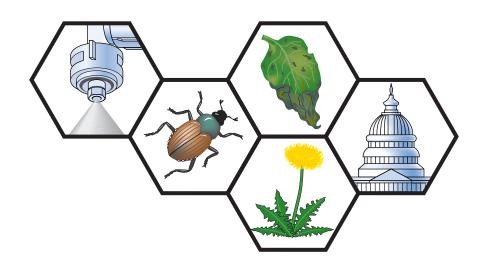
## University of Illinois Extension

## Pesticide Safety Education Program



**ANNUAL REPORT** 2015-2016



#### **Contents**

Program Highlights and Impacts	1
Program Mandate	2
State Lead Agency Cooperation	3
PSEP Specialists	4
Steering Committee	6
Support Trainers	7
Pesticide Safety Education Program Administrative Office	8
Educational Materials	10
Commercial PSEP Clinics	12
Online Training Courses	14
Private Applicator Training Clinics	16
Bilingual Training	18
Worker Protection Standard	18
Operation S.A.F.E. Fly-ins	19
Mass Media	20
Homeowner Programs	22
Other Programs and Invited Talks Given by PSEP Specialists	24
Professional Involvement by PSEP Specialists	25
Summary of Accomplishments	27

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

#### **Program Highlights and Impacts**

- 46 Clinics Offered
  - 2 State Agency Clinics
  - 23 Commercial Applicator Clinics
  - 17 Private Applicator Clinics
  - 4 Commercial Test-Only Clinics
- A total of 12,406 people received pesticide certification training
  - 9,788 Commercial Applicators and Operators
  - 2,618 Private Applicators
- Two training manuals were revised and published
  - Illinois Pesticide Safety Education Manual: Aquatics
  - Illinois Pesticide Safety Education Manual: Rights-of-Way
- Six issues of *The Illinois Pesticide Review* newsletter were published
- The PSEP Office processed 10,567 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 6,822 Pesticide Applicator Training Manuals and Workbooks. An additional 2,309 publications were sold during pesticide applicator clinics.
- Phil Nixon recieved the Distinguished Achievement in Pesticide Safety Education Award from the American Association of Pesticide Safety Educators



#### 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 non-commercial 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 aquatics and general standards certification exams.

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.









#### **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.

Scott accepted employment outside the University of Illinois early 2016



**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



#### **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

Dr. Gray retired from the University of Illniois October 2015



**Tom Voigt**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
- Bruce Black
- Kim Ellson
- Chris Enroth
- Dennis Epplin
- Laurie George

- Matthew Gill
- Doug Gucker
- Richard Hentschel
- Nathan Johanning
- Ken Johnson
- Jim Morrison

- Ellen Phillips
- Mike Roegge
- Marion Shier
- Martha Smith
- Elizabeth Wahle



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





## **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 2015-2016 season was 6,822. PSEP educational materials are also available at the commercial clinics where 2,309 were sold last season.



#### Clinic Registration

Forty-six clinics were scheduled for the 2015-2016 applicator training season. The majority of the clinics, 23, were for commercial applicators, while 17 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. Four test only sessions were also conducted at various times during the training season.

During the 2015-2016 training season, 7,958 Commercial registrations were processed in the PSEP office resulting in a training volume of 9,788. Additionally, 2,618 Private transactions lead to a private training volume of 2,618. A total of 12,406 people received pesticide safety training during the 2015-2016 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.



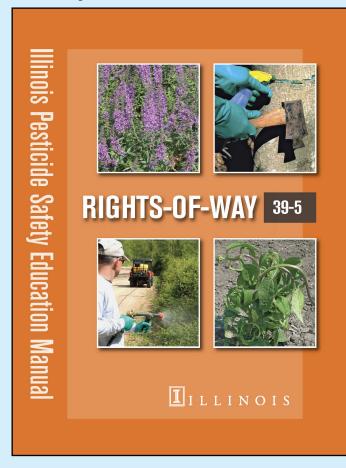
#### **Educational Materials**

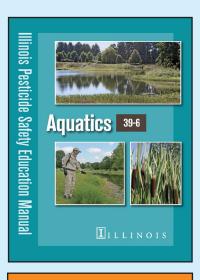
University of Illinois PSEP publishes twenty-one manuals that address most areas of pesticide certification in Illinois. Ten workbooks are produced to cover the twelve most commonly licensed areas. Our manuals and workbooks continue to be used not only as references and learning tools before and during 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.

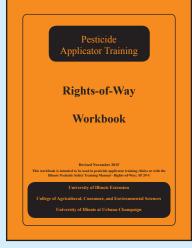
#### **Revised Training Manuals, Workbooks and Presentations**

The Rights-of-Way Manual, Aquatics Manual, Rights-of-Way Workbook, were revised and published during this reporting period. Commercial clinic presentations were revised for General Standards, Field Crops, Grain Facility, Rights-of-Way, Ornamentals, and Turfgrass.

#### **Recently Revised Publications**









#### **Pest Management for the Home Landscape**

This revised homeowner pest guide contains the University of Illinois Extension recommendations for the control of weed, disease, and insect pests of trees, shrubs, turf, vegetables, fruit, and households. It also contains a chapter on IPM and pesticide safety. It is written for Do-It-Yourselfers so all of the pesticide recommendations are for general use pesticides.

Garden center personnel find this publication useful in selling the proper pesticide or other control method. Landscapers, lawn care personnel, and other professionals find it handy in helping clientele with questions outside of their area of service, such as pests associated with fruit, vegetables, or buildings.

Phil Nixon coordinated and authored chapters within the guide. Travis Cleveland, David Robson, and Michelle Wiesbrook also authored chapters.



#### **Commercial PSEP Clinics**

Pesticide Training and Certification Clinics for commercial applicators and operators were conducted at 26 sites during 2015-2016 training season. At these meetings, 9,788 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 2015-2016 Commercial PSEP Clinics

CLINIC DATE	LOCATION	GS	S	Т	0	FC	D&R	MOS	ROW	AQ	TOTAL
Nov. 12-13	Springfield	81							50		131
Dec. 1-2	Sandwich	135	9			23					167
Dec. 14-15	Mt. Vernon	294	25			64			87		470
Dec. 17-18	Springfield	215	50			64					329
Dec 21-22	Champaign	319	57			91	25				492
Jan. 6-7	Rockford	226		81	41						348
Jan. 12-13	Carterville	174		24	12			18	37		265
Jan. 21-22	Champaign	319		94	43				95		551
Jan. 25-26	Jacksonville	164				51					215
Jan. 28-29	Matteson	229		112	49					34	424
Feb. 2-3	Springfield	266		64	46				74		450
Feb. 8-9	Alsip	236		68	42				37		383
Feb. 16-17	Crystal Lake	258		96	43				69		466
Feb. 22-23	Peoria	379				130			46		555
Feb. 24-25	Collinsville	278		101	44				84	27	534
March 7-8	Peoria	351		85	42					21	499
March 16-17	Skokie	303		117	43					26	489
March 22-23	Rockford	368		132	42			49	81		672
March 29-30	Moline	279		92	32				54		457
April 5-6	Matteson	218		51	24			35	49		377
April 13-14	Alsip	229		39	16			33	36		353
April 20-21	Collinsville	245						61	102		408
April 27-28	Skokie	214		68	43				31		356
May 3-4	Des Plaines	144		23				23	41		231
May 17-18	Springfield	135						31			166
Total		6059	141	1247	562	423	25	250	973	108	9788

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



#### **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** 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.

# Insects and Other Pests Insects and Insects are also greenbone pests, but here the lover relative hursdry that are not common in the lover relative hursdry that are not common in greenbones pests, but here the lover relative hursdry that are not common in greenbones and others that common in greenbones are common in greenbones.

#### **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**

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.



#### **Private Applicator Training 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 an average 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 2015-2016 Private Applicator Trainings Clinics

Clinic Date	Location	# Clinic Attendees
Nov. 20	Whittington	74
Dec. 3	Utica	140
Dec. 9	Carterville	142
Dec. 11	Champaign	186
Jan. 5	Bloomington	204
Jan. 8	Rockford	137
Jan. 11	Springfield	166
Feb. 4	Quincy	130
Feb. 10	Galesburg	183
Feb. 18	Kankakee	148
Feb. 19	Effingham	290
Feb. 26	Collinsville	219
March. 1	Lincoln	121
March. 3	Champaign	120
March. 9	Peoria	167
March. 24	Rock Falls	139
March. 31	Moline	52
TOTAL		2618



#### **Online Private Applicator Training**

The 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 681 registrations for the Online Private Applicator Training during the 2015-2016 fiscal year. An updated and revised edition of the online privatee applicator training was completed during this period. The revised edition will be available for the 2016 training season.

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.



#### Live Remote Private Applicator Training via Skype

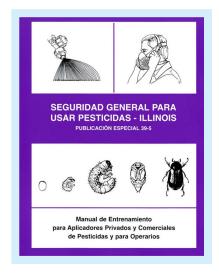
A live remote private applicator training session was conducted via Skype at the Clark County Extension office. Remote training was given on a trail basis to explore options to provide training to underserved areas. The training session had 105 attendees. Feedback from the attendees was positive.



#### **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 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 Matt Gill				
Dates	Event	Location		
June 1-2, 2016	Rochelle Fly-in	Rochelle, IL		
June 7, 2016	Iowa AAA Fly-in	Algona, IA		
June 8-9, 2016	Clark Fly-in	Clark, SD		
June 10-11, 2016	Rolla Fly-in	Rolla, ND		
June 15, 2016	Astoria Fly-in	Astoria, IL		



#### 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 51,680 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 2015 - June 2016				
Pesticide Safety Education Program Homepage	226,831			
Online Private Applicator Training (English)	401,974			
Online Private Applicator Training (Spanish)	9,688			
Illinois Pesticide Review Newsletter 51,680				

#### **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 answered by PSEP Specialists.





#### **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.

Pest Management for the Home Landscape was revised and published spring 2016. 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 427,786 page views during the reporting period. A mobile version of Hort Answers had 164,754 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 servcies in plant and insect identification, diagnosis of disease, insect, and weed problems and provides appropriate control recomendations. The success of the Plant Clinic relies on cooperation of many specialists at the University of Illinois. PSEP specialists are among those who 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)
- Garden Glories (Garden Clubs of IL, Inc. publication; horticulture column)
- Illinois Country Living: rural-electric monthly magazine (12 issues)
- WLDS 1180-AM: call in radio show
- WFMB 1450-AM: call in radio show



## Other Programs and Invited Talks Given by PSEP Specialists

- Bed Bug Prevention and Control Seminar, Integrated Pest Management: Inspection and Monitoring, Urbana, IL
- Emerald Ash Borer Open House, EAB Biology and Management Demonstration, Peoria, IL
- Gateway Green Conference, Is it an Insect, Disease or Something Else, and Tree Care: After the Initial Investment, Collinsville, IL
- Gateway Green Industry Conference, Tree Insect Update, Bonsai: Living Miniature Potted Trees, Collinsville, IL
- Great Lakes Hosta College, Unusual, Underplanted and Underrated Trees and Shrubs, and WaterSmart Gardening, Piqua, OH
- Illinois Arborist Association, Certified Arborist Training Basic Botany, Soils, and Soil-Water Relationship, Springfield, IL
- Kentucky Garden Clubs, BodySmart Gardening, Louisville, KY
- Margaret Scott African Violet Club, African Violet Insects and Pesticide Safety, Urbana, II.
- Springfield Bonsai Society, Bonsai Insects, Springfield, IL
- Minnesota PSEP Training, Controlling Spiders in the Midwest, Fungus Feeders: The Pests That Tell A Different Story, Minneapolis, MN
- University of Illinois Extension, Tree & Tree Pest Identification, Bloomington, IL
- University of Illinois Extension, Wood Identification, Bloomington, IL
- University of Illinois Master Gardener Training, Plant Pathology, Galesburg, IL
- University of Illinois Master Gardeners Training, Madison Unit, Basic Botany, Collinsville, IL
- University of Illinois Master Gardener Training, Insect Anatomy, Insect Lab, Ornamentals Insects, Household Insects, Danville, Milan, Urbana, IL
- University of Illinois Master Gardener Training via Skype, Insect Anatomy, Ornamentals Insects, Household Insects, Statewide
- University of Illinois Master Naturalist Training, Aquatic Invertebrates, Aquatic Plants, Milan, IL
- University of Illinois Master Naturalist Training, Common Illinois Insects, Insect Identification, Insect Field Trip, Kankakee, Milan, and Urbana, IL

### Professional Involvement by PSEP Specialists

#### **Professional Societies and Associations**

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

#### **University Committees**

- Crop Sciences Extension and Outreach Committee
- Crop Sciences Academic Professional Promotion 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 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 Leadership Enhancement Skill Seminar, Bloomington, IL
- Illinois Sustainable Technology Center Sustainability Seminar: Rubbery Shrubbery: Should We Use Rubber Mulch in Our Landscapes?
- MidWest Hosta College, Piqua, OH
- North Central Weed Science Society Annual Meeting, Indianapolis, IN
- 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, St. Charles, IL and Bloomington, IL
- Weed Science Society of America Annual Meeting, San Juan, PR

#### **Summary of Accomplishments**

Accomplishment	Date of Completion
WPS Cards Issued	All Season
Online Private Applicator Training (681 registrations)	All Season
Aerial Fly-In Clinics Conducted	All Season
Illinois Pesticide Review Newsletter Published(6 issues)	Bi-monthly
State Agency Flyer Printed	July 2015
Commercial PSEP Clinic Schedule Created & Published	August 2015
Rights-of-Way Manual Revised	September 2015
Rights-of-Way Workbook Revised	September 2015
Aquatics Manual Revised	November 2015
State Agency Clinics Conducted (2)	November 2015
Pest Management for the Home Lanscape	Februrary 2016
Private PSEP Clinics Conducted (17)	March 2016
Commercial PSEP Clinics Conducted (23 clinics)	May 2016



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.