Date: January 2005

BC Producers Demonstrate Beneficial Management Practices

BC Taking Charge Team

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Producer Partnerships Flourish

Four producer groups are partnering through the BC Taking Charge Team to coordinate the Greenhouse Gas Mitigation Program. They have worked hard to coordinate demonstrations and raise awareness of beneficial management practices that improve farm productivity and reduce greenhouse gas emissions. Their efforts have been enhanced by funding through the Greenhouse Gas Mitigation Program for Canadian Agriculture (GHGMP) sponsored by Agriculture and Agri-food Canada (AAFC).

The 4 producer groups are:

- 1. Soil Conservation Council of Canada (SCCC)
- 2. Abbotsford Soil Conservation Association (ASCA)
- 3. Peace River Forage Association of BC (PRFA of BC)
- 4. Peace River Soil Conservation Association (PRSCA).



Members of BC Team during the Super Soil Savers Solstice in June, 2004.

Objectives of the Greenhouse Gas Mitigation Program in BC

- ⇒ To work with teams, partners and cooperators to identify key demonstration projects.
- ⇒ To demonstrate effective ways to help farmers reduce greenhouse gases (i.e. BMPs or beneficial management practices).
- ⇒ To provide tools and information to farmers to encourage adoption of BMPs.

Achievements of BC Team

This 4 year program is entering its final year, with many successes along the way. Numerous BMP demonstration sites were established. Newsletters and fact sheets have been widely distributed and a myriad of awareness activities have been organized to help farmers and ranchers learn more about climate change BMPs. (see inside detail about demos and activities)



A crowd gathers for Delta Farmland Wildlife Trust Fall tour in October, 2004.



PRFA of BC Board of Directors

Executive: Chuck Sutherland, Pres. Groundbirch

Bill Wilson, Treas.

Dawson Creek

Sarah Davies, Sec. Lone Prairie

Committee Chairs:
John Kendrew,
Management, Pouce Coupe

Glenn Hogberg, R & D, Progress

Directors:

Pat Gerlinsky, *Doe River* Aron Collins, *Montney* Rick Kantz, *Montney*

Contractors:

Sandra Burton, *Farmington* Julie Robinson, *Kilkerran* Kim Strasky, *Farmington*

Greenhouse Gas Mitigation BMPs in Northern BC

Soil & Nutrient Management Projects (SCCC GHGMP)

Objectives:

- ⇒Work with the BC Taking Charge Team to coordinate GHGMP soil and nutrient management BMP demos in northern BC.
- Organize a package of awareness activities to raise awareness of climate change BMPs, including field days, tours, seminars, workshops and publications.

Types of BMPs Demonstrated:

- 1. Direct Seeding Forages (7 plots)
- 2. Nutrient & Manure Management with Forages (3 plots)
- 3. Nutrient NH₃ Management with Grain, Oilseed & Forages (5 plots)

Progress to Date:

Leased a Flexicoil zero till drill and direct seeded 900 acres in 2003 and 1600 acres in 2004. Established & monitored 7 demo plots of direct seeding forages.



BMP demo of direct seeded silage crops.

Progress to Date cont'd:

Established 3 new plots in 2004 of nutrient management BMPs. Leased a Dutch style anhydrous applicator and established 5 plots in 2004.

Funding Partners: Soil Conservation Council of Canada GHGMP, Agriculture & Agri Food Canada, Ducks Unlimited, Abbotsford Soil Conservation Assoc, Peace River Soil Conservation Assoc, Norwest Labs, Rolla Agricultural Services, Peace Tractor & Prairie Seeds.

Benefits to Farmers

Farmers can increase farm profitability by practicing Greenhouse Gas Mitigation BMPs.

- * Reducing tillage reduces tractor fuel costs.
- * Improving manure and fertilizer management reduces input costs.
- * Relay cropping keeps inputs in place by reducing loss through erosion.
- * Extending the grazing season and improving winter feeding strategies both reduce winter feeding costs.
- * Agroforestry diversifies farm income.

Livestock Management Projects (CCA GHGMP)

Objectives:

- ⇒Demonstrate how enhancing pastures and grazing management systems can improve productivity, profitability and reduce greenhouse gas emissions.
- ⇒Compliment forage nutrient management by enabling linkages to animal feed quality and yield monitoring in terms of animal weight gain.
- ⇒Share information about the mitigation of greenhouse gas emissions through good management practices in beef production systems.

Types of BMPs Demonstrated:

- Feeding Strategies Courses & Feed Quality Demos (12 cooperators)
- 2. Grazing Management Demos (6 plots)



Sampling for winter feeding strategies.

Progress to Date:

Organized 2 feeding courses. Setting up a grazing mentorship program. Establishing demonstrations of extending the grazing season.

Funding Partners: Canadian Cattlemen's Assoc. GHGMP, Beef Cattle Industry Development, Norwest Labs, Northern Lights College, PRRD, Ducks Unlimited & Western Forage/ Beef Group.

Greenhouse Gas Mitigation BMPs in Southern BC

Composting Poultry Manure & Urban Yard Trimmings

Objectives:

- ⇒Demonstrate optimum composting management of yard waste/ poultry manure.
- ⇒Evaluate composting techniques that minimize nutrient loss and costs, maximize soil organic matter and crop nutrition and ensure food safety standards are met.

Progress to Date: Established 6 research and demo sites. Analyzed poultry manure/ yard trimmings compost. Analyzed soil/ foliar samples from various compost application rates. Generated BMP recommendations.



Turning & mixing the poultry manure/ urban yard trimmings compost.

Project Partners:

UBC Faculty of Agric. Sciences, Delta Farmers' Institute, City of Vancouver.

Conservation Association (ASCA) Board of Directors Executive: Peter Reus, Pres.

Abbotsford Soil

Van Eekelen Ent.

Terry Feser, Vice Pres. L4T Farm

Rose Schroeder, Sec. Jacobs Farms

Len Smit, Treas. Kato's Nursery

Directors: Dick Bunbury

Bruce Wisbey, Wisbey Veggies

Kim Ross, Farm Credit Corp. Jim van Dongen

Technical Advisors: Geoff Hughes-Games, **BCMAFF**

Mark Robbins, BCMAFF

Frank Wright, City of **Abbotsford**

Project Coordinator: Jayna Houston Abbotsford



Dr. Shabtai Bittman describes relay cropping.

Sustainable Dairy Manure Management Obiectives:

- ⇒Improve spring manuring of perennial grass crops.
- ⇒Increase adoption of relay cropping.
- ⇒Reduce tillage in corn plantings.

Progress to Date: Measured & analyzed N₂0 emissions at 6 farm sites. Established 26 reduced tillage farm demo trials with 3 fertilizer treatments. Established 4 manure treatments & 3 application methods. Collected soil, root & plant samples. Relay cropped 2700 acres.

Project Partners: SCCC/ AAFC, BC Milk Producers Association, Pacific Field Corn Association, South Coastal Dairy Education Association, BCMAFF & Dairy farmer cooperators.

Improved Hog Manure Management

Objectives:

- ⇒Improve on-farm hoa manure composting technology.
- ⇒Maximize biodrying capabilities of composting process.

Progress to Date:

Installed aeration and temperature controlled, low head space, composting facility on farm. Testing is ongoing.

Project Partners:

SCCC/AAFC & Transform Compost Systems Ltd.

Agroforestry

Objectives:

- ⇒Diversify farm income.
- ⇒Improve environmental protection & enhancement.

Progress to Date: Planted 80 red oak trees & 1000 Christmas trees.

Project Partners: Sunshine Hog Farms, BCAC.



Tree planters at Sunshine Hog Farms.

The mandate of the Abbotsford Soil Conservation Association is to maintain and enhance the long term productivity and profitable agricultural land base of Abbotsford.

Upcoming Events Contacts:

Jayna Houston at Ph: (604) 556 3732 Fax: (604) 556 3732 Email: jayna@abbotsford soilconservation.com

Sandra Burton at Ph: (250) 789 6885 Fax: (250) 789 6884 Email: sburton@pris.ca

or check out events page on websites below.

Websites:

Check out the links to more information about climate change and greenhouse gas mitigation on our 2 websites.

Visit us at:

www.peaceforage.bc.ca
Or:

www.abbotsford soilconservation.com

Greenhouse Gas Mitigation Program for Canadian Agriculture:

is an initiative sponsored by the Government of Canada Action Plan 2000 on Climate Change through Agriculture and Agri-Food Canada, in partnership with the Soil Conservation Council of Canada, Canadian Cattlemen's Association, Canadian Pork Council & and Dairy Farmers of Canada.

Key Achievements in Raising Awareness

Farmers and ranchers learn and collect information in different ways to move themselves towards adoption of a beneficial management practice or BMP. Therefore, information is shared using a variety of approaches.

Seminars, Workshops, Courses & Winter Forage Club Meetings

The BC Taking Charge Team actively encourages agricultural groups to include speakers and topics about BMPs in their winter events. In 2004, there were 8 winter events reaching over 325 people.



Sustainable Farming Field Tour in Eastern Fraser Valley in July.

Newsletters & Fact Sheets

Updates about BMPs were provided in 2004 in:

- ⇒The **Soil Keeper**, a regular publication of the Abbotsford Soil Conservation Association (9000).
- ⇒ Forage First, a newsletter published by the Peace River Forage Association of BC (250).
- ⇒11 Forage Facts, such as this one (350).
- ⇒Fact sheets published by SCCC & other provinces.
- ⇒2 articles in regional newspapers (circulation 34,000 homes).



Over 65 people visit demo plots during the Sustainable Farming Field Tour.

Tours & Field Days in BC

There have been great discussions of BMPs in 2004 at the events listed below:

- ⇒June 17-21: Super Soil Savers Solstice Tour in the Peace (50 people)
- ⇒June 20: Annual Livestock & Forage Tour in Montney area (75 people)
- ⇒June 28: Turf and Forage Seed Tour in Rycroft area (80 people)
- ⇒Aug 11: Cows and Ducks Tour (55 people)
- ⇒July 14: Sustainable Farming Field Tour in Fraser Valley (65 people)
- ⇒Sept 11: Spraying for Direct Seeded Forages Field Day (15 people)
- ⇒Oct 22: Delta Farmland and Wildlife Trust Annual Fall Field Tour (over 70 people)

In total, there were 7 summer events, reaching over 330 people.



Nutrient management BMPs described at the Livestock & Forage Tour in June.

Compiled by: Sandra Burton & Jayna Houston in January, 2005.

Forage Facts Funded by: Soil Conservation Council of Canada GHGMP,

Canadian Cattlemen's Assoc GHGMP and

all the donators and supporters at the Forage Goods & Services Auction on Feb. 21, 2004.