

Susan Kelner

Ontario Pesticide Education Program

Ontario Pesticide Education Program certifies and trains farmers and pesticide vendors about the safe use of pesticides since 1987.



Susan Kelner

Ontario Pesticide Education Program

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1-800-652-8573 or 519-674-1500 ext 63584

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Agenda

- 1. Pesticide Regulatory Framework**
 - Federal
 - Provincial

- 2. Ontario Ministry of Environment and Climate Change**
 - Pesticide Applicator Certification and Licensing

Topic 1

Pesticide Regulatory Framework

Federal

Provincial

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Pesticide Regulations



Pest Control Products Act and Regulation

- ❑ Products must demonstrate no unacceptable **risk** to human health or the environment. As well, product efficacy data is reviewed.
- ❑ The product label is the legal document outlining the acceptable conditions for use.
- ❑ Classified into levels by **hazard** (acute toxicity of the pesticide)– Danger, Warning, Caution, no symbol on the label
- ❑ Classified into levels by assessment of **risk (hazard & exposure)**: Restricted, Commercial, Domestic

Assessment of Risk

Hazard and Risk - two different meanings:

Hazard is the harm that a pesticide can cause

- its toxicity
- a characteristic of the pesticide.

Risk is an assessment of the possibility that a hazardous pesticide will cause harm.

$$\text{Risk} = \text{Toxicity} \times \text{Exposure}$$

Pesticides assessed by the Pest Management Regulatory Agency of Health Canada. Health Canada completes a **risk assessment.**

Pesticide Regulations



Provincial: Ontario Pesticides Act and Regulations

- **Provinces are responsible for: sale, transport, storage, use, disposal, and the training, certification and licensing of pesticide users and vendors**
- **Provinces may further classify pesticides by hazard to direct the use of the product.**

Federal Provincial Cooperation

Federal-Provincial-Territorial Committee on Pest Management and Pesticides (FPT CPMP)



- Two members from each province, plus federal government members
- Provides advice and direction to governments on programs, policies and issues related to pest management and pesticides.
- Reports to the FPT Committee of Agriculture Associate Deputy Ministers and the FPT Committee of Health and the Environment.

<http://www.hc-sc.gc.ca/cps-spc/pest/part/fpt/index-eng.php>

Federal Legislation

Pest Control Products Act (PCPA)

<http://laws-lois.justice.gc.ca/eng/>

administered by **Health Canada** under the

Pest Management Regulatory Agency (PMRA)

www.hc-sc.gc.ca/cps-spc/pest/index-eng.php

- **Health Evaluation**
- **Environmental Evaluation**
- **Value/Efficacy Assessment**

On-going review of products

Pest Management Regulatory Agency may

- **re-evaluate at anytime**
 - Suspend a use or product
 - Cancel a use or product
 - Include more precautions on the label
 - Delete a use from the label
- **register a new product for emergency use**

PMRA Monitors registered products with **Pesticide Incident Reporting:**

<http://www.hc-sc.gc.ca/cps-spc/pest/part/protect-proteger/incident/index-eng.php>

Incident = an adverse reaction to humans, animals or the environment

Enforcement

Administrative Monetary Penalties Act:

- Canada Ag Products Act
- Farm Debt Mediation Act
- Feeds Act
- Fertilizers Act
- Health of Animals Act
- Meat Inspection Act
- **Pest Control Products Act**
- Plant Protection Act and the Seeds Act

Health Canada agents may issue a **Notice of Violation with Penalty** – penalties classified as minor, serious, or very serious –from \$100 to \$4,000.

Other Federal Acts

- Food and Drugs Act- **Health Canada**
- Fertilizers Act - **CFIA**
- Pesticide Residue Compensation Act – **Health Canada**
- Feeds Act - **CFIA**
- Fisheries Act – **Fisheries and Oceans Canada**
- Migratory Birds Act – **Environment Canada**
- Species at Risk Act – **Environment Canada**
- Transportation of Dangerous Goods Act – **Transport Canada**
- Canadian Environmental Protection Act – **Environment Canada**

CFIA: Canadian Food Inspection Agency –

- provides inspection and support for animal and plant health programs,
- ensures a safe, high quality food supply

www.inspection.gc.ca

Provincial Legislation

Provincial: Various Ministries

Pest management and pesticide regulations are under various provincial ministries such as environment, natural resources, agriculture, forestry – for listing see:

<http://www.hc-sc.gc.ca/cps-spc/pest/part/fpt/fpt-links-liens-eng.php>

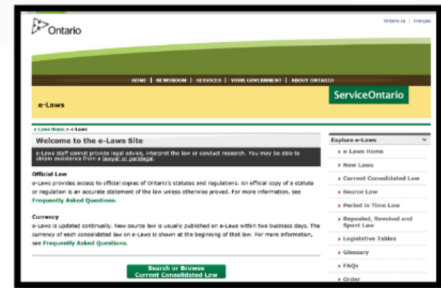
▪ Example:

- Ontario Ministry of the Environment and Climate Change (Pesticides Act) www.ene.gov.on.ca
- Ontario Ministry of Agriculture, Food and Rural Affairs (pest management activities, food safety) <http://www.omafra.gov.on.ca/>

In Ontario:

Pesticides Act Pesticides Regulation 63/09

www.e-laws.gov.on.ca



administered by

Ontario Ministry of the Environment and Climate Change

www.ene.gov.on.ca



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Ontario Pesticides Advisory Committee

Advises the Minister of the Environment

www.opac.gov.on.ca

- **Reviews the Pesticides Act and Reg 63/09**
- **Classifies pesticides by hazard for Ontario**
- **Considers pest management and pesticide matters**

Environmental Bill of Rights Registry

"public notices" about environmental matters being proposed by government

<http://www.ebr.gov.on.ca/>

Enforcement of the Pesticides Act

- **Director, under the Pesticides Act**
- **Provincial Officers**
 - **Inspect**
 - **Take samples**
 - **Seize records, equipment, pesticides**
 - **Ask for help from OPP or local police**
 - **Secure things or places**
 - **Issue tickets and/or provincial orders**

- **Questions can be directed to a provincial Pesticides Specialist at a regional office –**

Provincial Monetary Penalties

Sell an unclassified pesticide	\$355.00
Offer to sell or transfer an unclassified pesticide	\$255.00
Sell without a license	\$355.00
Offer to sell or transfer a pesticide with out a license	\$255.00
Fail to produce sales record	\$155.00
Store pesticide so that it poses health or safety risk	\$355.00
Display a Class 5 pesticide in manner hazardous to children	\$355.00
Use pesticide not in accordance with the label	\$155.00
Store outdoors without prescribed placard	\$355.00

<http://www.ontariocourts.on.ca/> Search for 'pesticides'

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Example of Pesticide Vendor/Operator Compliance Inspections (2005-2007)

Incident	No. of Vendors failing inspection	No. of Operators failing inspection	Issue
Anticipated Health Impacts	3	-	Improper display , leaking container
Anticipated Environmental Impacts	1	-	Possession of/use of unregistered/unclassified product
Suspected Violation	36		Unregistered/unclassified product possession/use, improper sales records , improper display of Schedule 3 product
		46	Storage area not in compliance with Reg. 914
Potential Environmental Impact	4		Leaking product, unregistered product, Schedule 1 & 5 stored with fertilizer
		10	Improper storage , application in high wind, leaking product

8 tickets (3 to one vendor) were issued to vendors for repeated non-compliance, display of unclassified product, open packages. A total of 79 Vendor inspections and 146 Operator/Exterminator inspections occurred.

Pollution Incident Reports

March 2006 to April 2007

Total of 371 pesticide program incidents

- **64% required a Priority or Planned Field response based upon:**
 - Health concerns of bystanders
 - Overspray damage
 - Odours
 - Bee kills
 - Lack of public notification
 - Improper storage
 - Application by non-licensed persons
 - Sale to unauthorized persons
 - Improper use of label directions
- **36% required no response or were deferred to other agencies**

Topic 2

Ontario Ministry of Environment and Climate Change

Pesticide Applicator Certification and Licensing

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Canadian Pesticide Safety Certification **National Standard** for Applicators and Vendors

The Standing Subcommittee for Pesticide Education, Training and Certification

- reports to the **FPT CPMP**
- develops and maintains a National Standard
- promotes consistency, harmonization and reciprocity across Canada
- provides a forum for discussion of issues and problems
- allows provinces to share resources and expertise

<http://www.hc-sc.gc.ca/cps-spc/pest/part/fpt/educ-cert-eng.php>

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Certification: Provincial Responsibility

Example Ontario

Co-ordinated by



In cooperation with

- Ontario Ministry of the Environment and Climate Change
- Ontario Ministry of Agriculture, Food and Rural Affairs
- Ontario Agri Business Association,
- CropLife Canada, Ontario Chapter
- Ontario Farm & Food Care

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Certification

Laws structured on:

- 1) What is the risk of using the pesticide?
- 2) Where is the pesticide used?
- 3) Who uses the pesticide?

Some Ontario terms:

Certification: learn and pass a pesticide safety exam/evaluation

Training: learn and no exam/evaluation

Exterminator Licence: Ministry of Environment and Climate Change permission issued to a person after she has achieved certification.

1) What is the risk of using the pesticide?

Federal Classification

Domestic Pesticides (least risk)

- **vendor certification:** required by some provincial governments
- **applicator certification:** not required by any provincial government
- **In April 2009, Ontario government banned “cosmetic” use of pesticides by homeowners (2006-QC; 2009-NB; 2010 – PEI; 2011– NS)**

Commercial Pesticides (moderately risk)

- **vendor certification:** required by all provincial governments
- **applicator certification:** required by most provincial governments with the type of certification depending on **who** uses the pesticide and **where** it is used – **some provinces exempt farmers**

Restricted Pesticides (most risk)

- **vendor certification:** required by all provincial governments
- **applicator certification;** required by most provincial governments with the type of certification depending on **who** uses the pesticide and **where** it is used – **some provinces exempt farmers**

Hazard Classification - Ontario

Pesticides registered under the PCPA must be classified in Ontario before being offered for sale or used in Ontario.

Pesticides are classified into one of eleven different Classes depending on:

- their federal classification
- whether they are products or active ingredients
- whether they are labelled for cosmetic or non-cosmetic uses
- how poisonous they are to human health and environment
- how long they last in the environment
- how they are used

Table 1 - Ontario Pesticide Classification - Hazard and Criteria

Class	Ontario Hazard	Federal Risk Assessment Classification
1	Various	Manufacturing - Concentrates that are used to manufacture a product.
2	Very Hazardous	Commercial or Restricted
3	Moderately Hazardous	Commercial or Restricted
4	Less and Least Hazardous	Commercial or Restricted
5	Less Hazardous	Domestic
6	Least Hazardous	Domestic
7	Various	Domestic - Controlled Sales (vendor sells with information handout) Class 7 products have both cosmetic and non-cosmetic uses.
8	N/A	Domestic products banned from sale or use.
9	N/A	Active ingredients that are banned for cosmetic use. Class 2, 3, 4, 5, 6 or 7 pesticides that contain Class 9 pesticides may be used for exceptions under the ban.
10	N/A	Active ingredients allowed for use under the health and safety exception to control plants that are poisonous to touch by humans.
11	N/A	Active ingredients that are biopesticides or certain lower risk pesticides. Examples: sulphur, acetic acid and mineral oil.

www.ene.gov.on.ca/environment/en/category/pesticides/index.htm

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Class	For Purchase By	For Use By
1	General Vendor Manufacturer	Manufacturer Researcher
2	General Vendor Certified Farmer Licensed Exterminator Bee Inspector (permit)	Certified Farmer Supervised Assistant Farmer Licensed Exterminator Bee Inspector
3	Above Plus: Registered Beekeeper	Above Plus: Technician/Trainee Registered Beekeeper
4	Above Plus: Farmer who is not certified	All the above plus: Farmers not certified
5	Anyone	Anyone
6	Anyone	Anyone
7	Anyone	Anyone
8	Domestic Products banned for sale or use	
9	Active ingredients banned for cosmetic use	
10	Active ingredients allowed for use under health and safety exception.	
11	Active ingredients that are biopesticides or lower risk pesticides	

2) Where is the pesticide used?

Federal Certification Framework

- **Applicator Core** - knowledge for every pesticide applicator
PLUS
- **Category Specific Certification Modules:**
 - Aerial
 - Agriculture
 - Aquatic Vegetation
 - Forestry
 - Fumigation
 - Greenhouse
 - Industrial Vegetation
 - Landscape
 - Mosquito and Biting Flies
 - Structural
- **Vendor Core** – knowledge for every pesticide vendor
 - Vendor **Module** for Commercial and Restricted Products

3) Who uses the pesticide?

Pesticide Use - includes mixing, loading, handling, applying, cleanup, transporting, storing and/or disposing of pesticides.

Commercial Use:

- Use or supervision of the use of a pesticide by a business owner/manager or their employee on a fee-for-service basis.

Non-commercial Use:

- Use or supervision of the use of a pesticide by an individual on property owned or controlled by them or their employer, who does not receive a fee-for-service and is not involved in the primary production of a commodity. Examples include municipalities, golf courses, hospitals, schools, cemeteries and rights of ways.

Private Use: (FARMERS)

- Use or supervision of the use of a pesticide by a business owner/manager or their employee who does not receive a fee-for-service and who is involved in the primary production of a commodity.

Residential Use:

- Use by a homeowner/tenant who uses a pesticide on or around their residence.

Ontario Example: Two Ways to Use Pesticides in Agriculture

Commercial Use (apply pesticides for money \$\$\$)

- certification of pesticide users in all provinces for all classifications of pesticides
- Recertification every five years required in most provinces

Private Use (farmers – apply pesticides to grow food)

- certification of pesticide users in 7 of 10 provinces for all classifications of pesticides*
- *In B.C., farmers are required to be certified only if they are using restricted class products, or products with an acute oral LD50 < 500 mg/kg.
- Some provinces use the same manuals, exams, program policies for both users, some use different manuals, exams and policies
- When a pesticide product label specifies that it is to be used by certified applicators only (federal government), then all users must be certified.

Private Use

Farmers and Farmer Assistants



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Certification of Farmers in Canada

Mandatory in 7 provinces

- Ontario - 1991
- PEI - 1995
- Nova Scotia - 1995
- Newfoundland and Labrador - 1997
- Quebec - 2005
- New Brunswick
- British Columbia *Restricted products only, not Commercial

Voluntary in 3 provinces

- Alberta
- Saskatchewan
- Manitoba



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What does an applicator need to know?

Based on National Standard

1. Characteristics of a pesticide
2. Canadian and Provincial Laws
3. Labeling – follow directions
4. Risks to Human Health
5. Risks to the Environment
6. Pesticide Safety Procedures
7. Pest Management Decisions
8. Application Equipment
9. Emergency Response
10. Professionalism



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Why? Requested by Farmers

Farmers wanted to show the public that they know how to use pesticides safely –

- Protect food
- Protect environment

Who Benefits?

- **Environment** -- farmers learn to minimize environmental risks
- **Farmers** – farmers learn how to minimize health risks
- **Government** – able to restrict pesticides to Certified Farmers

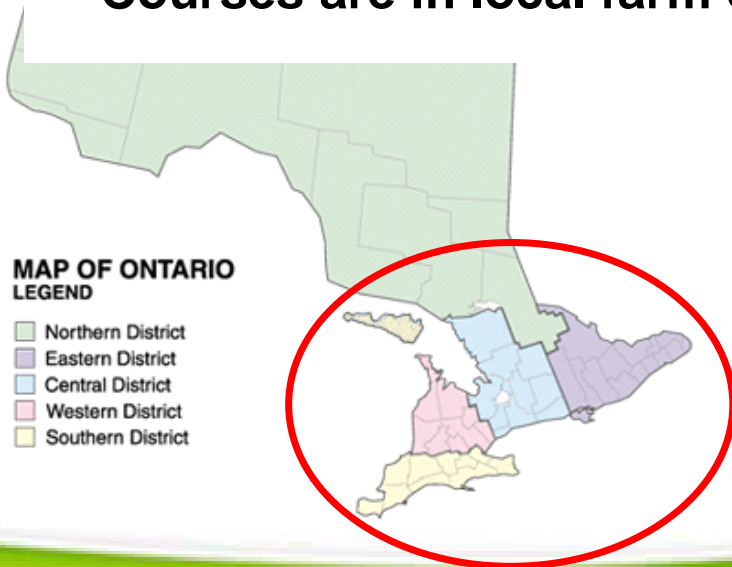
Grower Pesticide Safety Course	Pesticide Vendor Certification Course	Training for Farmer Assistants
Certification to buy and use the more hazardous pesticides (started 1987, legislated in 1991)	Certification to sell the more hazardous pesticides (started 1986, legislated 1991)	Training for applicators <u>assisting</u> a Certified Farmer (started 1998, legislated 2000)
<u>First certification</u> - one day course with open book exam OR online course	<u>First certification</u> - two day course with open book exam OR online course	<u>First training</u> - one day course, <u>no exam</u> OR trained on the farm by a qualified instructor
<u>Recertify</u> every five years - one day course with open book exam, OR self-study with exam, OR online course	<u>Recertify</u> every 5 years - one day course with open book exam, OR self-study with exam, OR two day course with open book exam OR online course	<u>Retrain</u> every 5 years Qualified Instructor receives more information about how to train

26th Year

Farmers	148,915
Farmer Assistants	3,023
On Farm Instructors	695
Vendors	7,191

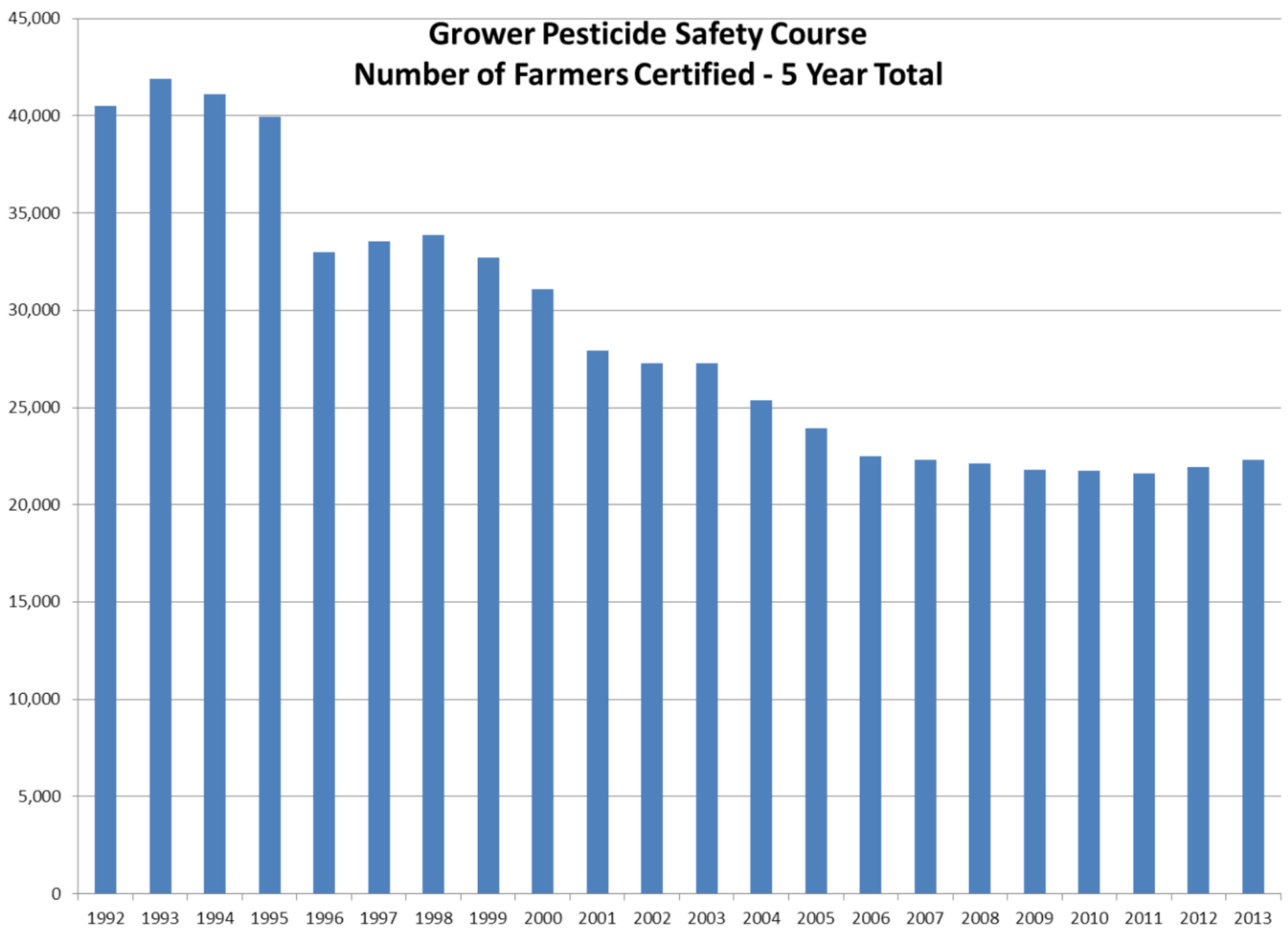
Ontario Achievements

- **Currently 20,000 Certified Farmers across Ontario**
- **350 or more courses or exam sessions across Ontario each year**
- **Courses are in local farm communities**



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Grower Pesticide Safety Course Number of Farmers Certified - 5 Year Total



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Farmers Teaching Farmers



- **Discussion**
- **Questions/answers**
- **Case Studies**
- **Real-life**
- **Local concerns**

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Improve Safety Practices on Farms



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Record of Certification

Computer database of Certified Farmers, Farmer Assistants and Certified Vendors

- Ontario Ministry of the Environment and Climate Change
- Record of pesticide applicator training and certification
 - Name
 - Address
 - Certification number
 - Expiry date
 - Date of birth

Ontario AG Care UNIVERSITY OF GUELPH RIDGETOWN CAMPUS

Grower Pesticide Safety Course

CERTIFICATE #

EXPIRY YEAR/MONTH

SIGNATURE

PestSQL_2005_Green : Project - PestCourse_tablesSQL (Access 2002 - 2003 file form...)

File Home Create External Data Database Tools Add-Ins

SUSAN KELNER - Cert. # 950346 950346

Student Information Company Info Add To Course Course History Shipping / Replacements

Student Information Date Registered: []

Navigation Pane

FIRST NAME: SUSAN English

LAST NAME: KELNER

STREET: RIDGETOWN CAMPUS

RR or PO: []

TOWN: RIDGETOWN

PROV: ON

POSTAL CODE: N0P 2C0

PHONE: (519) 674-1500

CELL: []

WORK PHONE: []

HomeFax: []

EMAIL: []

DOB: 5/07/59

COUNTY: KENT

Farm <input checked="" type="checkbox"/>	Other Land <input type="checkbox"/>	Information <input type="checkbox"/>
Beef <input type="checkbox"/>	Fruit <input type="checkbox"/>	Xmas <input type="checkbox"/>
Dairy <input type="checkbox"/>	Veg <input type="checkbox"/>	Ginseng <input type="checkbox"/>
Swine <input type="checkbox"/>	SOD <input type="checkbox"/>	Nursery <input type="checkbox"/>
Sheep <input type="checkbox"/>	Green <input type="checkbox"/>	No Farm <input type="checkbox"/>
Poultry <input type="checkbox"/>	Mushrooms <input type="checkbox"/>	Company <input checked="" type="checkbox"/>
FieldC <input type="checkbox"/>	Tobacco <input type="checkbox"/>	Other <input checked="" type="checkbox"/>
GH Flowers <input type="checkbox"/>	Research <input type="checkbox"/>	[]

Print Renewal
 Deceased
 No Longer Farm

ADDRESS For Susan : []

Exit
Save
Add New
Undo
Delete

Record: 1 of 1 No Filter Search

Form View

PestSQL_2005_Green : Project - PestCourse_tablesSQL (Access 2002 - 2003 file form...)

File Home Create External Data Database Tools Add-Ins

SUSAN KELNER - Cert.# 950346 GT 950346

Course Information: GT000001
 Guelph 14-Feb-00 ske

Confirmation Report

G - (Farmers) (Vendor Requested Grower)
 V - (Vendor) For Letter of Completion
 Qualified Instructor - GT X?
 Farm Assistant - TA TA Type: Exemption Type:

Final Mark: 100 Set Mark

Expiration Date: 28-Feb-05 Set Expiry Date

Date Override: Refresh

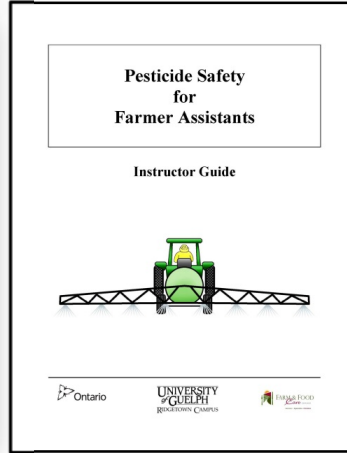
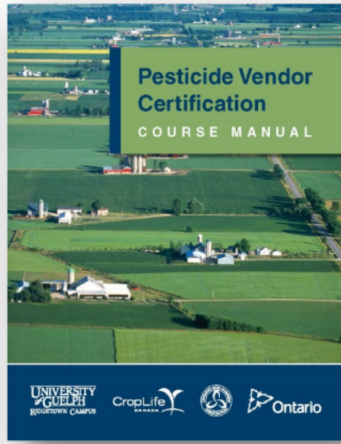
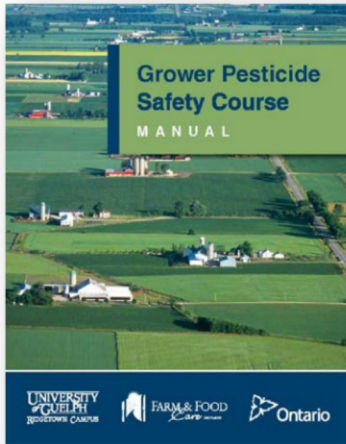
Passed Mark 100 Exam Only	Passed Retake Remark 1 0 Remark 1 Date	Passed Retake Remark 2 0 Remark 2 Date	Passed Retake Remark 3 0 Remark 3 Date
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PAID Replacements: 0 Date Cert Letter Sent: 09-Feb-00 Stop Print

Record: 1 of 1 No Filter Search

Form View

Learning Resources



Greenhouse
Mushroom

Videos
Examinations



Seven additional
chapters

www.opep.ca



English
French
Low German
Spanish
Thai

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Benefits of Learning In-Class

Farmers learn collaboratively.

- *“We learn through the personal experiences of the instructor and others in our class. The information in course manual becomes clear through discussion.”*

Farmers create a bond with the class.

- *“The instructor points out priority topics, interesting case studies, past incidents.”*

Instruction offers a variety of ways to learn.

- *“You have many ways to learn such as video, lecture, activities, reading, and problem solving.”*

Farmers are made aware of how their use of pesticides could cause adverse affects.

Teachers connect safety practices to the farmers’ operations to support a change in their practices.

Online Courses

First offered in 2012

**Over 5 days, 1.5
hours in online per
day**

**Uses “Desire 2
Learn” platform**

The screenshot shows the CourseLink interface for the "Grower Pesticide Safety Course" at the University of Guelph. The course is scheduled for five days (Day 1 to Day 5). The interface includes a navigation menu with options like "Outline", "Start Here", "ID/Class Code", "Discussions", "Dropbox", "Quizzes", "Edit Course", and "Help". The main content area features a "Welcome" message with a video thumbnail and text stating: "The course takes place over the next five days. You need to participate every day. The course will be open to you for two weeks. Grades will be posted before the course closes." There is also an attachment for "Audio 2011-09-20 0911.wav (765.54 KB)". The right sidebar contains sections for "Updates" (2 New Dropbox Submissions), "Bookmarks" (No bookmarks have been added), and "Role Switch" (Current Role: My Role (Instruct-build-grade)).

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Benefits of Certification

- **Allows government and the public to work together to ensure a high quality, nutritious and safe food supply.**
- **Strengthens public confidence that certified applicators and vendors are handling pesticides responsibly and safely.**
- **Establishes a national/provincial level of competency for certified applicators and vendors.**
- **Provides the government with the assurance that only trained applicators are applying pesticides.**
- **Provides a way to get a pesticide safety message to pesticide applicators.**
- **Provides a way for the government to restrict the use of certain pesticides to only certified individuals.**

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