed on one crop or another. Some of his fields don't receive pesticides at all. He's also found the nitrogen-fixing attributes of legumes such as peas reduce his need for fertilizer.

Care must be taken to choose varieties that mature at the same time and at roughly the same height. But because the dense canopy reduces seed pod shatter, he is able to save a step by cutting and harvesting these fields in one pass. Normally, fields are cut and left to dry before harvesting.

Back at the yard, Rosengren empties the harvested crops into a modified drum roller that separates and augers the peas and canola into different bins.

Instead of suffering a yield penalty, Rosengren has experienced "over-yielding" -- the two crops combined produced more yield than either crop individually. Combine that with the reduced production costs, and he's seen benefits that ranged from $6,500 to $28,000 per quarter section over the years. He's expanding his intercropping to include other crop combinations.

"Can you see anything else at this show that gives you 20 per cent more yield while spending less money?" he asked his audience.

Martin Entz, a cropping systems researcher at the University of Manitoba, has long argued farmers can produce at least some of their own nitrogen fertilizer through rotations, zero tillage and other practices that enhance the soil's ability to convert stored nitrogen into a form that can be taken up by plants.

He told his audience last week at Ag Days the next natural progression beyond zero-tillage and intercropping is towards perennial cropping systems. Although their commercial viability is still at least a generation away, perennial wheat is now growing in three research plots in the province as part of a collaborative project with the Land Institute in Kansas. Farmers may indeed find the path to profitability by following husbandry tips offered by the best agronomist around -- the natural environment.

Laura Rance is editor of the Manitoba Co-operator. She can be reached at 792-4382 or by email: laura@fbcpublishing.com

Ten Best Green Jobs for the Next Decade

By: Anya Kamenetz; Jan 21, 2009

Massive investments in clean energy promise to keep farmers, urban planners, and green-tech entrepreneurs in business for the next decade. This guide to sustainability focused career paths will help solar-charge your work life.

"It's time to bail out the people and the planet," says Van Jones, author of The Green Collar Economy: How One Solution Can Fix Our Two Biggest Problems. We agree, and this guide to to sustainability-focused career paths will help retrofit and solar-charge your work life.

> **#1 - Farmer**; America has only two million farmers, and their average age is 55. Since sustainable agriculture requires small-scale, local, organic methods rather than petroleum-based machines and fertilizers, there is a huge need for more farmers -- up to tens of millions of them, according to food guru Michael Pollan. Modern farmers are small businesspeople who must be as skilled in heirloom genetics as marketing.

Schools: Nova Scotia Agriculture College's Organic Agriculture Centre of Canada, Sir Sanford Fleming College in Ontario, University of Vermont: Center for Sustainable Agriculture; Stone Barns Center For Food & Agriculture in New York State; University of Oklahoma: Kerr Center for Sustainable Agriculture; Evergreen State College: degree in Sustainable Agriculture.

Related Careers: Urban Gardener; Farmers Market and CSA Coordinator; Artisanal Cheese makers; and Other Food Producers.

See the full story at: www.fastcompany.com/articles/2009/01/best-green-jobs.html

Looking for Farm Apprentices?

Many farms are interested in finding willing labour to work during the summer months in exchange for room and board. It seems like a simple idea, but finding the right person and then making it work can offer more challenges than anticipated.

Two PEI workshops are now being offered to help farms create productive and positive apprenticeship programs. (funded in part by the PEI ADAPT Council, Agri-Futures Nova Scotia, and Agriculture and Agri-Food Canada.)

Led by Rowena Hopkins, a New Brunswick farmer and teacher, the workshop will cover key issues–recruitment, establishing your program, teaching strategies, problem solving and much more. Hopkins has many simple and creative ideas for farmers that are based on her own on-farm apprenticeship program.

The workshops have been organized by ACORN, which is working the with SOIL Apprenticeship program (a national program) to promote farm apprenticeships in Atlantic Canada. ACORN has hired PEI native, Nicole Arsenault, to assist with recruitment and promotion of the program.

"It's important that people who want to learn about farming have those opportunities to stay in our area," said Arsenault. "Up until now, young people have been going to Ontario and beyond to learn and they often don't return here."

ACORN also completed the publication of an apprenticeship handbook, which includes all new resources for the Atlantic Canada region. This book is free for all farms that join the SOIL program. It provides teaching ideas, sample contracts, and many additional resources and contacts. To find out more about the SOIL Apprenticeship program, visit www.soilapprenticeship.org.

Contact ACORN to register for the workshop by calling 1-866-322-2676 or email nicole@acornorganic.org. Cost is just $10:

Billions Face Food Shortages, Study Warns

by: Ian Sample, The Guardian UK

Climate change may ruin farming in tropics by 2100. Record temperatures to become normal in Europe.

Half of the world's population could face severe food shortages by the end of the century as rising temperatures take their toll on farmers' crops, scientists have warned.

Harvests of staple food crops such as rice and maize could fall by between 20% and 40% as a result of higher temperatures during the growing season in the tropics and subtropics. Warmer temperatures in the region are also expected to increase the risk of drought, cutting crop losses further, according to a new study.

The worst of the food shortages are expected to hit the poor, densely inhabited regions of the equatorial belt, where demand for food is already soaring because of a rapid growth in population.

A study in the US journal Science found there was a 90% chance that by the end of the century, the coolest temperatures in the tropics during the crop growing season would exceed the hottest temperatures recorded between 1900 and 2006.

More temperate regions such as Europe could expect to see previous record temperatures become the norm by 2100.

"The stress on global food production from temperatures alone is going to be huge, and that doesn't take into account water supplies stressed by the higher temperatures," said David Battisti, at the University of Washington, who led the study.

Battisti and Rosamond Naylor, at Stanford University in California, combined climate models from the Intergovernmental Panel on Climate Change (IPCC) and historical examples of the impact of heatwaves on agriculture, and found severe food shortages were likely to become more common.

Among the periods they examined was the record heatwave across western Europe in 2003, which killed an estimated 52,000 people and also cut yields of wheat and fodder by a third. In 1972, a prolonged hot summer in south-east Ukraine and south-west Russia saw temperatures rise by between 2C and 4C above the norm, driving down wheat and coarse grain yields for the whole of the USSR by 13%. The disruption affected the global cereal market for two years.

Naylor, who is director of food security and the environment at Stanford, said the study emphasised the need for countries to invest in adapting to a changing climate. To develop new crops to withstand higher temperatures could take decades, she added.

"When we looked at our historical examples there were ways to address the problem within a given year," Naylor said. "People could always turn somewhere else to find food. But in the future there's not going to be any place to turn unless we rethink our food supplies."

The tropics and subtropics, which stretch from the southern US to northern Argentina and southern Brazil, from northern India and southern China to southern Australia, and cover all of Africa, are currently home to 3 billion people. Future temperature rises are expected to have a greater impact in the tropics because the crops grown there are less resilient to changes in climate.

According to the study, many local populations now live on less than £1.30 a day and depend on agriculture. The need for food is due to become more urgent as populations are expected to nearly double by the end of the century.

"When all the signs point in the same direction, and in this case it's a bad direction, you pretty much know what's going to happen," Battisti said. "You're talking about hundreds of millions of additional people looking for food because they won't be able to find it where they find it now.

"You can let it happen and painfully adapt, or you can plan for it. You could also mitigate [climate change] and not let it happen in the first place, but we're not doing a very good job of that."

Naylor added: "We have to be rethinking agriculture systems as a whole, not only thinking about new varieties [of crops], but also recognising that many people will just move out of agriculture, and even move from the lands where they live now."

In many countries, a combination of poor farming practices and deforestation, exacerbated by climate change, may steadily degrade soil fertility, leaving vast areas unsuitable for crops or grazing. In 2007, scientists warned that poor soil fertility meant a global food crisis was likely in the next half-century.

Food Sovereignty Popular Education Tool

"Food for Thought and Action: A Food Sovereignty Curriculum is a remarkably useful popular education tool; designed by Grassroots International and the National Family Farm Coalition.. It offers a practical way to strengthen a growing food sovereignty movement that includes consumers, farmers, environmentalists and faith communities. Building from the experiences of literally millions of grassroots activists worldwide, Food for Thought and Action challenges us to fix our broken food system."
-- Michael Pollan, Author of The Omnivore's Dilemma and The Botany of Desire

The food sovereignty movement is an exciting grassroots movement that has developed internationally in response to the havoc wrought by the current food system, which has left nearly a billion hungry people around the world and millions more are forced from failed farms.

How can we respond to such a massive and urgent problem? The answer, according to small farmers, farmworkers, fishers, consumers, environmentalists and indigenous peoples throughout the world, is food sovereignty. And to generate an informed and vibrant movement for food sovereignty, we must first understand how the food system works, its failures, and the hopeful alternatives that are blossoming throughout the world.

Food for Thought and Action: A Food Sovereignty Curriculum does just that.
The curriculum is divided into four modules: one each for consumers, faith and anti-hunger groups, environmentalists and farmers, all designed to help:
* Understand the ways in which current U.S. agricultural, trade and energy policies undermine the right of communities and nations around the world to determine their own food policies;
* See how food sovereignty and locally based food systems rooted in social justice and environmental sustainability can be practical alternatives to unsustainable industrial agriculture;
* Envision how people can act together across borders to build local food systems and pass fair agriculture, trade and energy policies.

The curriculum is free. You can download one module at a time, the fact sheets or the entire curriculum at http://grassrootsonline.org

Spread the word about this curriculum to others who are concerned about the food crisis and are ready to take action.

Have your say!
You're invited to a 'Foundations Session': A series of consultations hosted by the Rural Research Centre to learn from farmers and rural citizens, the key issues facing rural Atlantic Canada today. Come discuss farm sovereignty, production, distribution, food security, production changes, health and safety regulations, and rural poverty. Thurs. Feb. 26th at the Holiday Inn, Truro (during the ACORN conference) 5-7 pm. To RSVP in order to participate, email Julie Berkshire jberkshire@nsac.ca or call Deborah Stiles (902) 893-6705.