



MESAS Newsletter

Maine Sustainable Agriculture Society

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Integrated Systems: Coupling Maine Dairy and Potato Farms

Maine Dairy and Potato farms have found a system that supports them working together, rewarding their soils and their bottom line. The idea of integrating is not new. In fact, the independence of isolating one crop in a farm area of the industrial agriculture age is the newer idea of the last century. The two major problems of specialized farming are long-term soil degradation and increasing costs.

Some Maine dairy and potato farmers in central and northern Maine are working coupled farms as a combined land base. They are finding solutions for soil improvement and financial sustainability while maintaining the previous advantages of their specialties.

Dairy and potato farms near each other (within 15 miles) can manage their land as a coordinated system while maintaining their farm specialization. Cooperating farms find what works for them by sharing land, labor and equipment. Farms involved found the integrated system to be beneficial and effective.

As an integrated system, the **potato farm** expands production by farming additional acreage, while maintaining the same rotation sequence. The potato ecosystem project data shows evidence of a yield increased of 6-10%. The additional acreage is also used to grow cow feed. Corn was most commonly grown for silage. In northern Maine, cooler temperatures support farms experimenting with growing barley, alfalfa and haylage since the degree days do not favor silage corn production. This was effective as well.

The **dairy farm** provides livestock manure (organic matter) which replaces purchased fertilizer and increases the soil quality of the potato and grain acreage. At the same time, the dairy farmer can increase cow numbers since more cropping acres can be devoted to feed. The additional manure from the additional cows can be spread over more acres.

With no other changes in farming methods, integrating dairy and potato farms yielded the **short-term** financial gains measure at about \$20,000 for the two coupling farms or about \$40/acre for the small farm enterprises. For larger farms, the net income gain was \$70,000 for the two farms, or about \$60/acre.

Long-term integration yields increased rewards. As manure applications continue, commercial fertilizer applications can be reduced. In this case for smaller farms, income can increase by \$42,000 per couple or \$84/acre. The larger farm system would benefit by nearly \$120,000 per couple or \$103/acre. This increase is based on static production. If potato yields are increased from long term manure application, income gains could be even greater. Beyond the financial benefit of long term integration, the ability to restore and improve the nutrient content and carbon cycles of the soil is great.

Integrated farming methods create unification in the industry that steps beyond sector lines. Exercising these systems creates strengths in diversification which can help the agricultural system as a whole.

The University of Maine project, funded by USDA's *Initiative for Future Agricultural and Food Systems (IFAFS)* has studied the economic

impact, marketing opportunities, community impact and ecosystem impact of coupling dairy and potato farms, in cooperation with Iowa and Michigan Universities and farms. The University of Maine can assist farmers who are interested in pursuing opportunities for integrated systems, including starting a potato or dairy farm near the vicinity of an established farm for the purpose of coupling. For more information, interested farmers should contact Matt Williams at 207-532-6548 (mattw@umext.maine.edu) or Rick Kersbergen at 207-342-5971 (richardk@umext.maine.edu).

For more information on Dairy and Potato Systems visit www.umaine.edu/integratedfarming

MAINE GRASS FARMERS NETWORK and MESAS and UMCE FIELD DAY



Matt Williams
UMCE Houlton

On August 19th in Farmington Maine, The Maine Grass Farmers Network shared their wisdom. The farmer panel included Jeff Bragg, Henry Perkins, Jim Hilton, Erik Johnson and Bussie York who shared their lessons and experiences of the small grain industry within Maine. The group discussed issues of pest management, time of planting, time of harvesting, best cover crops and effective organic sprays.

Stew Smith of the University of Maine discussed integrated farming systems and the results of an IFAFS funded project in Maine "Re-Integration of Crop and Livestock Systems in Three Northern States."

Matt Williams of UMCE Houlton demonstrated effective techniques of combine use and grain harvesting.

For more information on the Maine Grass Farmers Network contact:

Rick Kersbergen at richardk@umext.maine.edu or contact the University of Maine Sustainable Agriculture office at 1-800-870-7270/ Rick Kersbergen, Waldo, 1-800-287-1426/Diane Schivera, 207-568-4142, www.mofga.org



Bussie York, Jim Hilton, Henry Perkins, Jeff Bragg

Marketing Opportunities

An Update of Farm Fresh Connection. The concept of Maine's Farm Fresh Connection, is receiving nationwide press by the New York Times article noting the success of such programs. Students heading back to college are requesting a higher quality of food and are asking for foods they can enjoy with good conscience. Colleges like Bates, Bowdoin, Colby and Thomas College purchase food from local producers. Farm Fresh Connection eases the commitment for buying locally by representing many Maine Farms. If you would like to become a participating farm, contact Martha Putnan, 207-761-0345 or Martha@farmfreshconnection.org

Among the participating colleges, there are those who are continuing the interest in local agriculture and closing the remainder of the loop by feeding the food waste of the day to local pig farmers.

North American Farmers' Direct Marketing Association is a trade association dedicated to nurturing the farm direct marketing industry. Its members support their family farms by selling millions of dollars worth of farm-grown produce directly to consumers at farm stands, farmers' markets, pick-your-own farms, consumer-supported agriculture, agritourism venues and other ever-growing innovations in direct producer-to-consumer agricultural marketing methods. Contact NAFDMA at 62 White Loaf Road, Southampton, MA 01073, Toll free: 888-884-9270, Fax: 413-529-2471.

Upcoming Deadline For Marketing Support. Do you struggle to develop promotional materials for your farm business? Need to look professional to compete in new markets? No money to hire a designer? Image Building Concepts may be your answer. Image Building Concepts (IBC) is a program of CEI and provides a full spectrum of promotional services to primarily low-income Maine farmers, as well as farmers' markets and farm organizations. Since 2000, IBC has been operating statewide, assisting over 100 farms and organizations with design consultation and development of promotional materials. For more information, contact Program Coordinator Gabe McPhail at 207-322-9832 or glm@ceimaine.org www.ceimaine.org/mambo/content/view/113/159/

Maine Fiberarts is creating a Tour Map to fiber destinations statewide for distribution throughout 2006. This self-guided map will be a resource for locating artists' studios, fiber producing farms, suppliers (yarn shops, fabric stores, basketry supplies, etc.), learning centers, galleries and processing mills year-round on Maine's beautiful byways and back roads. As a special benefit, all sites will be open to the public August 4, 5, 6, 2006 for an Open Studio & Farm Weekend at the height of the summer tourist season. To be included on the 2006 Tour Map, registration and payment are due by December 31, 2005. Call Maine Fiberarts at 207-721-0678.

Publicize Your Farm. Whether your farm has gone through the effort of creating a website or is simply interested in marketing your farm produce, the step to insuring that potential consumers find you is essential. On these sites you can enter your whereabouts for the ease of consumers:

www.visitmaine.com is a free site to list Agricultural Attractions including farm and stands.

www.farmersmarketonline.com is a great free site for customers looking to purchase locally or from a specific state

Ag Business Planning Assistance. Need to expand, consolidate, or just better plan for your existing business? Do you need a business plan to go to the bank? The Division supports business plan development through the use of scholarships for farmers to take business planning courses. The Division can also give grants to farmers to complete a business plan if they are seeking a loan through our loan program. The Division also

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SUPPORT FOR THE MAINE ANIMAL IDENTIFICATION SYSTEM (MAIS)

The Maine Department of Agriculture was the recent recipient of a federal grant to support the tracking of livestock to support the identification of cattle, bison, swine, sheep, goats, horses, poultry, deer, elk, llamas, apacas and aquaculture.

The three major components of the system are premises identification, individual animal identification and animal tracking. The goal of this project is to help maintain the health of the US herds and flocks and, when fully operational, be able to track an infected animal within 48 hours of disease detection.

The benefit to engaging in this system prior to the 2009 mandate deadline is that due to federal grant funds for this project, there is limited financial support available to farmers who initiate the identification system.

For more information on the project contact: Judy Perry, Maine Animal Identification System Coordinator 207-287-4507 or e-mail judy.h.perry@maine.gov

supports the FASTTRAC business training program as well as the NxLevel agricultural business planning program. The Division, working with local coalitions, has sponsored courses in southern and northern Maine. For further information, contact us at 207-287-7620.

Generational Transition of Farmland. Transitioning farms and farmland to the next generation is one of the greatest challenges facing agriculture today. To address this challenge a new effort called *FarmLink* has begun throughout the nation. *Maine FarmLink* is a farm transfer program that connects farmers seeking farmland with farmers and farm owners that are selling, transferring or leasing their farms and farmland. Contact Susie O'Keefe 207-469-6465 susie@mainefarmlink.org or www.state.me.us/agriculture/mpd/farmlink



Agricultural Education

Agricultural License Plate
www.maineagtag.com

Maine Agriculture in the Classroom is an essential program for educating the children in the State of Maine about food and fiber origins and the importance of local agriculture. When we as an industry impact the minds of children with the importance of agriculture, we have hope for our industry's future. This program is at risk due to funding shortages and is in need of support.

For only \$20 you can reserve one of these plates for your vehicle and show your support for Maine Agriculture in the Classroom, while showing you support for the industry as a whole. Additionally, if you would like information on training or benefits of the Maine Agriculture in the Classroom program, please contact Willie Grenier at 207-287-5522 or www.maineagtag.com

Nutrient Management Training

Farm Nutrient Management Plan updating farms with nutrient management plans certified in 2000 need to be certified again by December 2005.

Sponsored by the University of Maine Cooperative Extension, this one-day workshop on December 8, 2005 is in Albion, Maine. \$5.00 per person includes lunch. Contact: Extension Educator Mark Hutchinson at 1-800-244-2104, markh@umext.maine.edu. Pre-registration is required prior to December 1, 2005.

New Book Release

University of New Hampshire's John E. Carroll, *The Wisdom of Small Farms and Local Food: Aldo Leopold's Land Ethic and Sustainable Agriculture*. Focusing on many upcoming changes in small scale farming and local foods, the author provides insightful vision and awareness. Maine Sustainable Agriculture Society is noted for its work. This book feeds hope in those who want to play a role in increasing their own food security. To order a book at \$15 plus shipping, 603-862-3940 or e-mail carroll@hopper.unh.edu

Maine Rural Partners Work to Strengthen Rural Communities is working to strengthen the capacity of rural communities by attaining a high quality of life for all Maine citizens. To accomplish their mission, MRP will soon pilot a training program for rural community capacity building called, "Community Economic Development: The Key to Securing a Vital Future in Rural Maine." This series of workshops will be held in western Maine. Contact Maine Rural Partners at 207-581-3260.

Calendar of Events for Maine Food and Fibers

AGRICULTURAL TRADE SHOW, January 10–12, 2006 Augusta Civic Center, MESAS Program and Annual Meeting, Tuesday, January 10th from 1:30 to 5:00

Potato Pest Management Conference, December 6, 2005, 5 credits Presque Isle Inn & Conference Center, Presque Isle, Maine
For information, contact Steve Johnson at 1-800-287-1462 or e-mail sjohnson@umext.maine.edu

SWOAM Herbicides in the Forest Seminar, December 12, 2005, 5 credits, SWOAM Headquarters, Hospital St., Augusta, Maine
To register, contact Robb Cotiaux at 207-926-5352.

New England Vegetable and Fruit Conference, December 13–15, many credits, Radisson Hotel, Manchester, New Hampshire
For details, contact David Handley at 207-933-2100, e-mail dhandley@umext.maine.edu or go to <http://www.nevbc.org>

Tri-State Greenhouse IPM Program, Hands-on Workshop, January 4, 5 credits, Longfellow's Greenhouses, Manchester, Maine
For information, contact Cheryl Frank at 802-656-5434 or e-mail cheryl.frank@uvm.edu

Tri-State Greenhouse IPM Program, Hands-on Workshop, January 5, 5 credits, University of New Hampshire, Durham, New Hampshire
For information, contact Cheryl Frank at 802-656-5434 or e-mail cheryl.frank@uvm.edu

Tri-State Greenhouse IPM Program, Hands-on Workshop, January 6, 5 credits, University of Vermont, Burlington, Vermont
For information, contact Cheryl Frank at 802-656-5434 or e-mail cheryl.frank@uvm.edu

Northeast Agricultural Aviation Association Conference, January 16 & 17, up to 12 credits, Wyndham Harrisburg Conference Center, Harrisburg, Pennsylvania
For information, contact Glenn Martin at 717-337-1370 or e-mail gmartin@helicopterapplicators.com

Maine Agricultural Center is active in advancing Maine agriculture by Integrated Research/Extension Agricultural Projects. The scheduled 2005-2006 projects:

- Growing Winter Tender, High Value Fruit in High Tunnels
- Maine Maple Products Marketing
- Diagnostic Ultrasonography of the Thyroid Gland: Predictive Value for the Identification of Dairy Cows at Risk for Metabolic Disease during Early Lactation
- Growing by Design: Evaluating Organic Cropping Systems for Improved Feed and Reduced Weed Pressure
- Determining Consumer Preferences of Beefsteak type Tomatoes
- Nutritional Effect on the Occurrence of Soft Scald of 'Honeycrisp' Apple
- A Molecular Tool for Characterizing Wild Blueberry Clones
- Agritourism in Maine: Opportunities, Challenges and Linkages
- Sanitation and Microbial Control for Maine Potatoes and Maine Wild Blueberries
- Commercial Quinoa Production in Maine as a Cash and Rotational Crop for Farmers

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The Maine Sustainable Agriculture Society is a nonprofit organization of farmers and others who support the sustainable agriculture concept and its application to the production of food and other agricultural products. Our mission is to explore, develop and promote agricultural systems and practices that allow Maine farmers to retain a greater share of consumer expenditures for farm products.

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Grant and Financial Assistance Opportunities

Natural Resources Conservation Service: The Conservation Security Program is a relatively new program offered by the USDA/Natural Resources Conservation Service. The program provides farmers financial and technical assistance for conservation practices used on their land. The Conservation Security Program Self-Assessment Workbook is free and will quickly help you assess whether your farming practices are eligible for assistance. There are also programs that help with erosion, irrigation, road access, experimental growing methods, good crop management, transitioning to organics and wildlife management. Contact your local NRCS office or check www.me.nrcs.usda.gov for more information.

Maine Farms for the Future: Have you thought of diversification or experimental crops on your farm? How about a new marketing approach or agritourism? Grant funds are available for developing a business plan with a support team, through to the process the funding of implementation of the plan. For more details on the program contact CEI and Kerri Sands 207-772-5356 ext. 114 or kcs@ceimaine.org

Northeast Sustainable Agriculture Research and Education: Grants for Sustainable Agriculture. Partnership grant proposal due November 29th. Farmer/Grower grant proposal due December 6th. For more information and applications www.uvm.edu/~nesare or call 802-656-0471.

Maine Technology Institute: Grants available for new ideas in agricultural technology. Deadlines for Seed Grants proposals are December 15, 2005 and February 16, 2006. For more details www.mainetechnology.com or call 207-582-4790.

CHANGE OF EDITOR

I have been asked to write and edit the Newsletter for MESAS. Professionally, I have been an agricultural business manager and grant writer. I see the industry of agriculture integrating resources, developing protection for food safety issues, needing competitive and creative marketing and relying on an increase of market share. It is my intention to bring pertinent information to support these issues to the MESAS membership.

Personally, I am a firm believer in the saying "If you always do, what you've always done; you will always reap what you've always sown." There will be changes to the newsletter. Please share your comments... melissamajkut@hotmail.com or call 207-642-6044.