RAIN RESEARCH AGENDA

Agricultural research for new crops and livestock diversification from a Northern perspective is critical in maintaining sustainability of the industry in Algoma. The RAIN has identified the following research priorities for the pilot project:

- Diversification: Fruit production and diversification crop trials (testing crop varieties that would diversify current practice), which would include oilseeds, cereals and biomass
- Sharing best practices: Research with a focus on pasture management, no-till cropping, cover cropping, forage and cereal production

DIVERSIFICATION

Biomass, Oilseeds, Cereals and Fruits

Crop Performance and Production Analysis for Purpose Grown Biomass in Algoma (2013):

Assess the potential productivity and costs associated with purpose grown agricultural biomass crops in Algoma (including varieties of miscanthus, switchgrass and reed canary).



Photo: Sampling of biomass to observe crop growth, height, density and survival.

No-till Late Fall Seeding (Fall 2013-14):

Four crops were no-till seeded to investigate feasibility of late fall planting. Camelina, switchgrass, winter wheat and fall rye were planted in mid-October after oats. Results in the spring of 2014 showed that fall rye was the only crop capable of such late planting with exceptional density.

Northern Fruit Monitoring Program (Fall 2014):

The Northern Fruit Monitoring Program aims to develop, monitor and maintain a geo-database of fruit production in northern Ontario with specific details for Algoma District.

Annual Crop Variety and Nutrient Management Trials:

RAIN engages in testing crop varieties and nutrient management regimes that will benefit Algoma crop farmers. The 2014 trials include variety trials for flax and camelina; and assessment of sulfur application on canola and soybeans.



Photo: Flax planted June 10, 2014. Photo taken July 2, 2014.

BEST PRACTICES

Pasture Management, Cover Cropping and Forages

Algoma Pasture Improvement Demonstration and Assessment Project:

Demonstration and assessment of no-till seed drilling on pastures, enhanced soil health amendments, and intensive rotational grazing. Economic analysis will be undertaken in order to understand costs and benefits of different grazing practices. In late May, two cooperator farms were seeded with a mixture of legumes and grasses at a rate of 15 lbs/acre.

Watering and fencing systems are being constructed; livestock will be introduced in September. This project is supported by Growing Forward 2, Ontario Sheep Marketing Agency and Community Futures Program (FedNor).

No-till Forage Season Extension Trial:

Increasing the available forage for livestock on pasture can decrease a farmer's cost and time dedicated to hay production. Research will focus on three types of season extending forage crops, fodder corn, forage sorghum and kale all of which can be expected to grow into the late fall. Planting arrangement, growth, yield and nutritional value will be examined in an effort to find the best season extending forage crop for Algoma conditions.

Bobolink Hay Project:

RAIN is working with the Ontario Ministry of Agriculture and Food on a province wide project to determine the nutrient content (including digestible energy) for livestock of forage cut late May through late August to assess onfarm options for harvesting practices for bobolink and eastern meadowlark habitat.

Photo: Sandy Holmberg (Research Assistant) sampling hay for Bobolink project.



RAIN FUNDING FOR FARMERS

Sustainable New Agricultural Products (SNAP) Program:

RAIN and three regional partners (Eat Local Sudbury, Northeast Community Network in Kapuskasing and Clover Valley Farmers' Market in Rainy River) and FedNor administer the SNAP program, a pilot for Northern farmers and businesses that will provide up to \$5,000 (at 80% cost share) toward purchasing equipment that would result in the creation of an agri-food product new to the business. Program deadline is September 1st and more information available at:

www.rainalgoma.ca/snap



Algoma-Manitoulin Regional Tile Drainage:

RAIN has been approved to administer Algoma's Regional Tile Drainage program for Algoma/West Sudbury through Northern Ontario Heritage Fund Corp. in 2014. RAIN is now pursuing the development of a Manitoulin Island consortium for tile drainage projects and has a meeting scheduled for 7 p.m. July 29th at Spring Bay Hall.

For more information on RAIN's Research Projects, please contact:

Saul Fraleigh, RAIN Research Technician 705.942.79.27 Ext. 3034 sfraleigh@ssmic.com