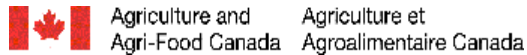




PEI ADAPT Council Agri-Newsletter



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What Makes a Good Piece of Beef?

High-tech Tests Will Give New Insight into Breeding Programs

When it comes to beef cattle, they are more than what they eat.

Just how much more is what the Maritime Beef Testing Society wants to find out with genetic testing that will give the most complete picture yet of beef produced in the Maritimes.

The society is working with John Duynisveld, a researcher with Agriculture and Agri-Food Canada's Nappan Research Farm, in a three-year study that is taking a close look at everything it takes to produce the kind of beef cattle that today's consumers demand.

The project, which has received \$43,500 in federal Advancing Canadian Agriculture and Agri-Food Program funding through the PEI ADAPT Council, Agri-Futures Nova Scotia and the New Brunswick Agricultural Council, is expected to generate the kind of detailed information Maritime beef growers need to be the top in their sector.

Duynisveld is tracking the food intake and care of up to 80 beef cattle from across the Maritimes that have been sent to the Nappan Research Farm, where they are all being fed the same diet right through to finishing.

“Throughout their stay we keep records on how well they grow and do genetic testing for carcass traits including beef tenderness, marbling, rib eye size and a variety of other traits,” he says.

When the cows are finished, they will be sent to Atlantic Beef Products Ltd. a beef slaughter plant in Borden, Prince Edward Island. Through a special cooperative program there, Duynisveld will get back information on grading, amount of bone, meat percentage and other things important to consumers.

“When completed, the project will provide farmers with a picture of the variability in the Maritime beef herd, allowing us to rule out the effect of diet because all animals will be fed uniformly,” he says.

“Then we can look at where we can improve the most from a consumer standpoint in terms of our cattle breeding.”

Duynisveld believes the study will help producers know what genetics to look for in breeding and how to best finish their cattle.

“I see this as an opportunity to really look at where the industry is at. And at how much we can improve things,” Duynisveld says.

Local Feeds May Hold Key to Healthier Beef

Healthy eating is sweeping food market demand, and University of Prince Edward Island researcher Mary McNiven and the P.E.I. Grain and Protein Council are doing all they can to capture a percentage of that market with healthier beef animals raised with local feed products.

With help from the P.E.I. ADAPT Council, Agri-Futures Nova Scotia and the New Brunswick Agricultural Council, which deliver Agriculture and Agri-Food Canada’s Advancing Canadian Agriculture and Agri-Food Program, they are looking at a variety of ways to lower saturated fats in beef and increase omega-3 fats and the healthy form of trans-fat called CLA (conjugated linoleic acid).

CLA occurs naturally in ruminant animals such as cattle and sheep and has a preventative effect on cancer, diabetes and heart disease.

“Although beef fat is more than 50% unsaturated, the fat profile could be improved,” says McNiven. “Many of the healthy fats we are looking at are found in fatty fish, yet many people don’t want to eat fish.”

“But with lowered saturated fats and increased CLAs, beef can be a healthy alternative.”

The project will investigate the effects of treatment of various oilseed feed products, such as flax, soy, and other oil-producing grains, on the cattle as part of their diet. The study will also look at the residue from biodiesel production as part of the diet.

The focus will also be on locally produced feed products rather than imported feed.

“There is potential for strong niche markets, such as Omega 3 beef,” says McNiven. “Instead of having the beef going through the normal slaughter process, you could isolate it and market it as a higher value product.”

The first part of the project will look at the oilseeds themselves and how the nutritional quality can be improved. In this phase, McNiven will simulate digestive processes in the lab using enzymes to determine the best treatments to increase the availability of nutrients to beef from these oilseeds.

In the second phase, she will run two feeding trials using 50 beef cattle each time at Agriculture and Agri-Food Canada’s Nappan Research Farm in Nappan, Nova Scotia.

“This will be a big job, monitoring growth and feed intake, and then slaughtering the animals to look at how much lean meat is produced, and the carcass grade, because it’s important for producers to know the carcass value,” she says.

“In addition to the slaughter results, we will analyze meat samples from each animal in each trial for taste, odor and consumer acceptability. We will also analyze each of these samples for fatty acid profiles, to see if the beef has actually become healthier for consumption.”

Because meat will sometimes spoil more quickly with an increase in unsaturated fats, the project will also look at fat peroxidation (how quickly the meat goes bad).

The Future of Your Workforce Forum

A great opportunity for agricultural employers to learn more about being a great employer is the upcoming 2007 Labour Market Forum, *The Future of Your Workforce*, to be held November 22, 2007, at the Rodd Royalty Inn, Charlottetown. This year’s forum will focus on practical tools and information that employers of all sizes can implement within their businesses. Keynote Speaker, Jen Wetherow, will speak on *Building Trust in the Workplace: How to Be a Great Employer*. Workshops, a trade show, and a panel on *What I look for in a Great Employer* round out the days agenda.

Register on-line at www.peiasc.ca. Register early to ensure a seat at this exciting event!

P.E.I. Agriculture Sector Council www.peiagsc.ca

“Cultivating a skilled sustainable agricultural workforce on P.E.I.”

Organic Friends' E-Zine

This e-newsletter highlights recent up-dates on the Organic Agriculture Centre of Canada (OACC) website. The October 2007 issue includes:

- * Animal Welfare in Organic Systems – a Summary of Four Surveys
- * Assessment of Potential Organic Pollenicides as Apple Blossom Thinners
- * Do-it-yourself (Diy) Faecal Egg Counts in Sheep
- * Organic Forage Crop Production in Atlantic Zones: an Ecophysiological Approach

- * Potential Value of Nurse Crops and Their Influence on the Undersown Swards
- * Suitability of Purebred and Crossbred Dairy Cows for Organic Systems
- * The Use of Indicators to Assess the Sustainability of Farms Converting to Organic Production
- * Towards an Organic System for Cattle Fly Control: a Push and a Pull?
- * The Weed-competitive Ability of Canada Western Red Spring Wheat Cultivars
- * Welfare of Organic Laying Hens

For details and to subscribe to the newsletter go to:

<http://www.oacc.info/FriendsE-zines/october2007.asp>

Uses for the Leftovers of Biofuel Production

By Hillary Rosner; Excerpted from New York Times, 08/09/2007

The baking tins and muffin cups lining the countertops in a corner of Ronald Holser's cluttered laboratory were filled with curious substances resembling angel food cakes and loaves of bread.

But Mr. Holser did not advise eating them. The concoctions were prototypes for biodegradable weed barriers and sticky films intended to hold grass seeds on the ground long enough to germinate.

If Mr. Holser, a research chemist, and his colleague Steven F. Vaughn, a plant physiologist, are successful, they will have found more than ecologically friendly ways to fight weeds and grow grass.

They will have found innovative uses for a byproduct of the production of biodiesel fuel, glycerol. This, in turn, could help transform the biodiesel industry into something that more closely resembles the petroleum industry, where fuel is just one of many profitable products.

"Just like petroleum refineries make more than one product that are the feedstock for other industries, the same will have to be true for biofuels," said Kenneth F. Reardon, a professor of chemical and biological engineering at Colorado State University in Fort Collins. "Biorefining is what the vision has to look like in the end."

Glycerol is used in a variety of products, including foods, soap and dynamite. But as biodiesel fuel production in the United States has risen, the market for glycerol has become saturated.

If scientists like Mr. Holser, who works at the United States Department of Agriculture's research center in Athens, Ga., and Mr. Vaughn, who works at the department's National Center for Agricultural Utilization Research in Peoria, Ill., can expand the number of valuable uses for the syrupy liquid, biodiesel makers could sell their glycerol instead of paying someone to haul it away.....

Glycerol, also called glycerin, is not the only byproduct of biofuel production that is the subject of experiments.

Other researchers are trying to develop technologies and processes that could yield different, more valuable byproducts. And still others are placing their bets on "biorefineries."

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In Ames, Iowa, Victor Lin has created a technology that changes the production process for biodiesel.The production of biodiesel fuel requires a catalyst. Mr. Lin created a catalyst that is safer and easier to use than the one commonly used now, reducing the cost of producing biodiesel and its impact on the environment (requiring less water, for instance).

‘Microtrends’ Offer Many Business Opportunities

By Mary Paulsell; Published Saturday, October 13, 2007,

<http://columbiatribune.com/2007/Oct/20071013Busi010.asp>

Marketing is a fascinating discipline for anyone interested in human behavior. That’s because solid market research is built on a knowledge of how and where we live our lives, why we do what we do and how changes in the world affect our habits and desires.

Market research also includes studying various trends, as well as an evaluation of the business opportunities within those trends. One of the pioneers in this work was John Naismith, who in 1982 published the book "Megatrends" and was one of the first predictors of the transition of the industrial economy to an information economy.

Today’s research in this discipline focuses more on what author Mark J. Penn calls "microtrends" in his new book "Microtrends: The Small Forces Behind Tomorrow’s Big Changes." According to Penn, today’s world is broken into smaller subgroups of people engaged in similar behaviors, which results in smaller - or "micro" - trends that are not as obvious but every bit as powerful as the larger, more homogenous trends of the 1980s and 1990s.

Penn is the market research guru and political strategist who coined the term "soccer moms" for the 1996 presidential campaign. In his research, only 1 percent of the population - or 3 million people - is enough to launch a microtrend that can have major ramifications for business, communities, education, social services or political campaigns.

Here are just a few of his findings:

What Penn calls "extreme commuting," or traveling more than 90 minutes each way to work, is on the rise, nearly doubling in the past decade. For whatever reason - property prices, quality of life, better schools, less crime - people are moving farther and farther away from the metro areas in which they work. There are several possible business opportunities: healthier fast-food meals that travel well, more comfortable car seats, more audio products to help commuters occupy their time and better navigational systems.

The number of Americans sleeping less than six hours a night is increasing. That lack of sleep has an increasingly powerful impact on work productivity, health and marital harmony. Shrewd entrepreneurs are seeing opportunities in this

microtrend, among them pharmaceuticals and herbal supplements to help us sleep. For those wanting to help us stay awake, there are opportunities in the stimulant and caffeine-packed drink industry. One of the most interesting business opportunities is in the creation of nap centers, where people can take naps during the day. One company offers sleep pods in airports and office buildings where, for a fee, you can take a 20-minute power nap to help you through the day.

The number of pet-owning households in America is nearly twice that of the number of households with children. As the baby boomers tire of coming home to their empty nests, they find the sound of paws on the floor comforting. Add to that more women living alone and seeking both companionship and protection, and you have a rationale for the prediction that pet-related industries will gross nearly \$41 billion in 2007. That's not all tied up in kibble and rawhide bones. We're talking holistic health services for pets, day care, high-end clothing, bowls and leashes, dental care, puppy sunscreen and even contact lenses.

Unless you're part of these "small forces behind tomorrow's big changes," you might not even be aware they exist. But like subtle seismic shifts in the earth, they can quickly and dramatically change the landscape. They demand our attention - and our creativity.

Mary Paulsell is the director of the University Center for Innovation and Entrepreneurship at the University of Missouri-Columbia. Reach her at paulsellm@missouri.edu or visit www.missouribusiness.net.

Transform School Lunch into a Vibrant Expression of Education for Sustainability

The Center for Ecoliteracy has launched the Rethinking School Lunch initiative as part of the national effort to restore the connection of farms to communities, meals to culture, and health to environment.

The Edible Schoolyard, in collaboration with Martin Luther King Junior Middle School, provides urban public school students with a one-acre organic garden and a kitchen classroom.

Using food systems as a unifying concept, students learn how to grow, harvest, and prepare nutritious seasonal produce. Experiences in the kitchen and garden foster a better understanding of how the natural world sustains us, and promote the environmental and social well being of our school community.

Children learn about the connection between what they eat and where it comes from, with the goal of fostering environmental stewardship and revolutionizing the school lunch program.

Linking garden and kitchen activities with classroom lessons using ecological principles, students develop a deep understanding and appreciation of how nature sustains life.

Since the inception of The Edible Schoolyard, the school garden movement and the demand for fresh, organically produced foods has spread nationally. We are at a threshold of growth in the shift toward sustainable food systems – these resources may guide your involvement.

The Edible Schoolyard: <http://www.edibleschoolyard.org/homepage.html>

Book Review: "The Omnivore's Dilemma" By Michael Pollan

Reviewed by Tanya Brouwers

What should we have for dinner? is the first and central question in Michael Pollan's *The Omnivore's Dilemma*. The answer is not straightforward. In fact, for the largely overweight North American population faced with more choices than minutes in the day, the question is, quite simply, unanswerable unless accompanied by the latest fad diet book. Pollan attempts to understand this "national eating disorder" by (gasp!) eating.

Four meals, each one as different from the other as a chicken is to a McNugget, are followed from plant to plate. Pollan employs a reverse chronology and begins with the "industrial meal", in this case, McDonalds take-out. This is followed, gratefully, by a meal prepared entirely from the global selections at Whole Foods. The third meal is "beyond organic". Its fixings are entirely local and are derived from sustainable sources; in this case, Joel Salatin's Polyface Farm, "where chickens get to live like chickens". Finally, he creates the perfect meal, one in which (almost) every last item he hunted and gathered himself, right down to the yeast in the bread.

The journey, between and within each meal, does indeed provide insight into the current dilemma. In Pollan's last meal, no question exists as to the origin of even one of the ingredients. It is a rare feast where all costs are fully realized. It is also in direct opposition to the first meal, the one created by industrial design. The cost breakdown of Pollan's burger, eaten on the fly in the driver's seat of his car, is so complicated and ambiguous that it is best if the eater focus on Ronald's happy face on the take-away bag, lest he lose his appetite. And this is precisely the problem with the industrial food chain. As Pollan notes, it is a chain of "forgetting", for to remember the source of that happy little meal would be to change one's eating habits forever.

Most surprising, though, were the two organic sections sandwiched in the middle, which, despite lacking the gore of the outer two layers, provided the most shock value, sentence per sentence. Pollan adeptly forces one to question the definition of "organic". He describes an organically labeled carton of milk, brightly illustrated with "happy cows and verdant pastures". This is smart packaging at its best, considering the cows in Pollan's example are milked three times a day in a grassless, large-scale industrial dairy in the western desert of Southern Idaho. True, they're not full of antibiotics, but where's the grass from that picture on the carton?

The problem, Pollan stipulates, is that many new organic consumers are still industrial consumers. A shopping trip to Whole Foods is never about the inconveniences of seasons or

locale. On the contrary, asparagus from Argentina is obtainable in January and TV dinners are just a quick toss into the basket. Of course, all the items are organic but more importantly they're "convenient" and convenience is not what small-scale, sustainable agriculture is all about.

Pollan experiences these sustainable "inconveniences" first-hand when he pitches in at Joel Salatin's "beyond organic" farm, an operation founded on the sustainable principals of management intensive grazing, recycling and small scale production. He soon realizes that Salatin has achieved a rare success in a local community that appreciates the dark orange of his yolks and the "chickeny" taste of his chicken. Salatin, Pollan observes, has found a niche and a niche is the only place a small organic farm can survive in a market dominated by industrial consumers and producers.

When we eat industrially, Pollan notes, we are eating in "perfect ignorance". At the other end of the spectrum are the pleasures we feel when we eat in "perfect knowledge". The new organic consumer is somewhere in between and Pollan paints a perfect picture of the dilemma faced by this new set of eaters. With highly entertaining narrative coupled with meticulous attention to detail Pollan has presented the eater in all of us with something to chew on. The Omnivore's Dilemma is a must read for anyone who has "forgotten" the source of their food.

Tanya Brouwers is a Consultant for the Organic Agriculture Centre of Canada. Please send comments or questions by phone to 902-893-7256 or by email to oacc@nsac.ca

Quotations about Leadership

"Never tell people how to do things.
Tell them what to do and they will surprise you with their ingenuity."
George S. Patton

"Treat people as if they were what they ought to be, and
you help them to become what they are capable of being."
Johann Wolfgang von Goethe

"Do not go where the path may lead,
go instead where there is no path and leave a trail."
Ralph Waldo Emerson

"Leadership is the capacity to translate vision into reality."
Warren G. Bennis

"The man who wants to lead the orchestra must turn his back on the crowd."
James Crook

"If you command wisely, you'll be obeyed cheerfully."
Thomas Fuller

“A leader takes people where they want to go.
A great leader takes people where they don't necessarily want to go, but ought to be.”
Rosalynn Carter

“A leader's role is to raise people's aspirations for what they can become and
to release their energies so they will try to get there.”
David Gergen

“Outstanding leaders go out of their way to boost the self-esteem of their personnel.
If people believe in themselves, it's amazing what they can accomplish.”
Sam Walton

“The real leader has no need to lead--he is content to point the way.”
Henry Miller

Up-Coming Events

November 14

Workshop on JAS (Japan's organic standards) in Charlottetown, PE, hosted by the PEI Certified Organic Producers Co-op. For more information, visit www.organicpei.com/content/page/front_news/id/11

November 15

Innovative Marketing Made Easy with Lori Colborne. Lori is a high energy, dynamic speaker offering practical marketing advice to farmers involved with marketing. Workshops takes place at the Best Western MacLaughlin Hotel in Charlottetown. Cost \$30 (includes lunch). Must register by November 13th. For more information or to register, call 902-368-4145.

November 15-16

Atlantic Agricultural Science and Communication Workshop: Atlantic BioRenaissance at the Nova Scotia Agricultural College, Bible Hill, NS. Themes include Food and the Value Chain, Biofuels and Rural Health. For more information see www.nsac.ca/aascw/AASCW_tentative_program.pdf . Seats are limited so please confirm your participation, as soon as possible with Chantal Cormier cormierc@agr.gc.ca. The registration fee is \$150.00, HST included, or \$50.00 for students.

November 16

Nova Scotia Rural Team is hosting a Food Forum as the concluding program item of the Atlantic BioRenaissance Workshop (see above). Held at NSAC, 11:00-4:00 pm, lunch and refreshments will be served. The two main goals of the Forum are 1) to provide an opportunity for different stakeholders in food production, distribution and consumption to exchange information on issues, priorities and challenges, and 2) to identify common areas for collaboration and partnership development. A report will be produced based on the discussions and recommendations, posted on the National Rural Web Site, and contributed to the federal and provincial policy development and program design processes. Free registration.

November 20 & 21

Atlantic Canada's Premiere Screening of the film, "How to Save the World – One Man, One Cow, One Planet". Featuring the renaissance of India's marginal farms through biodynamic agriculture. The film will be screened on both Tuesday, Nov. 20th and Wednesday, Nov. 21st at 7 PM at the Tatamagouche Centre. Free! Donations are welcomed!

November 21

Are You Ready for Change? Agriculture for the Future workshop featuring Murray Bast (Bio-Ag), Johann Kleinsasser (Whole Circle Farm, ON) and Charles Hubbard (NS). Topics include homeopathy and biodynamic systems. \$50.00 including a local and/or organic lunch and refreshments. For more information, please call Av Singh 1.902.657.1199 or via email at organicav@hotmail.com. Space is limited. For affordable accommodations, please call the Tatamagouche Centre at 1.800.218.2220.

November 23

PEI Potato Board AGM and Banquet. Delta Prince Edward Hotel, Charlottetown.
For more informaton contact: 902-892-6551 www.peipotato.org

March 6

Organic Grains and Oilseeds Forum in Memramcook, NB. Presented by ACORN and the OACC, featuring presentations on variety selection, weed/pest management, crop rotations, market opportunities, and more. For more information, visit www.acornorganic.org/2008symposium.html

March 6-8

ACORN Organic Conference and Trade Show will be held in Memramcook, NB (between Sackville and Moncton). Featuring workshops on seed production for commercial growers, pastured poultry, Maritime food miles, business planning for "going organic", equipment selection, and much more! For more information, visit www.acornorganic.org/conference.html