



# Pesticide applications warrant special safety precautions

As the crop season progresses, the number of pest control products or pesticides used in the fields begins to increase.

And that means producers need to take special safety precautions, says Saskatchewan Provincial Pesticide Management Specialist Cameron Wilk.

The range of pesticide applications is accompanied by a corresponding range of safety concerns.

“In general terms, herbicides are a relatively safe, low-risk type of pesticide, while certain rodenticides and insecticides are higher risk pesticides,” Wilk said. “Compounding these risks are the number of insecticides applied in any one season. And that number can be highly variable, depending on a number of conditions that influence insect outbreaks.”

For instance, orange wheat blossom midge, bertha armyworm, diamondback moth, grasshoppers and aphids all have the potential to become a concern in a single year. Lorsban, Pyrinex, Monitor and Eco Bran are common trade names of insecticides that may be applied to eliminate these insects, Wilk said.

These four insecticides are called organophosphorus and carbamate insecticides. They can influence the nervous system by inhibiting the enzyme cholinesterase, which is necessary for the proper functioning of the central nervous system. Signs and symptoms from overexposure are similar and may vary in severity for products in the same chemical family, Wilk said.

“Organophosphorus and carbamate insecticide symptoms may resemble influenza, while pyrethroid insecticide, such as Decis and Ripcord, have their own unique safety concerns. Pyrethroid insecticide symptoms may cause asthmatic reactions, eye or respiratory tract irritation, along with skin sensitization,” Wilk said.

“Each of these insecticides may be rapidly absorbed through the skin, lungs and gut,” Wilk said. “Their acute toxic effects may be noticed within minutes or hours, depending on the exposure. Farmers or commercial pesticide applicators, who may be exposed to a number of small doses over the course of a growing season, may quickly develop toxic symptoms due to the cumulative effect of each exposure.

“It’s very important to be informed before undertaking the application of insecticides or entering into areas treated with insecticides for monitoring purposes. There are easy ways to learn about the safe use of any insecticide or other agricultural chemical,” Wilk said.

Users need to read the product or container label. This label shows the name of the product and the company that manufactured it; hazard symbols; brief risk information; precautionary and first-aid measures. The label also states that a Material Safety Data Sheet or MSDS is available.

Chemical suppliers are required by law to provide the MSDS upon request for any product they sell. An MSDS gives detailed information about the chemical and its ingredients, health hazards, first-aid measures, fire fighting measures, accidental release measures, handling and storage instructions, and recommended personal protective equipment.

Wilk says the use of personal protective equipment plays a significant role in mitigating the risks associated with insecticide application. Local farm supply dealers stock some personal protective equipment. Suppliers are always listed in the Yellow Pages of the telephone directory, usually under Industrial Equipment and Supplies or Safety. To search on-line, enter the words “Canadian suppliers of personal protective equipment” into the search engine’s subject box.

“Applicators who are buying a chemical cartridge respirator should shop around to be



sure they get a good facial fit and the right cartridge for the job,” Wilk said. “The use of gauntlet-style PVC gloves; goggles; chemical-resistant hard hats and PVC aprons; disposable Tyvek coveralls and a tractor cab-filter may also be advisable.”

The best safety tool when working with pesticides is water, Wilk said.

“Keep a tank of clean water available in the field or on your equipment when applying pesticides. Use the water for handwashing or for washing off a spill or a splash. If chemicals get onto skin or into eyes, flush immediately with water,” Wilk said.

Taking proper safeguards when working with pesticides is worth the time and expense, said Wilk, because the precautions help to prevent the short-term and more serious long-term health problems that any pesticide may cause.

#### FOR MORE INFORMATION

- Phone Cameron Wilk, Provincial Pesticide Management Specialist, Saskatchewan Agriculture and Food, at (306) 787-2195;
- Visit the Institute of Agricultural, Rural and Environmental Health (IAREH) website at [www.iareh.usask.ca](http://www.iareh.usask.ca); or
- Visit the Saskatchewan Safety Council website at [www.sasksafety.org/programs/farm.html](http://www.sasksafety.org/programs/farm.html).

## PROVINCE FUNDS RURAL HEALTH EXTENSION PROGRAM

The Government of Saskatchewan will provide \$90,000 in support of the Rural Health Extension Program, operated by the Institute of Agricultural, Rural and Environmental Health (IAREH).

“This program makes an important contribution to the health and safety of Saskatchewan’s agricultural producers, their families, and those employed by them,” Agriculture and Food Minister Mark Wartman said. “We are aiming for the sustainable reduction in agricultural producers’ deaths and injuries.”

The Rural Health Extension Program directly addresses a broad range of

agricultural health and safety issues, including farm accident reduction, prolonged exposure to pesticides and airborne contaminants, and rural water quality. Funding supports extension activities in farm equipment safety, farm injury surveillance, respiratory health, hearing conservation, skin cancer, and economic impact of farm injuries.

“The Rural Health Extension Program represents a co-operative effort involving Saskatchewan Agriculture and Food, the participation of 155 rural municipalities encompassing more than 26,000 farm families in Saskatchewan, and the Institute of Agricultural, Rural and Environmental Health,”

IAREH Director Dr. James Dosman said.

“By each of us bringing our resources to the table, we are able to mount an important and credible program in support of agricultural production in Saskatchewan.”

The Institute, through its Agricultural Health and Safety Network, carries out a range of educational activities, including a Farm Safety Audit, slide talk presentations, as well as health and safety training for nurses.

#### FOR MORE INFORMATION

- Visit [www.iareh.usask.ca](http://www.iareh.usask.ca);
- Phone (306) 966-8286; or
- e-mail [ruggi@sask.usask.ca](mailto:ruggi@sask.usask.ca).





“This program provides an opportunity for producers to develop individual learning plans and access financial support to attain these necessary skills.”

Minister of Agriculture and Food Mark Wartman

# CASS Program helps producers create new opportunities

The Canadian Agriculture Skills Service (CASS) program, recently announced by the governments of Canada and Saskatchewan, is designed to help farmers and their spouses increase their family income through improved farm practices or through increased off-farm income.

“Modern farms with diverse crop and livestock enterprises have become highly complex business operations requiring a broad range of skills to manage,” said Minister of Agriculture and Food Mark Wartman. “This program provides an opportunity for producers to develop individual learning plans and access financial support to attain these necessary skills.”

CASS is designed to help farmers and their spouses increase their family income by:

- improving farm practices;
- building new agricultural enterprises;
- creating new business ventures; or
- obtaining employment income.

The program will take eligible participants through four main steps:

**ASSESSMENT:** Participants will work with qualified counsellors to identify existing strengths and skills, and develop realistic and achievable goals. During this process, you may discover skills, learning options and opportunities that you were previously unaware of.

**DEVELOPMENT OF AN INDIVIDUAL LEARNING PLAN:** The counsellor will help you create your personal Learning Plan by selecting learning activities that best suit your needs and goals, and will determine the time and costs involved in carrying out the plan.

**FUNDING:** Financial support is provided for formal training (i.e. non-degree college programs of less than 24 months) and informal learning (i.e. workshops and short courses). Eligible costs include tuition, textbooks and related expenses such as travel and dependent care.

**FOLLOW UP:** The CASS Case Manager will provide individualized assistance to you as you implement your Learning Plan. Through on-going communication with the Case Manager, CASS participants will receive encouragement and assistance with problems that may arise.

#### WHO CAN APPLY?

You and your spouse may be eligible for CASS assistance if:

- you are an established producer, with annual gross farm sales of at least \$10,000 per year, and a net family income of less than \$45,000 (three-year average);
- you are a beginning farmer who has owned/operated a farm for less than six years, or intends to establish a farm that has, or will have, annual gross farm sales of at least \$10,000;
- you have been out of high school for at least two years;
- you are not currently receiving Employment Insurance benefits.

CASS is one of the Renewal Programs of the Agricultural Policy Framework. It is a joint initiative of Saskatchewan Agriculture and Food, and Agriculture and Agri-Food Canada.

#### FOR MORE INFORMATION

- Visit [www.agr.gov.sk.ca](http://www.agr.gov.sk.ca), click on the Agricultural Policy Framework badge on the right side of the page, then click “Renewal.”

### HOT OFF THE PRESS

Saskatchewan Agriculture and Food is constantly updating the wealth of information it makes available to Saskatchewan residents. You can download the most current version of any document posted on our website. You can also call the Agriculture Knowledge Centre at 1-866-457-2377 to request a hard copy of many items.

Below is a list of the latest documents posted, as well as the most frequently visited pages, on SAF’s website at [www.agr.gov.sk.ca](http://www.agr.gov.sk.ca).

**FAQ – Do I Have Too Much Money Tied Up in Farm Machinery? Do I have too much invested in farm machinery? How do I compare? Visit: [www.agr.gov.sk.ca](http://www.agr.gov.sk.ca) under About Us, click on Frequently Asked Questions | Winter.**

**FAQ – Forage Harvest and Marketing. How do I determine the price of standing hay? What is my hay worth? Visit: [www.agr.gov.sk.ca](http://www.agr.gov.sk.ca) under About Us, click on Frequently Asked Questions | Summer.**

**HANDLING CHEMICAL COMPLAINTS – A guide for complainants to help resolve pesticide complaints. Visit: [www.agr.gov.sk.ca](http://www.agr.gov.sk.ca) under Crops | Integrated Pest Management | General.**

**RELATIVE FEED VALUE – A Tool for Determining Alfalfa Quality. Provides information on how to determine relative feed value. Visit: [www.agr.gov.sk.ca](http://www.agr.gov.sk.ca) under Crops | Forage/Pasture | Marketing.**

**DISEASES AND NUTRIENT DEFICIENCIES IN ALFALFA FOR FORAGE – Provides a summary of diseases and nutrient deficiencies common in alfalfa grown in Saskatchewan. Visit: [www.agr.gov.sk.ca](http://www.agr.gov.sk.ca) under Crops | Forage/Pasture | Integrated Pest Management.**

**MANAGING LIVESTOCK MORTALITIES – Provides several options for managing livestock mortalities. Visit: [www.agr.gov.sk.ca](http://www.agr.gov.sk.ca) under Livestock | Beef | Production information.**





# Environmental Farm Plan (EFP) Program Going Strong

Saskatchewan producers have once again shown that they are enthusiastic about environmental stewardship.

The Canada-Saskatchewan EFP program, which is an important part of environmental programming under the Agricultural Policy Framework, has been well-received across the province.

The program is being delivered by the Provincial Council of Agriculture Development and Diversification Boards of Saskatchewan, Inc. (PCAB), which has deployed 11 trained facilitators to deliver a series of two workshops to program participants.

“So far, the EFP program in Saskatchewan has yielded tremendous success in terms of number of participants and the overall general perception of the program,” said PCAB EFP Program Co-ordinator Shelanne Wiles-Longley. “The majority of producers who have participated realize the importance of an EFP and how it will benefit them.”

## A WORKSHOP APPROACH

At the workshops, PCAB facilitators assist and instruct producers on how to complete an environmental risk assessment of their operation, and subsequently to develop a plan to address any identified risks. With assistance from Agriculture and Agri-Food Canada (AAFC), Saskatchewan Agriculture and Food and other agency partners, PCAB facilitators provide producers with the technical support they need to prepare their EFP.

Since the first pilot workshops were held in the winter of 2004, nearly 1,200 producers have participated in the first workshop and nearly 700 have been through the second. In addition, more than 550 environmental farm plans have been endorsed via peer review – an endorsement that paves the way for those producers to access cost-shared incentives through the Canada-Saskatchewan Farm Stewardship Program.

## A NEW KNOWLEDGE BASE

In addition to creating an opportunity for producers to assess current practices, the EFP program also helps producers broaden their knowledge base on agri-environmental issues. That new knowledge will ensure that environmental sustainability will be an important factor in future management decisions.

The general consensus among producers is that EFPs provide an excellent tool for producers who are interested in assessing their operations from an environmental perspective.

## MOVING FORWARD

Once producers have completed their environmental farm plans and have had them endorsed by PCAB, they are eligible to apply for financial assistance to help with the implementation of specific beneficial management practices (BMPs) on their farms. In Saskatchewan, producers can choose from a list of 30 categories of BMPs designed to

reduce environmental risks. The program will pay from 30 to 50 per cent of the eligible costs of implementation, depending on the BMP. A producer can receive a maximum of \$30,000 from the program, which ends on March 31, 2008.

Wiles-Longley is optimistic that the program’s strong start is a sign of good things to come. “Overall, uptake of the program has been exceptional, and the interest continues to increase every day.”

## FOR MORE INFORMATION

- Visit [www.agr.gov.sk.ca](http://www.agr.gov.sk.ca), click on the Agricultural Policy Framework badge on the right side of the page, then click Environment;
- Visit PCAB’s website at [www.saskpcab.com](http://www.saskpcab.com) and click on EFP Program; or
- Visit the AAFC website at [www.agr.gc.ca](http://www.agr.gc.ca) and click on APF Home | Environment.



## GREENCOVER CANADA BENEFITS BOTH AGRICULTURE AND THE ENVIRONMENT

Fifteen years ago, more than 13,000 Western Canadian producers signed up to return environmentally sensitive cultivated land to forage under Agriculture and Agri-Food Canada’s (AAFC) Permanent Cover Program (PCP). Now, many of them have taken advantage of a similar opportunity by enrolling in the Land Conversion component of AAFC’s new Greencover Canada Program.

Between 1989 and 1992, more than 225,000 hectares (ha) – or 500,000 acres – were seeded to forage by Saskatchewan producers under the PCP. Today, Greencover Canada has picked up where PCP left off, and many producers are happy it has.

Mark Stock operates a 160 head cow-calf cattle ranch near Hazlet, Saskatchewan, about one hour’s drive northwest of Swift Current. His land is on the eastern edge of the Great Sand Hills region of western Saskatchewan.

“For years, we had quite a bit of our land in annual crop,” he said. “But the land around here is very prone to erosion and not really suited for diversification into other cropping options. So we began returning some of the cultivated land to permanent grass.”

The 57 ha (140 acres) he seeded to grass in 1989 under the PCP continues to provide pastureland for his cattle. This year, he seeded another 69 ha (170 acres) to grass under Greencover Canada, and he hopes to plant more next year.

“Greencover is allowing me to return marginal and erosion-prone land to grass and gives me the opportunity to move away from annual cropping,” explained Stock. “With the cost of farming these days, I have a chance to at least cover my operating costs by seeding grass.”

Announced in 2002, Greencover Canada is a five-year, \$110 million national program consisting of four components each with a specific focus:

- **LAND CONVERSION** – offers financial and technical assistance to producers who wish to convert environmentally sensitive land to perennial cover. Establishing perennial cover on environmentally sensitive lands improves soil, water and air quality with the additional benefit of preserving or enhancing biodiversity. Funding from the Land Conversion component can be accessed through the Canada-Saskatchewan Farm Stewardship Program by producers who complete an environmental farm plan.
- **TECHNICAL ASSISTANCE** – promotes the adoption of beneficial management practices by funding extension projects

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