

# 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**

**University of Guelph Ridgetown Campus**

[www.opep.ca](http://www.opep.ca)    [skelner@uoguelph.ca](mailto:skelner@uoguelph.ca)

**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](http://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](http://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:

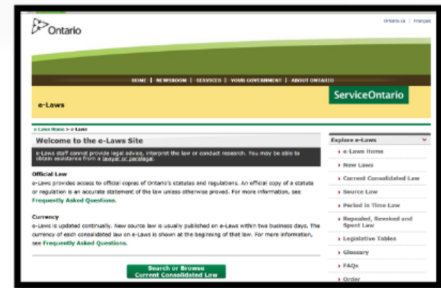
- Ontario Ministry of the Environment and Climate Change (Pesticides Act) [www.ene.gov.on.ca](http://www.ene.gov.on.ca)
- Ontario Ministry of Agriculture, Food and Rural Affairs (pest management activities, food safety) <http://www.omafra.gov.on.ca/>



## In Ontario:

# Pesticides Act Pesticides Regulation 63/09

**[www.e-laws.gov.on.ca](http://www.e-laws.gov.on.ca)**

**administered by**

# Ontario Ministry of the Environment and Climate Change

[www.ene.gov.on.ca](http://www.ene.gov.on.ca)



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# Ontario Pesticides Advisory Committee

**Advises the Minister of the Environment**

**[www.opac.gov.on.ca](http://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/>**

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# 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	-	<b>Improper display</b> , leaking container
Anticipated Environmental Impacts	1	-	Possession of/use of unregistered/unclassified product
Suspected Violation	36		Unregistered/unclassified product possession/use, <b>improper sales records</b> , improper display of Schedule 3 product
		46	<b>Storage area</b> not in compliance with Reg. 914
Potential Environmental Impact	4		Leaking product, unregistered product, <b>Schedule 1 &amp; 5</b> stored with fertilizer
		10	<b>Improper storage</b> , 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>



# 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**

<b>Class</b>	<b>Ontario Hazard</b>	<b>Federal Risk Assessment Classification</b>
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](http://www.ene.gov.on.ca/environment/en/category/pesticides/index.htm)

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

## 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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# Ontario Pesticide Education Program

## 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 <b>more hazardous</b> pesticides (started 1987, legislated in 1991)	Certification to sell the <b>more hazardous</b> pesticides (started 1986, legislated 1991)	Training for applicators <u>assisting</u> a Certified Farmer (started 1998, legislated 2000)
<u>First</u> certification - one day course with open book exam OR online course	<u>First</u> certification – two day course with open book exam OR online course	<u>First</u> training - 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

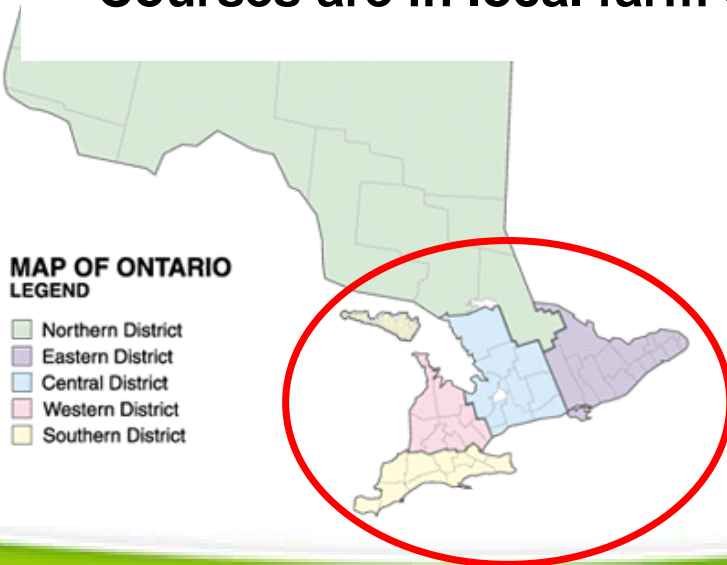
# 26<sup>th</sup> Year

<b>Farmers</b>	<b>148,915</b>
<b>Farmer Assistants</b>	<b>3,023</b>
<b>On Farm Instructors</b>	<b>695</b>
<b>Vendors</b>	<b>7,191</b>

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# Ontario Achievements

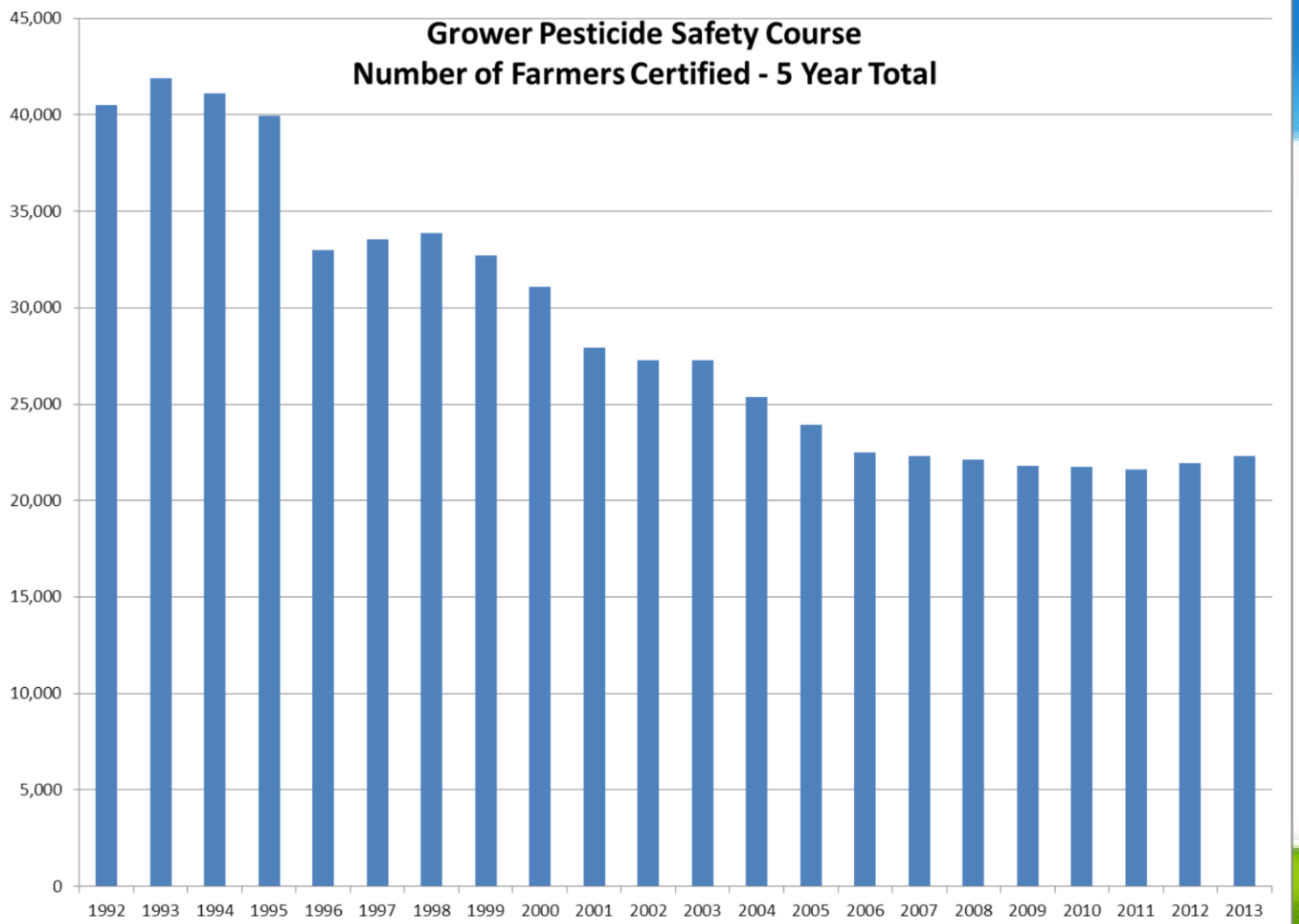
- **Currently 20,000 Certified Farmers across Ontario**
- **350 or more courses or exam sessions across Ontario each year**
- **Courses are in local farm communities**



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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

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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:**

**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

<b>Farm</b> <input checked="" type="checkbox"/>	<b>Other Land</b> <input type="checkbox"/>	<b>Information</b> <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 : )

Navigation Pane

Record: 1 of 1 No Filter Search

Form View

Exit  
Save  
Add New  
Undo  
Delete

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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

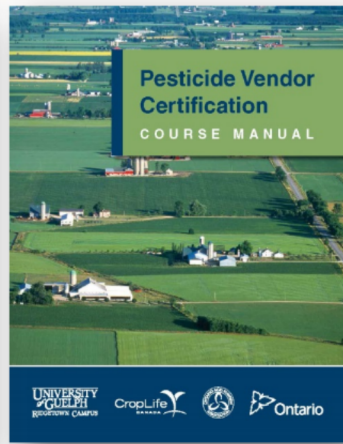
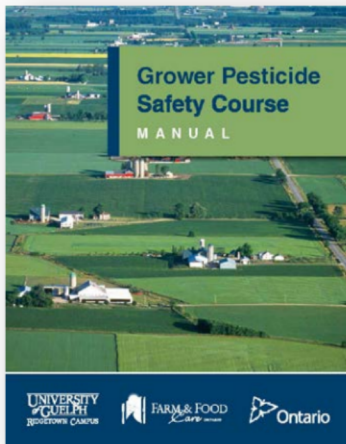
PAID Replacements: 0 Stop Print  
Date Cert Letter Sent: 09-Feb-00

Record: 1 of 1 No Filter Search

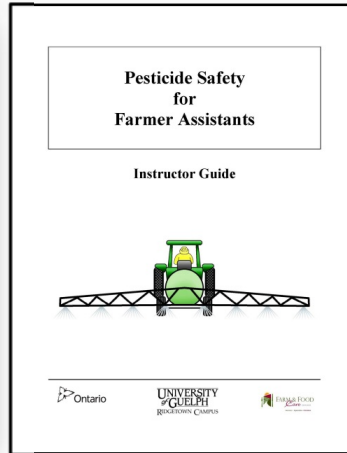
Form View

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# Learning Resources



Seven additional  
chapters



Greenhouse  
Mushroom

Videos  
Examinations



[www.opec.ca](http://www.opec.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.**

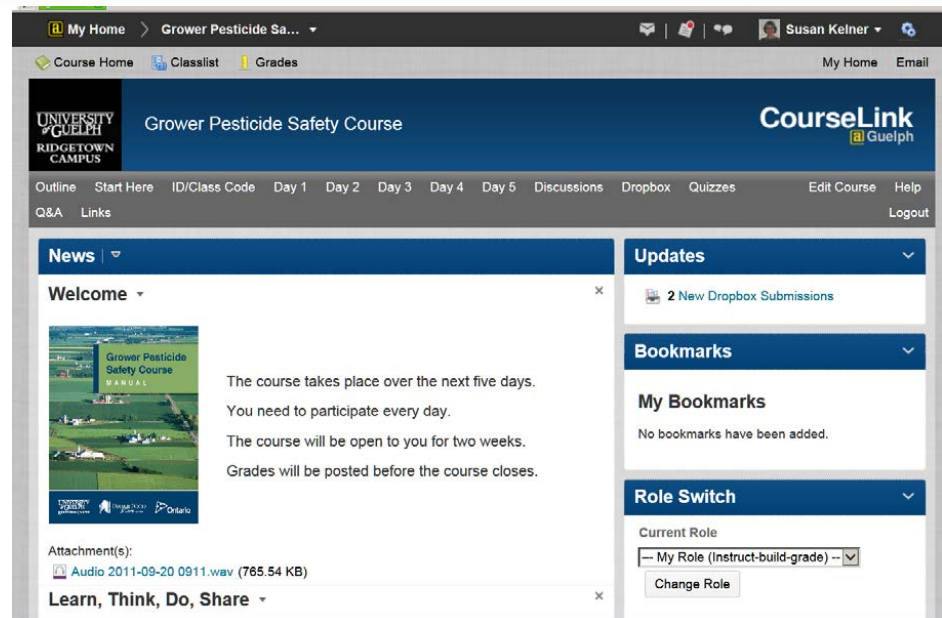


# Online Courses

**First offered in 2012**

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

**Uses “Desire 2  
Learn” platform**



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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.**

**Susan Kelner, BSc(Agr), MLIS, MEd**  
**Ontario Pesticide Education Program**  
**University of Guelph Ridgetown Campus**  
**120 Main Street East**  
**Ridgetown ON Canada N0P 2C0**  
**[www.opep.ca](http://www.opep.ca)    [skelner@uoguelph.ca](mailto:skelner@uoguelph.ca)**  
**1-800-652-8573 or 519-674-1500 ext 63584**

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