Conservation LEARNING CENTRE

2005 PROJECTS

Field-Scale Annual Cropping Projects

1. AC Metcalfe malting barley (17 acres) and CDC Copeland malting barley (17 acres)
   Treated with Gemini NEW
   Demonstrations of 25, 50 and 100 lb N per acre
   In-crop Refine Extra SG NEW and Puma Super
   Tilt fungicide

Cooperators: SeCan, BASF, DuPont, Syngenta, Farm World

2. AC Intrepid hard red spring wheat (85 acres)
   Treated with Raxil-T NEW
   In-crop Achieve Liquid and 2,4-D ester
   Headline vs Tilt vs Stratego fungicide
   Preharvest with Roundup WeatherMax

Cooperators: Bayer, Syngenta, Nufarm, BASF, Monsanto, Farm World Equipment

3. CDC Imagine (Clearfield) hard red spring wheat (20 acres)
   Treated with Gemini NEW
   In-crop Adrenaline
   Headline vs Tilt vs Stratego fungicide
   Preharvest with Touchdown iQ

Cooperator: Saskatchewan Wheat Pool, BASF, Syngenta, Bayer, Farm World Equipment

4. CDC Stratus malt barley (40 acres)
   Bin-run seed from 2003: 20 acres treated with Gemini NEW; 20 acres untreated
   In-crop Achieve Liquid and 2,4-D ester
   Headline vs Tilt vs no fungicide

Cooperators: BASF, Syngenta, Nufarm, Farm World Equipment

5. 5070 InVigor canola treated with Titan (precision agriculture project) (110 acres)
   In-crop Liberty and Select

Cooperators: Bayer, Arvesta

Precision agriculture: *Optimal efficiency of crop inputs for environmental sustainability*
Landscape-based prescription (variable rate) fertilizer application
Prescription (spot and blanket) herbicide application based on weed population densities
Use of guidance system
Improved return per acre through reduced crop inputs costs and optimal production based on improved efficiency.

Cooperators: EcoACTION (Environment Canada), Moker & Thompson Implements, Farm World Equipment, Greenhouse Gas Mitigation Project for Canadian Agriculture

6. Snowbird hard white spring wheat (70 acres)
   Treated with Raxil-T NEW
   In-crop Triton NEW and Puma Super
   Demonstration plot of Triton NEW and Horizon
   Tilt fungicide
   Preharvest with Roundup WeatherMax

Cooperators: Bayer, DuPont, Syngenta, Monsanto, Farm World Equipment

7. Specialty Oil canola (80 acres)
   v1031 NEW (10 acres)
   v1030 NEW (10 acres)
   Nexera 828 (40 acres)
   IMC 111 (20 acres)
   In-crop Roundup WeatherMax and Absolute
   Lance fungicide

Cooperators: Dow AgroSciences, Cargill Specialty Oils, BASF, Monsanto, Farm World

8. NEW Canola variety demonstrations
   Agricore United: 45H72 CL (20 ac)
   SW Seed: SW9803 RR (10 ac); SW6802 RR (10ac)
   Brett-Young: 624 RR (20 ac)
   Prairie Seeds: Prairie 719 RR (20 ac)
   Canterra Seeds: 1896 RR (10 ac); CS 7001C RR (10 ac)

Cooperators: Agricore United, SW Seed Canada, Brett-Young Seeds, Prairie Seeds, Canterra Seeds, Monsanto, BASF, Farm World

9. CDC Bethune flax (55 acres)
   In-crop FlaxMax
   Preharvest Touchdown iQ

Cooperators: BASF, Syngenta, Farm World Equipment

Short-term Projects and Small-scale Demonstrations

1. NEW The "Saskatchewan Centennial Living Wheat Museum Project" mimics wheat production practices in Saskatchewan during six major eras (1885-1909-1935-1970-current-future). It includes seeding rates, soil fertility and weed control. The cultivars included are Red Fife (1885), Marquis (1909), Thatcher (1935), Neepawa (1970), AC Superb (2005) and CDC Imagine (2005 herbicide tolerant). *(University of Saskatchewan)*
2. NEW Development of GOAL2XL for afforestation with poplar species *(Poplar Council of Canada, Saskatchewan Forest Centre)*
3. NEW Demystifying the Environmental Farm Plan: The CLC's Experience *(Saskatchewan Agriculture and Food)*
4. Maize maze *(Monsanto)*
5. ART120 seed population monitor *(AGTRON)*

6. NEW Novel Crops – New Opportunities *(Saskatchewan Agriculture and Food)*
   Fibre flax (Biolin Research)
   Lentils (4 varieties) (BASF)
   PC rye (Agriculture and Agri-Food Canada)
   Pinto bean
   Herbs and spices
   C4 species
   Soybean (Monsanto)

7. Greenhouse Gas Mitigation Project for Canadian Agriculture
   Nutrient management techniques *(Saskatchewan Soil Conservation Association)*

8. Perennial and annual forage varieties *(SW Seeds, Brett-Young, Prairie Seeds, Proven Seeds)*
   Established varieties
   NEW varieties: Glacier orchardgrass, Riding tall fescue, PS 200 hybrid alfalfa, Stockwell alfalfa, Crown annual ryegrass, Royal Italian ryegrass, turnips, Cowboy barley, Dakota switchgrass, NewHy RS wheatgrass, Goliath crested wheatgrass, SW Bamse reed canary grass

Long-term and On-going Projects

1. NEW Production of dwarf sour cherries – 6 varieties *(Saskatchewan Agriculture and Food, Prairie Plant Systems)*
2. NEW Production of blue honeysuckle – 3 varieties *(University of Saskatchewan)*
3. NEW Alternative Biomass Sources for Ethanol Fermentation *(Saskatchewan Agriculture and Food, Iogen)*
4. NEW In-depth monitoring of weed species, density and movement at the CLC
5. Riparian management in a cultivated landscape *(Greencover Canada Technical Assistance Program, Agriculture and Agri-Food Canada, Saskatchewan Agriculture and Food)*
6. Technical Training and Capacity Building for Professional and Extension Staff *(Greencover Canada Technical Assistance Program, Agriculture and Agri-Food Canada, Saskatchewan Agriculture and Food)*
7. Extension activities to demonstrate establishment of riparian forage barriers around wetlands *(Canadian Adaptation and Rural Development Saskatchewan, Agriculture and Agri-Food Canada)*
8. Demonstrating the value of on-farm long-term water quality monitoring to producers making management decisions – Studying the long-term influence of type and maturity of riparian protective barriers on water quality of wetlands *(Canadian Adaptation and Rural Development Saskatchewan, Agriculture and Agri-Food Canada)*.
9. Conservation and Kids – Educating youth about conservation, the environment and primary food production. *(PromoScience, Natural Sciences and Engineering Research Council)*

10. Balicki Project – Rotation grazing system with shallow trenched water pipelines *(Ducks Unlimited Canada)*
11. Xeriscape project: Landscaping to conserve water (school project)
12. Strawberry crown production *(Saskatchewan Agriculture and Food)*
13. Wild plant collection
14. Wildlife survey
15. Meteorological data collection
16. Dense nesting cover: habitat for waterfowl, song birds, wildlife *(Ducks Unlimited Canada)* – *Wetland Wonder Nature Trail (1 km) goes through the dense nesting cover*
17. Potential perennial forages for use in dense nesting cover *(Ducks Unlimited Canada)*
18. Herb garden
19. Woodlot *(Agriculture and Agri-Food Canada and Canadian Forestry Service)*
20. Shelterbelt species garden *(Agriculture and Agri-Food Canada)*
21. Siberian larch line test *(Agriculture and Agri-Food Canada)*
22. Tree establishment and vegetation control *(Agriculture and Agri-Food Canada)*
23. Fruit shrubs
24. White spruce field shelterbelt
25. Green ash field shelterbelt
26. Native plant diversity study *(Ducks Unlimited Canada)*
27. Environmental containment pit for liquid fertilizers and fuels
28. Forest belt / wildlife corridor
29. Pocket gopher control
30. Bertha army worm monitoring

Miscellaneous

1. School Program:
   Focus: Integration of food production with environmental health and preservation of wildlife habitat
   Learning experience based on hands-on activities
   ~1,500 students each year (with 200+ accompanying educators and parents)
   Reach is 305 schools within a two-hour radius
2. Extension activities: Field days/tours (six to ten), tradeshows/conferences (six to ten), publications (six to ten), media interviews (two to four)
3. Website: **www.conservationlearningcentre.com**
4. Continued involvement with the Agri-ARM network