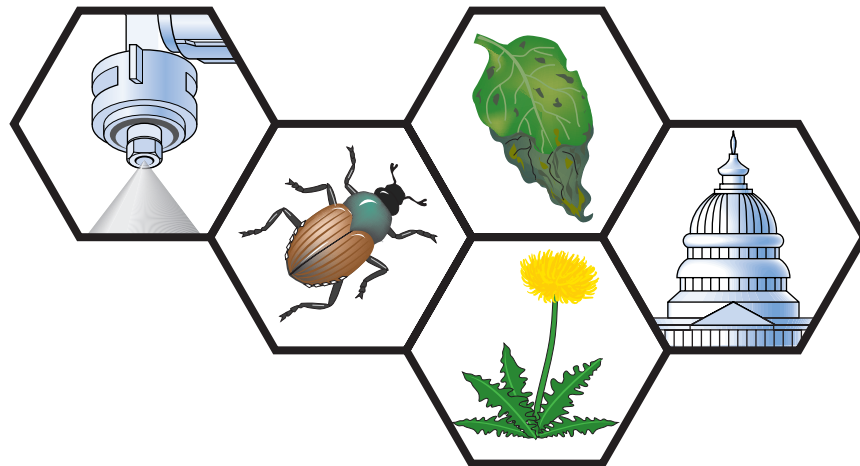
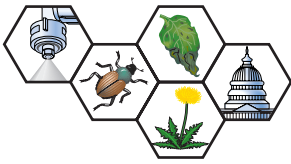


**University of Illinois
Extension**

**Pesticide Safety
Education Program**



**ANNUAL REPORT
2014-2015**



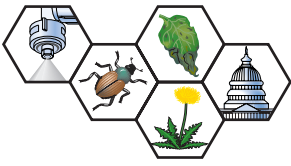
Contents

- Program Mandate 1**
- State Lead Agency Cooperation 2**
- Program Highlights and Impacts 3**
- Practice Change Survey Results 4**
- PSEP Specialists 5**
- Steering Committee..... 7**
- Support Trainers 8**
- Pesticide Safety Education Program**
- Administrative Office 9**
- Educational Materials..... 11**
- Commercial PSEP Clinics..... 13**
- Online Training Courses 15**
- Private PSEP Clinics 17**
- Bilingual Training 19**
- Worker Protection Standard..... 19**
- Operation S.A.F.E. Fly-ins..... 20**
- Mass Media 21**
- Homeowner Programs 23**
- Other Programs 25**
- Professional Involvement by PSEP Specialists 27**
- Summary of Accomplishments 29**

-
-
-
-
-
-

Prepared by: Travis Cleveland, Patty Bingaman, Scott Bretthauer, Jean Miles,
Phil Nixon, David Robson, and Michelle Wiesbrook

May 2016 (Reflects activities from July 2014 through June 2015)



Illinois Pesticide Safety Education Program

-
-
-
-
-
-

Program Mandate

Authority

Illinois law, in accordance with the Federal Environmental Pesticide Control Act, requires that anyone who purchases or uses pesticides classified as “restricted use” must be certified as a commercial pesticide applicator or operator, or a private (farmer) pesticide applicator. In addition, those who apply “general use” pesticides commercially must also be certified. The responsibilities of the Illinois Department of Agriculture (IDA) and University of Illinois Extension (Extension) in pesticide certification and training are clearly defined. The IDA, as lead agency, has responsibility for the certification and issuing of permits or licenses to persons who apply pesticides. Extension, working in cooperation with IDA staff, is responsible for conducting educational training programs for private, commercial, and public pesticide applicators and operators.

Purpose

Since 1966, Extension has been conducting training schools for private applicators, and commercial agricultural and urban operators and applicators. The purpose is to train applicators and operators in the proper and safe use of pesticides to prevent misuse and to avoid accidents. In addition to keeping applicators up-to-date on new developments in both chemical and nonchemical pest control methods, the training sessions help to prepare applicants to pass the certification examinations required for obtaining a license. This quality pesticide safety education is ultimately vital to Illinois residents in terms of public health protection and environmental stewardship.

Support

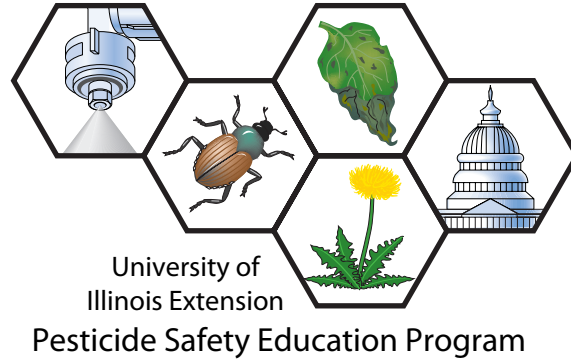
Initial funding for the Pesticide Safety Education Program (PSEP) was provided by the U.S. Environmental Protection Agency (USEPA) through the USDA Federal Extension Service, starting in 1974. These funds have been reduced over the years in amount and also in value due to inflation.

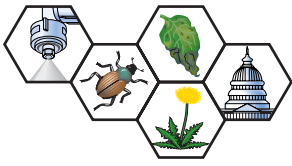
The Pesticide Control Fund, approved by the Illinois State Legislature in August 1985, provides funds to the IDA “for the purpose of conducting a public educational program on the proper use of pesticides and for other activities related to the enforcement of this act.” This fund provides the bulk of the dollars needed to conduct educational programs related to the safe and proper use of pesticides.

State Lead Agency Cooperation

Since 1998, the PSEP team has worked with the Illinois Department of Agriculture to review exam questions (based on our PSEP manuals) for use in the certification process. As a result, both parties feel more comfortable with the exams given to our clients. During the past year, PSEP assisted IDA in reviewing exam questions on new Aerial, General Standards, and Forestry tests.

Close interaction with the Illinois Department of Agriculture regarding the number of attendees at each clinic and other operational issues results in consistent information from both training and testing personnel to our PSEP clinic attendees.





Illinois Pesticide Safety Education Program

Program Highlights and Impacts

- 47 Training Clinics Offered
 - 2 State Agency Clinics
 - 23 Commercial Applicator Clinics
 - 18 Private Applicator Clinics
 - 4 Commercial Test-Only Clinics
- A total of 13,144 people received pesticide certification training.
 - 9,879 Commercial Applicators and Operators
 - 3,265 Private Applicators
- Six issues of *The Illinois Pesticide Review* newsletter were published.
- The PSEP Office processed 11,795 training clinic registrations. The online registration option continued to provide 24-hour access to easy and efficient registration for clinic attendees. Clientele also continued to have the options of registering by mail or by phone. Telephone calls placed during business hours were provided personal service. Calls placed after business hours were greeted with an automated telephone service.
- The PSEP Office processed orders for 7,200 Pesticide Applicator Training Manuals and Workbooks. An additional 2,790 publications were sold during pesticide applicator clinics.

Practice Change Survey Results

The University of Illinois Pesticide Safety Education Program offered General Standards Training in 27 locations from November 2011 to May 2012. A total of 5,874 attended these trainings. A questionnaire was mailed to a sample of these attendees to determine whether or not practice changes had occurred as a result of the training. The results of the survey were published in 2014.

The 295 questionnaire respondents included 98 who reported being operators and 196 who reported being applicators. Operators are those who use pesticides at the job site and are under supervision of applicators who have the ultimate legal responsibility for all pesticide purchasing, storage, handling, and use.

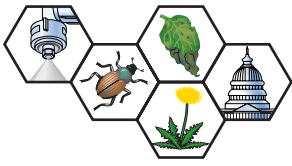
When asked to indicate how many years they had been certified to apply pesticides, 279 responded with 111 (40%) having been applying pesticides from 1-5 years. Ninety-two (33%) had been applying pesticides for 6-15 years, 43 (15 %) for 16-25 years, 29 (10%) for 26-35 years, and four for over 35 years.

Summary of Key Findings

- 90% of survey respondents indicated improving one or more of 12 practices after attending training
- 65.7% respondents reported improving calibration procedures
- 64.0% reported improved pest control decision making
- 62.2% reported improved pesticide mixing procedures
- 35.% reported an increase in frequency of calibration

The survey findings, overall, appear to indicate that Pesticide Safety Education training has been effective in helping pesticide operators/applicators to engage in correct pesticide application practices.





Illinois Pesticide Safety Education Program

-
-
-
-
-
-
-

PSEP Specialists



Patty Bingaman

Extension Assistant, PSEP Program Facilitator
Department of Crop Sciences

Coordinates commercial PSEP clinics. Conducts commercial clinic preregistration and PSEP publication distribution. Maintains financial accounts, develops new databases, and prepares special reports and brochures. Coordinates acquisition, reprinting, and marketing of PSEP study material.

<http://cropsci.illinois.edu/directory/pbingama>



Jean Miles

PSEP Office Assistant
Department of Crop Sciences

Helps handle telephone queries and registration, collect registration and publication data, process orders for educational materials, facilitate monetary obligations, and assist in other operational functions within the PSEP office.



Scott Bretthauer

Extension Specialist, Application Equipment
Department of Agricultural and Biological Engineering

Provides subject matter expertise and training in pesticide application equipment and calibration. Co-coordinates the private PSEP program. Conducts special aerial calibration clinics and pesticide drift reduction programs. Maintains and coordinates storage of PSEP supplies and equipment.

http://abe.illinois.edu/staff/S_Bretthauer



Travis Cleveland

Extension Specialist, Plant Pathology
Department of Crop Sciences

Provides subject matter expertise and training in pesticide training with an emphasis on plant pathology. Provides diagnostic support for the UI Plant Clinic. Coordinates annual report.

<http://cropsci.illinois.edu/directory/tclevela>



Phil Nixon

Extension Specialist, Entomologist
Department of Crop Sciences

Provides subject matter expertise and training in entomology. Coordinates grant proposals, state and federal reports, and other reports and summaries. Structural pest control liaison with the Illinois Department of Public Health. Co-coordinates Commercial and Private PSEP trainer scheduling.

<http://cropsci.illinois.edu/directory/pnixon>



David Robson

Extension Specialist, Pesticide Safety - Horticulture
Department of Crop Sciences

Provides subject matter expertise and training in pesticide safety and horticulture. Co-coordinates social media. Co-coordinates Worker Protection Standard training. Co-coordinates Private Pesticide training. Co-coordinates Commercial and Private PSEP trainer scheduling.

<http://cropsci.illinois.edu/directory/drobson>



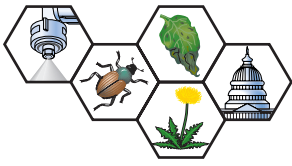
Michelle Wiesbrook

Extension Specialist, Weed Science
Department of Crop Sciences

Provides subject matter expertise and training in pesticide safety with an emphasis on horticultural weed science. Serves as IPR newsletter editor, collecting and organizing material; co-coordinates social media information and ensures its timely publication. Co-coordinates Illinois' Worker Protection Standard training. Facilitates accreditation of trainings through various professional organizations

<http://cropsci.illinois.edu/directory/buesinge>

-
-
-
-
-
-



Illinois Pesticide Safety Education Program

-
-
-
-
-
-

Steering Committee

The PSEP Steering Committee represents the two departments housing PSEP Specialists as well as off-campus staff, serving in program administration and advisory capacities as various opportunities and challenges arise. The committee members are familiar with the PSEP program and its mission. They represent the interests of their disciplines, associated clientele, and departments, with a variety of expertise, experiences, and perspectives.



Germán Bollero

Chair of the PSEP Steering Committee
Professor, Head of the Department of Crop Sciences



Michael Gray

Professor, Crop Sciences Extension Coordinator, and Assistant Dean for
Agriculture and Natural Resources Extension Programs
Office of Extension and Outreach Representative



Tom Voigt

Associate Professor of Turfgrass, Landscape, and Energy Grasses
Department of Crop Sciences Representative

Support Trainers

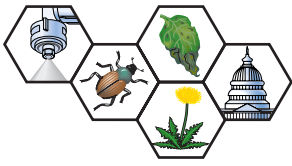
The following professional educators assisted PSEP specialists with Private Applicator Training Clinics and Commercial Applicator Training Clinics. We thank them for their support.

- Kelly Allsup
- Chris Enroth
- Dennis Epplin
- Duane Friend
- Laurie George
- Mathew Gill
- Richard Hentschel
- Sonja Lallemand
- Jim Morrison
- Ellen Phillips
- Mike Roegge
- Marion Shier
- Martha Smith



Dennis Epplin (above) and Jim Morrison (right) assisting with Private Applicator Training





Illinois Pesticide Safety Education Program

-
-
-
-
-
-

Pesticide Safety Education Program

Administrative Office

The University of Illinois Extension Pesticide Safety Education Program (PSEP) maintains an office to carry out needed administrative and secretarial functions. Close interaction with the Illinois Department of Agriculture regarding specific clinic operations results in consistent information from both training and testing personnel to our PSEP clinic attendees.

Clientele Communication Options

Pesticide Safety Education Program clientele have multiple options available to help register for training clinics or purchase educational materials. The PSEP website (www.pesticidesafety.illinois.edu) provides links to a convenient “one stop shop” for clinic registration and ordering of study material. The system was designed specifically for PSEP and has been viewed as the leading registration/ordering system in Extension. Clientele can also access the online training programs through the PSEP website.

In addition, the telephone system includes 24-hour voice mail, an automated attendant to assist the caller in selecting which option is needed and a direct rollover option to the Illinois Department of Agriculture. There are currently 56 voice mail lines so that a busy signal does not occur. With the high volume of in-coming calls (over 12,000 during this reporting period) this telephone system helps to direct patrons to the phone service they need in a timely manner. Many customers still want to be reassured that their online registration was received and is being processed.

Commercial and Private schedules, plus other pertinent clinic information is also available on the University of Illinois Pesticide Safety Education website. A listing of PSEP publications including the most recent publication date is available on this site. Clients have the added option to print and mail the forms to register for clinics and/or order study materials.

Educational Materials

The PSEP Office conducts the sale and distribution of over 35 manuals, workbooks and pest guides. Customer response is positive because they are able to register plus order desired material with one action, either via telephone or our online system. Mailing of requested educational materials is promised within 72 hours; however, this is usually accomplished within the same day. The number of publications sold from the PSEP office during the 2014-2015 season was 7,200. PSEP educational materials are also available at the commercial clinics where 2,790 were sold last season.



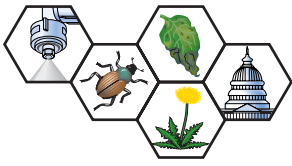
Clinic Registration

Forty-seven clinics were scheduled for the 2014-2015 applicator training season. The majority of the clinics, 24, were for commercial applicators, while 18 clinics were conducted for private applicators. Two State Agency clinics were held prior to the season. State Agency clinics provided additional training and testing opportunities for applicators employed by the Illinois Department of Transportation, Illinois Department of Natural Resources, etc. Three test only sessions were also conducted at various times during the training season.

During the 2014-2015 training season, 8,269 Commercial registrations were processed in the PSEP office resulting in a training volume of 9,879. Additionally, 3,526 Private transactions lead to a private training volume of 3,265. A total of 13,144 people received pesticide safety training during the 2014-2015 training season.

Financial Accountability

An additional responsibility of the PSEP office is the monitoring of receivables. At this printing, all outstanding payments have been resolved. This is accomplished by the combination of on-going database management plus the utilization of set office procedures.



Illinois Pesticide Safety Education Program

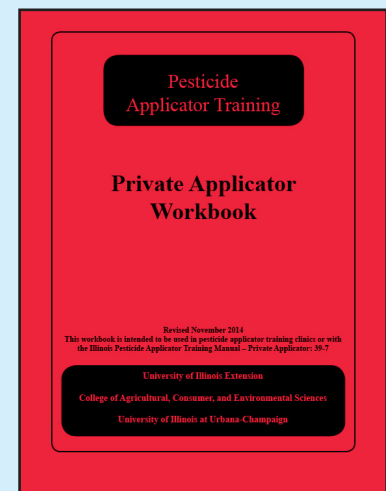
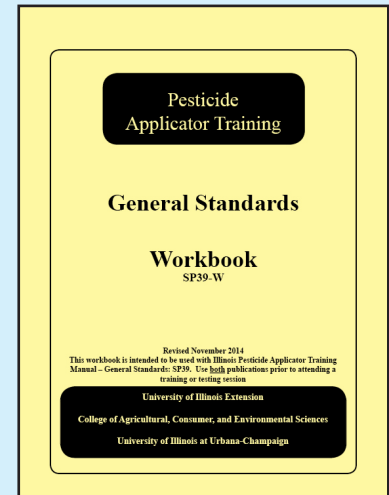
Educational Materials

University of Illinois PSEP publishes twenty-one manuals that address most areas of pesticide certification in Illinois. Ten workbooks are produced to cover the twelve most commonly licensed areas. Our manuals and workbooks continue to be used not only as references and learning tools before and during training clinics, but also as self-tutorial guides for those who wish to study on their own. These publications allow us to educate more operators and applicators than those who attend PSEP clinics.

Revised Training Manuals, Workbooks and Presentations

The Forest Manual, General Standards Workbook, Bilingual General Standards Workbook, Private Applicator Workbook, and Grain Facility Workbook were revised and published in November of 2014. Commercial clinic presentations were revised for General Standards, Field Crops, Grain Facility, Rights-of-Way, Ornamentals, and Turfgrass.

Recently Revised Publications



Sprayer Calibration Calculator App

University of Illinois Extension has released a new smartphone app for making sprayer-related calculations. Pesticide Spray Calculator, or Spray Calc, is available for both Apple and Android platforms. It contains multiple functions related to calibrating a sprayer.

The opening screen allows the user to select from one of four main options:

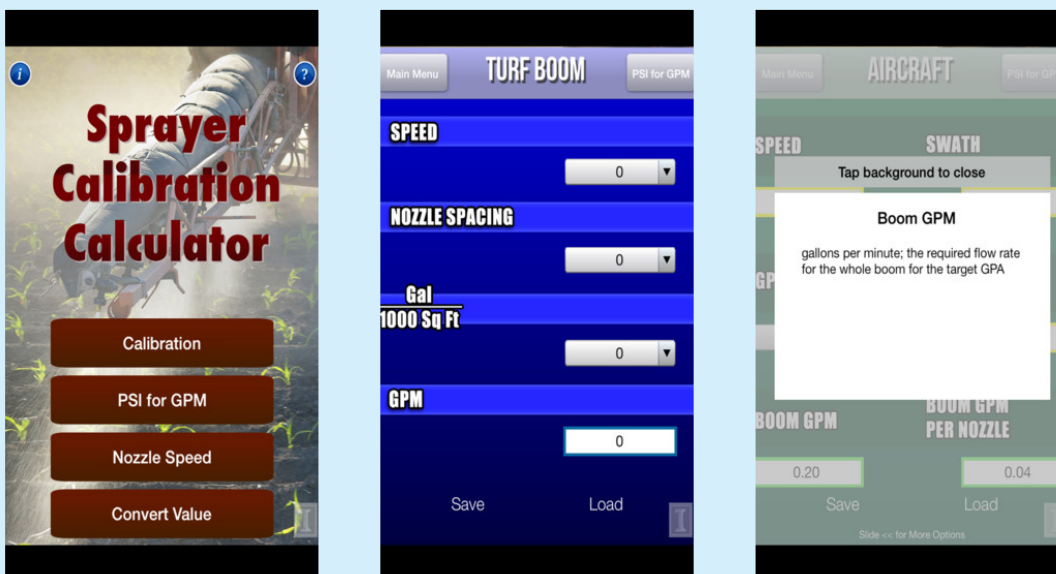
- 1. Calibration: allows user to calibrate four different sprayers types.
- 2. PSI for GPM: allows user to calculate required pressure in order to provide a specific flow rate, or do the opposite.
- 3. Nozzle Speed: determine minimum and maximum speeds for a specific nozzle.
- 4. Convert Value: various pesticide application related unit conversions.

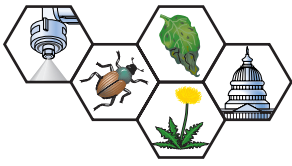
Throughout the app, help menus are available to provide guidance as to the function of various app components, as well as definitions for many of the variables listed. For most variables, touching the name of the variable brings up a definition of what the variable is and how it is measured.

Selecting “Calibration” leads to a screen with four options: Aircraft, Ground Rig, Turf Boom, and Boomless. Within each section, calibration scenarios can be saved for future reference and for values to be loaded into some of the other functions available on the app. Each option will be discussed separately.

Spray Calc was created to assist applicators with many of the calculations used to calibrate and set up a sprayer. In the future, functions to assist with tank mix calculations will be added along with other possible functions.

Sprayer Calibration Calculator Screenshots





Commercial PSEP Clinics

Pesticide Training and Certification Clinics for commercial applicators and operators were conducted at 26 sites during 2014-2015 training season. At these meetings, 9,164 commercial applicators and operators were trained (See Table 1). In addition to the General Standards, training was offered for the following categories: Field Crops, Turf, Ornamentals, Rights-of-Way, Aquatics, Seed Treatment, Demonstration and Research and Mosquito.

General Standards trainings covered 8 topics over a 3.5 hour session. Training topics included: Understanding Pesticides, Pesticide Application Equipment and Drift Reduction, Human Pesticide Protection, Equipment Calibration and Examples, Integrated Pest Management, Pesticides and the Environment, Labels and Labeling, and Pesticide Laws and Regulations.

Category trainings ranged from 1.5 hours to 3.5 hours in duration. Topics covered during the training sessions were specific to the category.

Training clinic attendees were offered a workbook. Workbooks were formatted as “guided notes” to encourage engagement, highlight important points from the presentations, and to provide full and accurate notes. University of Illinois Extension Pesticide Safety Educators presented the various topics and were available to respond to any questions.

Trainers

PSEP Specialists conducted the training clinics. Extension Educators and other Extension Specialists throughout the state also assisted with the trainings. PSEP Specialists provided assistance to the training efforts of these Extension Educators by furnishing PowerPoint presentations, notes, and other training materials. This afforded additional educational contacts for the participating Extension Educators and allowed the campus-based staff to pursue additional activities. All mosquito category training sessions were conducted by specialists employed by the Illinois Department of Public Health.

Evaluation

Teaching evaluations are occasionally conducted during General Standards trainings with the goal of identifying strengths and weaknesses within the program. Evaluation questions focus on the clinic registration process, the quality of individual sections within the General Standards training as well as the quality of the program as whole. Evaluations from year to year consistently show satisfaction and approval of the program.

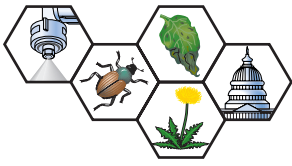
Continuing Education Units

Clinic attendees received continuing education points from the Golf Course Superintendents Association of America (GCSAA) for both Turf and General Standards trainings. International Society of Arboriculture (ISA) members received educational credits for attending the Ornamentals category training. Many of our clients are Certified Crop Advisors and received CCA education credits for Field Crops and Seed Treatment. The Illinois Dept. of Public Health issued CEUs for completion of General Standards training.

Table 1. Attendance by Category for 2014-2015 Commercial PSEP Clinics

CLINIC DATE	LOCATION	GS	S	T	O	FC	D&R	MOS	ROW	AQ	TOTAL
Nov. 13-14	Springfield	87							63		150
Dec. 1-2	Mt. Vernon	264	21			82			26		393
Dec. 9-10	Sandwich	180	19			51					250
Dec. 15-16	Springfield	194	48			63					305
Dec. 17-18	Champaign	353	74			102	10				539
Jan. 6-7	Jacksonville	200				55					255
Jan. 8-9	Mt. Vernon	288		38	28			29	80		463
Jan. 13-14	Rockford	206		84	47						337
Jan. 15-16	Matteson	146		64	37						247
Jan. 21 IFCA	Peoria IFCA	42									42
Jan. 22-23	Champaign	289		88	61				63		501
Feb. 2-3	Peoria	228				129			29		386
Feb. 4-5	Alsip	196		61	30				42	20	349
Feb. 17-18	Springfield	311		71	36				48		466
Feb. 19-20	Crystal Lake	282		99	48				71		500
Feb. 25-26	Collinsville	377		76	43				112	16	624
March 4-5	Skokie	346		129	58					29	562
March 10-11	Peoria	341		98	41					26	506
March 18-19	Moline	265		50	19				85		419
March 24-25	Rockford	329		66	41			39	98		573
April 1-2	Matteson	274		46	24			38	58		440
April 7-8	Alsip	215		47	26			36	43		367
April 14-15	Skokie	228		68	27				38		361
April 21-22	Collinsville	234						54	90		378
April 28-29	Des Plaines	213		31				29	44		317
May 6-7	Springfield	110						39			149
Total		6198	162	1116	566	482	10	264	990	91	9879

GS=General Standards; PM=Plant Management; S=Seed Treatment; T=Turfgrass; O=Ornamentals; FC=Field Crops; D&R=Demonstration & Research; MOS=Mosquito; ROW=Rights-of-Way; AQ=Aquatics



Illinois Pesticide Safety Education Program

Online Training Courses

A variety of interactive online training programs are available to assist applicators preparing for category exams. These courses also serve to expand training opportunities to areas of the state where on-site training is not feasible.

The training modules are scripted, as well as voiced. Lessons are self-paced and can be finished in approximately 3 hours. Users can choose to finish them all at once or over the course of several days. Additionally, participants can review any of the previously accessed modules. Training modules cost \$15.

During this reporting period, commercial applicators were able to prepare for the **Plant Management**, **Grain Facility** and **Vegetable Crops** (published Sept. 2014) category exams using online training courses.

Plant Management

Plant Management is geared towards commercial applicators managing interiorscapes. Training modules include: cultural requirements and stress management; common insect and disease pests and their controls; and application equipment and calibration.

Grain Facility

The Grain Facility course covers topics related to stored grain pest management and is for those who manage pests around grain elevators or other grain holding facilities. The convenient online course helps prepare applicators for the Grain Facility category exam. Private Applicators, who plan to fumigate their own grain, can use an abbreviated version of this training course to prepare for the Grain Fumigation exam. Modules include: insect identification and control; storage molds of grains; and rodent and bird pests.



Vegetable Crops (NEW 2014)

The Vegetable Crops online training modules were developed to provide applicators with the knowledge needed to pass the Vegetable Crops category exam. The training covers four areas – Diseases, Insects, Weed Management, and Application Equipment and Calibration.

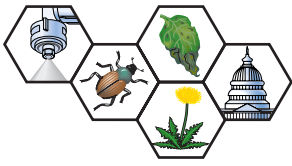
Diseases deal with the common diseases of cucurbits, tomatoes and peppers, and sweet corn. The Insect module includes chewing and sucking insects, focusing on the pests for specific vegetables. Weed management deals with the issues involved with controlling weeds as well as a few weeds for identification. Application Equipment and Calibration deals with the current innovations in spray applications, and basic calibration equations.



Herbicide Tolerant Crop Stewardship

The online Herbicide Tolerant Crop Stewardship course is provided free of charge and includes information on preventing herbicide injury to nontarget plants. By understanding the off-target movement of herbicides better and by knowing what factors contribute to it, applicators can more easily take preventative steps. Information is provided here on typical injury symptoms that result from exposure to plant growth regulator or auxin herbicides as their use is expected to greatly increase. Injury diagnosis assistance and resources for handling injured plants and communicating with neighbors are shared as well.

Although this training was developed with herbicide tolerant crop growers in mind, it is also intended to be useful for a much broader audience.



Illinois Pesticide Safety Education Program

Private PSEP Clinics

Private Applicator clinics are designed for grain farmers, orchardists, and small acreage farmers (vineyards, vegetable growers, etc.) who apply restricted-use pesticides on their properties or managed lands. While similar to General Standards training, Private Applicator clinics put an added emphasis on changing technology, modes-of-action and reducing pesticide resistance, environmental issues including drift and stewardship with emphasis on protecting pollinators, and human pesticide protection.

Private Applicator training clinics are taught by University PSEP staff members with assistance from local county Extension educators and retired regional Extension educators. Private pesticide testing occurs immediately after training, with a passing rate greater than 95%.

Private applicator training and recertification needs were met with 18 regional training clinics and 30+ test-only clinics. The use of larger venues (200-250 person capacity) helped to compensate for the reduced number of training locations from the 90+ offered in previous years.

Table 2. Attendance for 2014-2015 Private Applicator Trainings Clinics

Clinic Date	Location	# Clinic Attendees
Nov. 24	Mt. Vernon	168
Dec. 3	Utica	197
Dec.11	Sandwich	83
Dec. 12	Champaign	327
Dec. 19	Carterville	96
Jan. 12	Rockford	176
Jan. 27	Springfield	268
Jan. 28	Bloomington	262
Feb. 10	Kankakee	200
Feb. 11	Galesburg	182
Feb. 13	Effingham	261
Feb. 24	Quincy	120
Feb. 27	Collinsville	186
March 3	Champaign	157
March 12	Peoria	204
March 20	Moline	117
March 26	Lincoln	110
March 31	Rock Falls	151
TOTAL		3265



Online Private Applicator Training

An online Private Applicator Training option was first introduced in January 2010. This allows a person to obtain training without attending a training clinic or working through the Private Applicator Training Manual and Workbook. Access is through a password obtained after the online training fee is paid. The training is organized into the same topics as the manual and face-to-face training. Presentation typically consists of an illustration or photo with accompanying written and narrated text. Slide progression is controlled by the trainee so participants can go back to visit previous slides as well as skip slides with familiar content. Testing is not available online. The trainee makes arrangements to take the test at a testing only session or at an IDA office. There were 552 registrations for the Online Private Applicator Training during the 2014-2015 fiscal year.

The Online Private Applicator Training is also available in “mobile friendly” format, allowing users to view the program using a smart phone or tablet. Both the full and mobile versions of the Online Private Applicator Training are also available in Spanish.

PESTICIDE SAFETY EDUCATION PROGRAM
Private Applicator Training
 Online Courses for Private Pesticide Applicators

Section: Welcome

Welcome

Welcome to the Private Applicator Training website. Below are the courses that are currently available.

- Understanding Pesticides (~25 minutes)
- Pesticides and the Environment (~35 minutes)
- Integrated Pest Management (~30 minutes)
- Human Pesticide Protection (~50 minutes)
- Labels and Labeling (~25 minutes)
- Equipment and Calibration Part I (~50 minutes)
- Equipment and Calibration Part II (~40 minutes)
- Pesticide Laws and Regulations (~20 minutes)

This course will help prepare you for the private applicator test. You still need to take the private applicator test in person. After completing this course, you can attend a test-only clinic or make an appointment with Illinois Department of Agriculture. The test is not available online.

If you do not have an account with University of Illinois Extension yet, you can [register here](#).

Login

Username (or email):

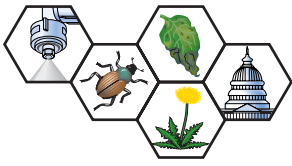
Password:

[Lost your password?](#)

Modules in This Series

- Welcome
- Understanding Pesticides
- Pesticides in the Environment
- Integrated Pest Management
- Human Pesticide Protection
- Labels and Labeling
- Equipment and Calibration Part I
- Equipment and Calibration Part II
- Pesticide Laws and Regulations

[En Español](#)

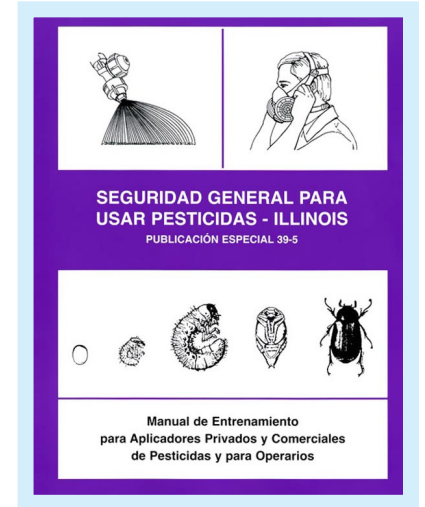


Illinois Pesticide Safety Education Program

Bilingual Training

Hispanic clientele are progressively becoming a larger proportion of our clientele. Many have excellent English language skills and are fully capable of understanding training and testing in English. Others have difficulty with English, but still must pass an English written exam to obtain pesticide certification due to most pesticide labels being in English only.

In previous years, we provided separate Bilingual General Standards Training Clinics in the Chicago metropolitan area. The presentations consisted of short passages of spoken English followed immediately by the spoken Spanish translation. This method served the dual purpose of conveying the information so that it is understood and increased the understanding of English. Unfortunately, face to face bilingual clinics have been discontinued due to poor attendance. Individuals seeking bilingual training are directed to the Spanish version of our Online Private Applicator Training.



Worker Protection Standard

David Robson and Michelle Wiesbrook coordinate the Worker Protection Standard (WPS) efforts. We continue to offer WPS cards to those handlers who attend trainings but don't need a pesticide license. We also work to inform employers, employees, IDA inspectors, and educators about the WPS through newsletter articles and during PSEP clinics. They keep up-to-date on new developments through training sessions, new publications, e-mail, and other methods.

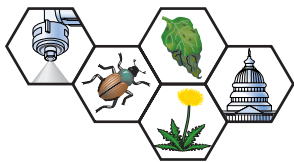
Operation S.A.F.E. Fly-ins

The annual Illinois Agricultural Aviation Association's (IAAA) Operation S.A.F.E. (Self-regulating Application and Flight Efficiency) fly-in was held on April 28th, 2015 at the Coles County Memorial Airport in Mattoon, Illinois. Operation S.A.F.E. analysts, certified with the National Agricultural Aviation Association (NAAA), were there to analyze spray patterns and droplet size data; they included Scott Bretthauer, PSEP educator. Five aircraft were evaluated at this event. Additional Fly-in events are listed in Table 3.

The purpose of an Operation S.A.F.E. fly-in is to make sure aerial applications are made accurately and safely. At a fly-in clinic, an aerial applicator can view the spray pattern, determine effective swath width, and examine the spray droplet size created by the aircraft. If corrections need to be made, the applicator can make adjustments to the aircraft setup and then immediately re-run the aircraft over the flight line to verify that the changes have improved the spray pattern or droplet size. In many cases an aerial applicator may run multiple series over the flight line, checking the different setups they use for the various spray application rates they use throughout the course of a spraying season. For instance, nozzle orifice size, nozzle deflection angle, and the number of nozzles used on the boom can vary depending on the GPA (gallons per acre) that the applicator is setting the aircraft up to apply.

Table 3. Fly-ins Conducted by Scott Bretthauer

Dates	Event	Location	Number of Aircraft Calibrated
July 3, 2014	Astoria Fly-in	Astoria, IL	3
September 1-2, 2014	Terreton Fly-in	Terreton, ID	5
October 6-7, 2014	A Montana AA Fly-in	Lewiston, MT	5
October 21-22 2014	Florida AAA Fly-in	Lewiston, FL	15
April 9-10, 2015	Kansas AAA Fly-in	Burlington, KS	3
April 28 2015	Illinois AAA Fly-in	Mattoon, IL	5
April 29 2015	Illinois AAA dry fly-in	Virden, IL	3
May 7-8, 2015	North Carolina AAA Fly-in	Pantego, NC	10
May 15, 2015	Wahpeton Fly-in	Wahpeton, ND	5
May 19-20 2015	Chilton Fly-in	Chilton, WI	6
June 1, 2015	Farmington Fly-in	Farmington, NM	1
June 2, 2015	Hereford Fly-in	Hereford, TX	2
June 6, 2015	Astoria Fly-in	Astoria, IL	5
June 10, 2015	Rochelle Fly-in	Rochelle, IL	8
June 16-17 2015	Veedersburg Fly-in	Veedersburg, IN	3
June 29 2015	Rantoul Fly-in	Rantoul, IL	3



Illinois Pesticide Safety Education Program

-
-
-
-
-
-

Mass Media

Through radio, television, newspapers, and magazines, PSEP specialists increased client knowledge of proper pesticide application, new developments in human and environmental pesticide safety, and recently enacted rules and regulations. Newspaper and magazine articles were published as the result of news interviews or news releases produced by PSEP specialists. Radio programs were used to promote proper pesticide use.

Illinois Pesticide Review

Six issues of The Illinois Pesticide Review newsletter were published this year. This bimonthly newsletter is written by PSEP specialists to address pesticide safety issues, regulatory information, and changes in pesticide registration and label status. Each issue contains at least one in-depth article addressing current pesticide issues or pesticide-related activities. The newsletter is available on the Pesticide Safety Education website. There were 43,509 visits to the Illinois Pesticide Review website during this reporting period.

PSEP Website

The Pesticide Safety Education website (www.pesticidesafety.illinois.edu) continues to provide up-to-date information. The site features fact sheets, tips, links to relevant websites and resources, The Illinois Pesticide Review newsletter, an online registration system for clinics and an online ordering system for training manuals and workbooks.

These efforts serve to keep clientele up-to-date about pesticide safety issues outside of the PSEP clinics that they attend. Important information is communicated to the clientele when it is needed. In addition, many homeowners and other Illinois residents learn how to apply pesticides correctly and safely in and around their homes. There were 193,424 “page views” on the website during this report year.

Table 4. Total Views for Various Pages Associated with the Pesticide Safety Education Program Website July 2014 - June 2015	
Pesticide Safety Education Program Homepage	193,424
Online Private Applicator Training (English)	392,315
Online Private Applicator Training (Spanish)	3,277
Illinois Pesticide Review Newsletter	43,509

Facebook

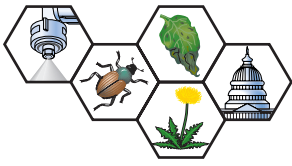
The PSEP Facebook page continues to grow in its use. It provides yet another avenue for timely information to be delivered to pesticide users and other interested parties. It also serves a platform for clients to have their pest control questions answer by PSEP Specialists.

-
-
-
-
-
-



Like us on Facebook

**University of Illinois Extension
Pesticide Safety Education Program**



Illinois Pesticide Safety Education Program

-
-
-
-
-
-

Homeowner Programs

Illinois homeowners and other residents are educated by Extension on proper pesticide use through the Master Gardener Program and various gardening, home safety, and other programs. The PSEP specialists wrote the Pesticide Safety and Weeds sections and revised the Plant Diseases and Insects sections of the *Illinois Master Gardener Handbook*. They also developed several of the color slide presentations used to train Master Gardeners and deliver training sessions for beginning and advanced Master Gardeners.

The *Home, Yard, and Garden Pest Guide* was revised during fall 2011. It was published under a new name, *Pest Management for the Home Landscape*. This publication provides important pest management information on specific pests to Illinois residents. Included in this guide is a section on pesticide safety. Much of this pest guide was written by PSEP specialists.

An online training site for retailers who sell pesticides called, “Responsible Pest Management for Retailers” was developed by PSEP specialists and support trainers. The training consists of modules with quiz questions. There were 2,500+ visits to the site throughout the year.



Phil Nixon teaching Illinois Master Gardeners about insects

Hort Answers

The Hort Answers website provides access to a wide variety of horticultural disease, insect pest, herbicide injury, and plant culture information. PSEP specialists continue to be involved in its content. Hort Answers logged 600,933 page views during the reporting period. A mobile version of Hort Answers had 144,477 page views.

AskHort

Many PSEP team members contributed to the development of AskHort, a computer-based answering system that allows regional Extension offices to ask horticulture questions, which are then funneled to specialists and Extension educators. Questions

posted to the system typically result in a less than 24-hour turn-around for answers. PSEP team members continue to provide expertise for this resource.

University of Illinois Plant Clinic

The University of Illinois Plant Clinic offers services in plant and insect identification, diagnosis of disease, insect, and weed problems and provides appropriate control recommendations. The success of the Plant Clinic relies on cooperation of many specialists at the University of Illinois. PSEP specialists are among those contribute expertise to the Plant Clinic.

Distance Diagnostics through Digital Imaging

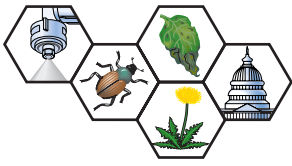
David Robson co-coordinates the Illinois Extension's Distance Diagnostics through Digital Imaging (DDDI). Other PSEP team members contribute expertise to the DDDI system. DDDI is an excellent resource for home owners and just about anyone involved in plant production. High quality representative samples of the plants or pests can be brought to a local Extension Unit office. County personnel will ask submitters to fill out a DDDI sample form. High quality digital images of the plant or pest sample are taken and submitted with information into the system. The information resides on a website that is exclusive to Extension diagnostic personnel for privacy purposes. Extension educators throughout the state and campus specialists with expertise in Agronomy and Horticulture will attempt to diagnose and identify production and pest problems on commercial forage, field, vegetable, fruit and turf crops, and home horticulture plant problems.

Mid-American Gardener

Mid-American Gardener is a televised program produced by WILL TV (PBS). Viewers can call or send questions pertaining to every aspect of gardening and horticulture. David Robson served as a guest host, panelist, as well as a moderator for the show's chatroom and online forum. Phil Nixon also provided expertise as a panelist.

Television, Radio and Newspaper Contributions

- Gardening Column – State Journal Register (biweekly; syndicated by Gatehouse Media statewide and nationwide)
- Illinois Country Living: rural-electric monthly magazine (12 issues)
- WLDS (Jacksonville): monthly (5 minutes to 30-minutes)
- WQQQ (Springfield): quarterly (30 minutes)
- WBRL (Burlington, IA): quarterly (5 minutes)

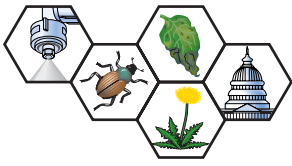


Other Programs

Invited Talks Given by PSEP Specialists

- Arizona Garden Clubs Flower Show School
- Association of Montana Aerial Applicators Annual Convention, *Aerial Application Research Update*, Great Falls, MT
- California Agricultural Aircraft Association's Annual Convention, *Using Adjuvants with Aerial Application*, Lake Tahoe, CA
- Carolina's Golf Course Superintendents Association Annual Conference, *Making Accurate Pesticide Applications*, Myrtle Beach, SC
- Central IL Hosta Society
- Dallas Texas Flower Show School
- Dana-Thomas House Society, *Herbs*, Springfield, IL
- Emerald Ash Borer Training, Southern, IL
- Federated Garden Clubs of New York Judging Symposium
- Four Seasons Garden Series: *Modern Pest Control Strategies in the Garden*
- Four Seasons Garden Series: *Practical Weed Control*
- Garden Clubs Judges Symposium, California, Florida, Montana and Virginia
- Garden Clubs Judges Flower Show School, Florida, Illinois, Missouri, Texas, Virginia
- Gardeners Pathway, *Identification of Common Lawn and Garden Weeds*, Malta, IL
- Gateway Green Industry Conference, *Buffalo Gnats and Mayflies, Borers*, Collinsville, IL
- Georgia Garden Club Federation Judging Symposium
- Great Lakes Hosta College, *Modern Pest Control Strategies*, and *Underused Shade Shrubs for the Landscape*
- Hosta Society of Kentucky, *Modern Pest Control Strategies in the Garden*
- Illinois Arborist Association Annual Meetings, *University of Illinois Plant Clinic Update*, Tinley Park, IL
- Illinois Arborist Association Summer Workshop, Monticello, IL
- Illinois Arborist Association Certified Arborist Training
- Illinois Corn and Soybean Classics, *Evaluating Drift Reduction Technologies for Making Applications of Dicamba and Glyphosate*, Peoria, Moline, Malta, Springfield, Champaign, and Mt. Vernon, IL
- Illinois Department of Agriculture, *University of Illinois Plant Clinic Disease Update*, Springfield, IL
- International Union of Pure and Applied Chemistry, *Evaluating Drift Reduction Technologies for Dicamba-Glyphosate Applications*, San Francisco, CA
- iTurf Conference, *Measuring Pesticides, Emerging Disease Threats to Illinois Landscapes*, Bolingbrook, IL
- Kansas Agricultural Aviation Association's Annual Meeting, *Current Research on Nozzles Used for Aerial Applications*, Wichita, KS

- Kansas State Garden Clubs Judging Symposium
- Misstates Agricultural Aviation Convention, *Application Technology for Agricultural Aircraft*, Bettendorf, IA
- National Garden Clubs, *Modern Pest Control Strategies*
- National Agricultural Aviation Association's Annual Convention, *Maximizing Aerial Applications through Nozzle Selection and other Parameters*, Louisville, KY
- Northern Idaho Growers Meeting, *Aerial Applications*, Grangeville, ID
- Northern Idaho Growers Meeting, *Basics of Pesticide Applications*, Grangeville, ID
- Northern Illinois Growers Meeting, *Aerial Applications*, Dixon IL
- No Till Oklahoma, Balance: *Spraying for both Efficacy and Drift Mitigation*, Norman, OK
- Oak Problems, Illinois Arborist Association Summer Conference, Monticello, IL
- *On Target Application Academy*, Beaver Dam WI, Chula GA, Lansing MI
- Pacific Northwest Agricultural Aviation Association's Annual Convention, *Application Technology for Agricultural Aircraft*, Coeur d Alene, ID
- Professional Aerial Applicators Support System, Great Falls, MT, Gulfport, MS Lake Tahoe, CA, Lansing, MI, Coeur d Alene, ID,
- Springfield Arbor Day Celebration
- Southern Illinois Growers Meeting, *Aerial Applications*, Lawrenceville, IL
- Tennessee Federated Garden Clubs Judging Symposium
- Texas Federated Garden Clubs Judging Symposium
- University of Illinois Extension County Directors Meeting, *Overview of the Illinois Pesticide Safety Education Program*
- University of Illinois Extension, *Tree & Tree Pest Identification*, Bloomington, IL
- University of Illinois Extension Gardening Workshop, Paris, IL
- University of Illinois Master Gardener Training, *Herbaceous Ornamentals*, Champaign, IL
- University of Illinois Master Gardener Training: *Insect Anatomy, Ornamentals Insects, Turf Insects. Household Insects*, Champaign, Danville, IL
- University of Illinois Master Gardener Training via Eluminate, *Insect Anatomy, Ornamentals Insects, Turf Insects, Household Insects*, Statewide
- University of Illinois Master Naturalist Training, *Aquatic Invertebrates, Invertebrate ID Lab, Aquatic Field Trip*, Penfield, IL
- University of Illinois Master Naturalist Training, *Common Illinois Insects, Insect Identification, Insect Field Trip*, Havana, Peoria, & Urbana, IL
- Wilbur-Ellis Company Aerial Applicators Meeting, *Summary of Aerial Application Research*, Denver, CO
- Wyoming Weed Management Association, *Drift Developments*, Casper, WY
- Wyoming Ag Business Association, *New Drift Reduction Rules from the EPA*, Casper, WY



Illinois Pesticide Safety Education Program

-
-
-
-
-
-

Professional Involvement by PSEP Specialists

Professional Societies and Associations

- American Association of Pesticide Safety Educators (AAPSE)
- American Society of Agricultural and Biological Engineers (ASABE)
- Colorado Agricultural Aviation Association (CAAA)
- Entomological Society of America (ESA)
- National Garden Clubs, Inc.
- Illinois Agricultural Aviation Association (IAAA)
- Illinois Fertilizer and Chemical Association (IFCA)
- Illinois Turfgrass Foundation
- National Agricultural Aviation Association (NAAA)
- National Agricultural Aviation Research & Education Foundation (NAAREF)
- National Arbor Day Association
- North Central Weed Science Society (NCWSS)
- The Pesticide Stewardship Alliance
- Weed Science Society of America (WSSA)

University Committees

- Crop Sciences Extension and Outreach Committee
- Extension Crop Systems Development Team
- Extension Environment Program of Work Committee
- Extension Horticulture Development Team
- Extension Program Leaders Committee
- Purdue Pest Management Conference Planning Committee
- University of Illinois Grounds Advisory Committee

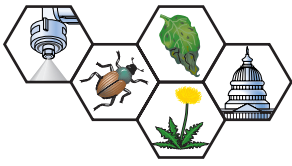
Other Committees

- Forest Pest Outreach & Survey Project Advisory Committee, Morton Arboretum
- Illinois Governor's Science and Technology Team on Emerald Ash Borer
- Illinois Interagency Committee on Pesticides
- Illinois Worker Protection Stakeholders Committee
- NAAA Operation S.A.F.E. Committee
- NAAA PAASS Program Development Committee
- NAAA Research and Technology Committee
- National Stakeholder Team for PSEP Funding
- North Central AAPSE Workgroup on Laundering Pesticide-contaminated Work Clothes

- PSEP Business Plan Development Committee
- USEPA Region 5 Bed Bug Working Group
- USEPA Region 5 State and Federal Regulatory Committee

Professional Improvement Used by PSEP Specialists

- American Association of Pesticide Safety Educators Workshop, Harrisburg, PA
- American Association of Pesticide Safety Educators Manual Development Workshop, Nebraska City, NE
- Ball Field Day, West Chicago, IL
- Champaign County Farm Bureau Farm/City Roundtable, Champaign, IL
- Champaign County Garden Walk, Champaign, IL
- Chicago Botanic Garden and ILCA: Lawn Care Education Day, Northbrook, IL
- Entomological Society of America National Meeting, Portland, OR
- Green Industry Conference, Gateway Center, Collinsville
- I-Landscape Trade Show, Schaumburg, IL
- Illinois Agri-Women's ENGAGE workshop, Bloomington, IL MidWest Hosta College, Piqua, OH
- Illinois Sustainable Technology Center Sustainability Seminar: *Rubbery Shrubbery: Should We Use Rubber Mulch in Our Landscapes?*
- North Central Region Pesticide Education and Certification Workshop, Indianapolis, IN
- Palmer Amaranth Field Research Tour by University of Illinois and Bayer Crop Science, Union Hill, IL
- Precision Pesticide Application Technology, USDA NRCS Science and Technology webinar
- Purdue Pest Control Conference, W. Lafayette, IN
- The Pesticide Stewardship Alliance Annual Meeting, Savannah, GA
- University of Illinois Agronomy Day, Urbana, IL
- University of Illinois Annual Extension Conference, Urbana, IL
- University of Illinois Extension Horticulture Team In-service, Urbana, IL



Illinois Pesticide Safety Education Program

Summary of Accomplishments

<u>Accomplishment</u>	<u>Date of Completion</u>
Illinois Pesticide Review Newsletter Published(6 issues).....	Bi-monthly
Commercial PSEP Clinics Conducted (23 clinics)	May 2015
State Agency Clinics Conducted (2)	November 2014
Private PSEP Clinics Conducted (18).....	March 2015
WPS Cards Issued.....	All Season
Online Private Applicator Training (552 registrations).....	All Season
Aerial Fly-In Clinics Conducted (16)	All Season
State Agency Flyer Printed.....	July 2014
Commercial PSEP Clinic Schedule Created & Published.....	August 2014
Forestry Manual	Sept. 2014
Private Applicator Workbook	Nov. 2014
Grain Facility / Seed Treatment Workbook.....	Nov. 2014
Bilingual Workbook.....	Nov. 2014
General Standards Workbook.....	Nov. 2014



UNIVERSITY OF ILLINOIS
EXTENSION

College of Agricultural, Consumer and Environmental Sciences

The development and publication of this document has been supported with funding from the Illinois Department of Agriculture.