# **Cumulative Faculty Achievement Report (CFAR)**

I. Personal Information

A. Name: Janet Ann DeStefano Hurley

B. Title: Extension Program Specialist (III) – School IPM

C. Department/Program Unit: Department of Entomology / IPM

D. Date of Initial Appointment: August 9, 2001 E. Date of Last Promotion: September 1, 2015

II. Position Description

A. Percent Appointment Extension: 100% B. Major Areas of Work

- 1. Development of Programs, Services, Products and/or Processes
  - Scope of Work statement In 1991, the Texas Legislature passed a law requiring that pests in and around school buildings be managed using integrated pest management. In 2007, the Legislature updated the laws defining regulatory guidelines more definitively. Texas is one of the few states that mandate all IPM Coordinators attend a six-hour training course on the basics of IPM principles and specific state regulations.
    - 2015: Student enrollment has increased to 5,027,047 for 1,033 school districts in Texas with a total of 8,754 campuses (source: AskTED School and District Data File April 2016) and 342,192 teachers (source: 2014-15 TEA Pocket Edition)
    - 2011-2012: Texas School Data: 1,227 school districts and charters, 8,539 campuses, 324,213 teachers and 4.9 million students. 60.4% of students are economically disadvantaged
    - 2010: There are 4,824,778 million students in 8,435 campuses and 1,030 school districts around the state of Texas. Texas has the second largest student base in the country, with more school systems currently than California. (Note Texas Education Agency lags with total student numbers)
  - Coordinator for the Texas School IPM team oversee the school IPM program with direct guidance for educational programming, materials, and training locations at area school districts.
  - Act as a liaison with Texas Department of Agriculture, Structural Pest Control Service regarding school district compliance with the school IPM rules.
  - Developed technique for offering compliance assistance to school IPM coordinators to stay in compliance with Structural Pest Control Service
  - Work with school organizations Texas Association of School Boards (TASB) and Texas
     Association of School Business Officials (TASBO) on the development of best management
     practices for school IPM and policy development.
  - Support school IPM efforts nationally by assisting with development of educational materials
    or distribution of materials by sitting on the National School IPM Workgroup, EPA PPDC IPM
    Workgroup, Southern IPM School IPM Workgroup, and eXtension CoP Urban IPM.
  - Maintain a detailed database of Texas IPM Coordinators, plus other interested stakeholders
  - Develop training curriculum for school IPM coordinators and others regarding pests and integrated pest management
  - Oversee the development of the school IPM cost calculator tool being developed by Texas A&M AgriLife Extension. http://ipmcalculator.com
- 2. Faculty and Staff Training/Assistance

- Provide assistance and training to County Extension Agents, Extension Agents IPM, and Specialist on School IPM.
- 3. Implementation of Educational Programs
  - Develop and maintain a web page covering school IPM topics for school IPM Coordinators, pest management professionals and other interested stakeholders http://schoolipm.tamu.edu
  - Publish a monthly newsletter School Pest News addressing IPM and environmental issues pertaining to public schools
    - Collaborating with IPM Institute of North America to enhance the School IPM 2015 newsletter by co-authoring stories, or acting as a resource
  - Respond to individual client request for assistance by mail, phone, e-mail, or site visits.
  - Provide leadership for planning, implementing, evaluating, and interpreting school IPM
    Coordinator training for regional training with school IPM team, plus individual trainings for
    Educational Service Centers and Texas Association of School Boards.
  - Provide informational trainings to support county agents or pest control contractors for continuing education credits (CEU).
  - Provide in-service trainings for schools based on request to support individual school districts
     IPM programs
  - Work with departments of health and other agencies and organizations to implement voluntary IPM programs.
- 4. Financial and Program Support of Extension Activities
  - Prepare grant proposals and budgets, memoranda of agreement, manage accounts and deliver reports to granting agencies in a timely fashion.
  - Update and develop quality publications to support the school IPM program
  - Serve on committees to support the mission and goals of the Texas A&M AgriLife Extension.
  - Develop plans of work; submit monthly narratives, statistical reports, and annual faculty achievement reports in a timely fashion.
  - Participate in office and faculty conferences.
  - Conduct fee based trainings based on school IPM as part of a team and individual requests
  - Develop and update Extension IPM publications.
  - Serve as a resource person for other Extension faculty in the area of school IPM.
- 5. Coordination and Cooperation
  - Take the lead role in developing a school IPM coalition of key stakeholders within TX to make IPM in schools sustainable.
  - Work with the Texas Association of School Business Officials (TASBO) in delivering timely information as it pertains to school IPM.
  - Keep professional relations and support to non-profit organizations
  - Oversee the development of the school IPM cost calculator working with Dr. Michael
    Merchant, Extension Entomologist, and Dr. Blake Bennett, Extension Economist on a heuristic
    program to help schools determine where they are risks for pest presence and how they can
    fix or repair areas so they are not at risk for pest problems.
  - Keep Extension IPM Coordinator, School IPM Project Team, and Associate Department Head informed of activities, events, and program results.
  - Provide leadership to the Urban Community of Practice section of the National eXtension website
    - Oversee the development of content development and writing annual reports
    - Work with co-leaders to oversee and monitor online webinar series

- http://articles.extension.org/urban integrated pest management
- Provide leadership role to Southern Region School IPM workgroup to support the mission of the group and help oversee the progress of the group to move school IPM forward nationally.
  - Steering Committee member for the National School IPM Workgroup headed up by the IPM Institute and EPA.

#### 6. Professionalism

- Participate in professional organizations at local, state, and national levels
  - Member of Texas Extension Specialist Association (TESA) 2013-present
- Publish articles in trade and peer reviewed journals on school IPM related topics.
- Expand knowledge and expertise in school and childcare IPM.

# 7. Marketing and Interpretation

- Develop mailers and flyers advertising IPM Coordinator trainings and other materials to provide education about Texas A&M AgriLife Extension programs.
- Provide information for Extension IPM Coordinator and Associate Department Head to be distributed to key stakeholders
- Evaluate and disseminate annual data collected on regional school IPM Coordinator trainings
- Work with EPA, TDA, SPCS, and other key stakeholders to disseminate information to Texas school IPM Coordinators.

### III. Education, Experience & Award Recognition

### A. Education

- Master of Public Affairs. 2006. University of Texas at Dallas, Richardson, TX
- Bachelor of Science Community Health. 1994. Texas Woman's University, Denton, TX
- Associates of Arts Degree Business. 1984. Northern Oklahoma College, Tonkawa, OK

# B. Previous Held Positions

- 9/10-9/15 Extension Program Specialist II School IPM, Texas A&M AgriLife Extension, Dallas, TX
- 2. 3/07-9/10 Extension Program Specialist I School IPM, Texas AgriLife Extension, Dallas, TX
- 3. 8/01-3/07 Extension Assistant, Texas Cooperative Extension, Dallas, TX
- 4. 6/99-8/01 Environmental Control Services Lab Technician, City of Lewisville, Department of Public Services, Lewisville, TX
- 5. 5/95-6/99 Environmental Control Services Inspector, City of Lewisville, Department of Public Services, Lewisville, TX
- 6. 8/92-5/94 Student Assistant Registrar's Office Texas Woman's University, Denton, TX
- 7. 7/90-8/92 Receptionist; Morey J. Silverman, MD, Dallas, TX
- 8. 1982-1989 Ladies Apparel Retail & Wholesale Positions, Ponca City, OK and Dallas, TX

## C. Awards and Recognition

- 1. 2014 Texas A&M AgriLife Service Superior Service Award Team School IPM
- 2. 2013 Healthy Schools Hero, Lessons of the 1937 Texas School Explosion
- 3. 2012 U.S. EPA IPM Innovator Award for the National School IPM Demonstration Project
- 4. 2012 7<sup>th</sup> International IPM Award of Excellence awarded to Spring ISD part of the team recognition
- 5. 2010 Southern Region Friends of IPM Educator Award for 2011 Southern Region IPM Center
- 6. 2009 Southern Region IPM Center Friend of IPM Bright Idea Award Southern Region School IPM Working Group.
- 7. 2008 Excellence in IPM Programming Award Texas Pest Management Association

- 2005 Texas Cooperative Extension, Team Award for Superior Service for School IPM Program
- 2005 U.S. Environmental Protection Agency, Pesticide Environmental Stewardship Program Champion recipient for School IPM – recognizing the Southwest Technical Resource Center for its role in school IPM.

### IV. Cumulative Achievements

#### A. Extension Activities

- 1. Development of Programs, Services, Products, and/or Processes
  - O School IPM Coordinator training curriculum (Day 1) Updated the original training curriculum developed by Dr. Mike Merchant and Dr. Don Renchie. This curriculum matches the requirements outlined by the Texas Department of Agriculture Structural Pest Control Service that requires all new school IPM coordinators attend a six-hour training course on the school IPM rules, pesticide safety, IPM principles and practice. Our training also includes a hands-on exercise teaching class participant how to distinguish between the three-pesticide categories levels (green, yellow, and red). Additionally, we also offer a 1-hour walk-thru tour of a school campus inspecting the kitchen area for potential pest threats and the exterior of the campus noting areas that could be potential pest threats.
    - 2016 Provided four regional trainings and three one-day trainings around the state.
       198 IPM Coordinators from 131 public school districts were trained which benefits
       1,066,054 students
    - 2015 Provided four regional trainings and three one-day trainings around the state.
       195 IPM Coordinators from 142 public school districts were trained which benefits
       1,620,193 students.
    - 2014 Provided three regional trainings with school IPM team and 3 trainings for regional educational service centers around the state. 228 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained at school IPM Coordinator trainings. This represents 105 school districts and 1,469,662 students.
    - 2013 Provided four regional training with school IPM team and one, training for the Lubbock region per requests from TDA. 312 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained at school IPM Coordinator training. This represented 154 school districts and 1,149,075 schoolchildren.
    - 2012 Provided four regional training with school IPM team and five trainings association with Regional Education Service Centers and AgriLife Extension District offices. 115 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained. This represented 86 school districts and 664,224 schoolchildren.
    - 2011 Provided four regional training with school IPM team and eight trainings in association with Regional Education Service Centers and AgriLife Extension District offices. 210 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained. This represented 135 school districts and 1,493,264 schoolchildren.
    - 2010 Provided six regional training with school IPM team and three trainings in association with Regional Education Service Centers. 229 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained. This represented 155 school districts and 983,817 schoolchildren.
    - o 2009 Provided four regional training with school IPM team and three trainings in

- association with Regional Education Service Centers. 277 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained. This represented 138 school districts and 1,117,191 schoolchildren.
- 2008 Provided four regional trainings with school IPM team and two regional trainings by self, 167 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained on the first day of IPM Coordinator training. Of the 160 school districts that attended our training in 2008, 1.48 million school children attend their schools.
- 2007 Provided four regional trainings with school IPM team, plus one two-day regional training and four one-day trainings I conducted. 162 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained on the first day of IPM Coordinator training.
- 2006 Provided four regional trainings with school IPM team, plus nine one-day trainings I conducted, 197 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained on the first day of IPM Coordinator training
- 2005 Provided four regional trainings with school IPM team, plus five one-day trainings
   I conducted, 134 IPM Coordinators, School Maintenance Facility Directors, Pest
   Management Professionals were trained on the first day of IPM Coordinator training
- 2004 Provided four regional trainings with school IPM team, plus five one-day and one two-day trainings I conducted, 169 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained on the first day of IPM Coordinator training.
- 2003 Provided four regional trainings with school IPM team, plus eight one-day trainings I conducted, 238 IPM Coordinators, School Maintenance Facility Directors, Pest Management Professionals were trained on the first day of IPM Coordinator training
- 2002 Provided three regional trainings with school IPM team, plus six one-day trainings
   I conducted, 173 IPM Coordinators, School Maintenance Facility Directors, Pest
   Management Professionals were trained on the first day of IPM Coordinator training
- Development of an Advanced School IPM Coordinator training curriculum (Day 2). In 2002, the school IPM team began offering an additional day of training to school IPM coordinators. This advanced training varies each year and program information is derived from participant surveys given at each training. The school IPM team develops topics, speakers are located, and this second day is given in conjunction with the regional IPM trainings offered.
  - 2016 Provided four regional trainings with school IPM team. Covered turfgrass pests using IPM, guest speakers from Dept. of Soils and Crops. 119 IPM Coordinators and private applicators attended this event.
  - 2015 Provided four regional trainings with school IPM team. Covered Spiders, Scorpions and Mites; Understanding pesticide classification with an in-depth review of Green Category pesticides, and piloted IPM Module for Stop School Pests EPA grant project.
     101 IPM Coordinators attended this event.
  - 2014 Provided three regional training with school IPM team 172 IPM Coordinators, school maintenance facility directors, pest management professionals were trained on the second day of IPM coordinator training. Continued training on IPM inspections by TDA versus program implementation. Fire ant management and control, breakfast in the classroom and the pests associated with this outcome.

- 2013 Provided four regional trainings with school IPM team 278 IPM Coordinators, school maintenance facility directors, pest management professionals were trained on the second day of IPM Coordinator training. Curriculum for the second day included information on school IPM recordkeeping for TDA inspections, IPM for turf and sports fields, utilizing Larry Rider as the guest speaker for this topic. Dr. Merchant covered outdoor pests for turf and ornamental.
- 2012 Provided four regional trainings with school IPM team and one solo two-day workshop with X8 Environmental, Inc. 78 IPM Coordinators, school maintenance facility directors, pest management professionals were trained on the second day of IPM Coordinator training. Curriculum for the second day included information on school IPM recordkeeping for TDA inspections, the Top Ten pests for TX schools and how to develop management plans, with a discussion about bed bug management in schools. The class was also taken on a school or building walk-thru on how to conduct in-depth IPM inspections using the IPM Calculator kept same content for 2012 training as 2011 as the subject material was of need for all schools to pass TDA inspections
- 2011 Provided four regional trainings with school IPM team and one solo two-day workshop with X8 Environmental, Inc. 106 IPM Coordinators, school maintenance facility directors, pest management professionals were trained on the second day of IPM Coordinator training. Curriculum for the second day included information on school IPM recordkeeping for TDA inspections, the Top Ten pests for TX schools and how to develop management plans, with a discussion about bed bug management in schools. The class was also taken on a school or building walk-thru on how to conduct in-depth IPM inspections.
- 2010 Provided four regional trainings with school IPM team. 123 IPM Coordinators, school maintenance facility directors, pest management professionals were trained on the second day of IPM Coordinator training. Curriculum for the second day included information on school IPM recordkeeping, insects as environmental indicators, and blending the school IPM program with the AG science program.
- 2009 Provided four regional trainings with school IPM team. 91 IPM Coordinators, school maintenance facility directors, pest management professionals were trained on the second day of IPM Coordinator training. Curriculum for the second day included information on school IPM recordkeeping, bees, wasps and other stinging insects.
- o 2008 Provided four regional trainings with school IPM team and two regional trainings by self, 167 IPM Coordinators, school maintenance facility directors, pest management professionals were trained on the second day of IPM Coordinator training. Curriculum for the second day included information on turfgrass management and IPM principles, Dr. James McAfee, Professor, Turfgrass Specialist gave presentations at the four regional trainings. In addition to turfgrass IPM, Dr. Merchant offered information on insects and turf, plus mosquito control for schools.
- o 2007 Provided four regional trainings with school IPM team and one regional training by self, 60 IPM Coordinators, school maintenance facility directors, and pest management professionals were trained on the second day. Curriculum for the second day included information on fire ants (utilized the 4 urban IPM specialists), spider, scorpion and other venous insect control for schools was presented by Dr. Merchant and information was also provided on basic IPM principles.
- 2006 Provided four regional trainings with school IPM team and one regional training by self, 91 IPM Coordinators, school maintenance facility directors, and pest management professionals were trained on the second day. Curriculum for the second day second

- day included information on rodent control given by Dr. Merchant and understanding the difference between Green, Yellow and Red Category pesticides. Additional information was provided on organizing the districts IPM program, developing IPM plans and policy statements.
- 2005 Provided four regional trainings with school IPM team, 76 IPM Coordinators, school maintenance facility directors, and pest management professionals were trained on the second day. Curriculum for the second day included information on focused on weed identification and treatment given by Dr. James McAfee, Extension Turfgrass Specialist or Larry Rider, Texas Turfgrass Associates. Dr. Merchant gave a presentation on cockroach control and treatments. I presented on new wording of the SPCB regulations and IPM for new buildings.
- 2004 Provided four regional trainings with school IPM team and one two-day workshop by self, 88 IPM Coordinators, school maintenance facility directors, and pest management professionals were trained on the second day.
- 2003 Provided four regional trainings with school IPM team, 102 IPM Coordinators, school maintenance facility directors, and pest management professionals were trained on the second day.
- 2002 Provided three regional trainings with school IPM team, 133 IPM Coordinators, school maintenance facility directors, and pest management professionals were trained on the second day. This was the first year the second day of training was offered.
- Development of IPM for Colleges, Universities, and LEEDs Building Managers Course. This
  New course was offered for the first time in August 2014 at Texas A&M University Facility
  Services Building. Course instructors are Janis Reed, PhD, Extension Program Specialist I,
  Molly Keck, Extension Program Specialist II, Elizabeth "Wizzie" Brown, Extension Program
  Specialist II. 2014 Day 1 had 14 participants, Day 2 had 7 participants.
- Development of the school IPM website (<a href="http://schoolipm.tamu.edu">http://schoolipm.tamu.edu</a> ) providing information on basic IPM questions, important forms, and/or documents for download, school IPM training schedule, and archiving of newsletters.
  - 2016 website received the following: 23,673 visits; 18,993 unique visitors; 75,592 pageviews; 3.19 pages/visit; average visit 1:33; 9.34% bounce rate; 79.28% new sessions.
  - 2015 website received the following: 18,442 visits; 14,732 unique visitors; 61,016 pageviews; 3.31 pages/visit; average visit 1:51; 13.14% bounce rate; 78.46% new sessions
  - 2014 website received the following: 17,950 visits; 14,286 unique visitors; 34,919 pageviews; 1.95 pages/visit; average visit 1:54; 71.86% bounce rate; 77.42% new sessions
  - 2013 website received the following: 17,773 visits; 13,974 unique visitors; 36,871 pageviews; 2.07 pages/visit; average visit 2:07; 69.80% bounce rate; 76.77% new sessions. (For a full report go to Google Analytics 2013 Annual Report) Interpretation of this data tells me that people come in, find what they are looking for, download it, and move on.
  - 2012 website received the following: 13,797 visits; 10,469 unique visitors; 32,553-page views; 2.36 pages/visit; average visit 2:28; 63.59% bounce rate; 74.14% new sessions.
     (For a full report go to Google Analytics 2012 Annual Report) Interpretation of this data tells me that people come in, find what they are looking for, download it and move on.
  - 2011 website received the following: 7,468 visits; 22,089-page views; 3.08 pages/visit;
     4,844 unique visitors.

- 2010 website received the following: Successful requests for pages: 462,150; Distinct files requested: 4,076; Distinct hosts served: 38,149; Data transferred: 22.87 gigabytes Average data transferred per day: 64.73 megabytes
- 2009 website received the following: Successful requests for pages: 512,389; Distinct files requested: 5,258; Distinct hosts served: 57,101; Data transferred: 20.31 gigabytes Average data transferred per day: 57.34 megabytes
- 2008 the website received the following: Successful requests for pages: 338,716;
   Distinct files requested: 17,731; Distinct hosts served: 70,632; Data transferred: 14.14 gigabytes Average data transferred per day: 39.56 megabytes
- 2007 the website received the following: Successful requests for pages: 404,466;
   Distinct files requested: 10,061; Distinct hosts served: 84,921; Data transferred: 15.01 gigabytes Average data transferred per day: 42.12 megabytes
- 2006 the website received the following: Successful requests for pages: 570,838;
   Distinct files requested: 7,891; Distinct hosts served: 109,359; Data transferred: 15.92 gigabytes Average data transferred per day: 44.66 megabytes. This was the first year that web server starting using Analog Software to track website reporting numbers
- Develop a newsletter for IPM coordinators and other interested stakeholders. The School Pest News is distributed via email and archived on the website.
  - 2016 Produced twelve issues of School Pest News, current subscription 1745, with 1,050 being IPM coordinators. Newsletter is embedded into School IPM Website, so readers must go to website to read full stories. I also added a PDF handout to each School Pest News (SPN) publication so that coordinators can download the document and place in teacher lounges, mailboxes, or other ways to help with educating staff about IPM.
  - 2015 Produced fourteen issues of School Pest News, current subscription 1789, with 1,023 being IPM coordinators. Collaborated with IPM Institute of North America and University of Arizona on their newsletter to have a more unified approach to all school IPM programs, reaching approximately 8900 subscribers each issue that is distributed. Newsletter is also embedded into School IPM Website, so readers must go to website to read full stories.
  - 2014 Produced eleven issues of School Pest News, current subscription 1537, with 923 being IPM coordinators. Collaborated with IPM Institute of North America and University of Arizona on their newsletter to have a more unified approach to all school IPM programs, reaching approximately 8900 subscribers each issue that is distributed
  - 2013 Produced eight issues of School Pest News, current subscription is 1537 with 923 being IPM Coordinators. Collaborated with IPM Institute of North America and University of Arizona on their newsletter to have a more unified approach to all school IPM programs, reaching approximately 8900 subscribers each issue that is distributed.
  - 2012 Produced nine issues of School Pest News, current subscription is 1435
     Collaborated with IPM Institute of North America to co-author newsletter stories for the School IPM 2015 newsletter a national school IPM newsletter that reach approximately 6700 subscribers each issue.
  - o 2011 Produced six issues of School Pest News. Current subscription list is 1335
  - 2010 Produced four major issues of School Pest News were written and distributed.
     Current readership is 1,416 individuals, with 823 being IPM coordinators
  - 2009 Produced 4 issues of School Pest News. Readership is holding at 1,145. Many school districts are using software that prevents the newsletter going to its intended recipient.

- 2008 Produced 5 issues of School Pest News. Beginning email count was 1,040 with the last issue going out to 1,139 The March issue was printed (500 copies) on high quality paper and was distributed at the NSPMA meeting, SASBO meetings, school IPM trainings, and CEU workshops.
- 2007 Produced 6 issues of School Pest News. Emailed all 6 versions with a starting recipient count of 1,025 with an ending recipient count of 1,040
- 2006 Produced 4 issues of School Pest News. Emailed all 4 versions with a starting count of 1,061 with an ending recipient count of 1,019
- 2005 Produced 5 issues of the School Pest News. Mailed Issue 2 to 1,036 school districts announcing the 2005 school IPM survey. Emailed all 5 versions starting database 800 ending with 817 recipients
- 2004 Produced 6 School IPM newsletters, changed name to School Pest News in
   October. Emailed all 6 versions starting database 677 with an ending recipient total of
   874
- 2003 Produced 6 School IPM newsletters mailed February newsletter with IPM Coordinator training schedule to 1,740 recipients. Emailed all 6 versions of newsletter database started at 496 and ended with 674 recipients.
- 2002 Produced 3 School IPM newsletters mailed October newsletter to 720 recipients, emailed all three versions to 303 in August to an increase of 517 by December
- Development of school IPM training curriculum for Texas Association of School Boards
   OnSite Environmental Division. Utilizing the same program as the AgriLife Extension school
   IPM team, a modified version of this training was prepared for TASB OnSite.
  - o 2009 Conducted 2 IPM coordinator trainings for TASB 74 total contacts
  - o 2008 Conducted 2 IPM coordinator trainings for TASB 113 total contacts
  - 2007 Conducted 3 IPM coordinator trainings for TASB 112 total contacts
  - o 2006 Conducted 2 IPM coordinator trainings for TASB 121 total contacts
- Development of Annual IPM Pride Award Program for public schools. This recognition program allows schools to submit a detailed application explaining their district's IPM program. The Southwest Technical Resource Center Team oversees a committee which scores the applications. Schools are presented with a plaque and check based on their level of recognition. Presentations are made in the presence of the district's school board during an open meeting. This recognition helps to educate the Board about their IPM program and the importance of the IPM program to their school district. Financial support for this program has come from private and federal grants. In 2008, funds were generated from the proceeds of the IPM Coordinator trainings.
  - 2016 Began the process for three schools in Texas to be certified for IPM Star and Plano ISD to recertified.
  - 2015 IPM Star Certification: Spring ISD was recertified by the IPM Institute of North America
  - O 2011 IPM Star Certification Assisted Spring ISD, Spring, TX, Klein ISD, Klein, TX and Katy ISD, Katy, TX with obtaining IPM Star Certification from the IPM Institute of North America. These three schools were put through IPM Star using money from school IPM program. Each school scored moderately high on their first evaluation with Dr. Green. Each school responded to the initial evaluation with additional remedies, making Spring and Katy very high scoring and placing them in the top 5% of schools in the U.S.
    - Spring ISD has utilized this status to help educate other schools, by partnering with

Facility Masters and Roger Young to give webinars and in-person talks. In March 2012, Spring ISD presented a session based on their School IPM Program at the 7<sup>th</sup> International IPM Symposium.

o 2007 IPM Star Certification

Assisted Carrollton-Farmers Branch ISD, Farmers Branch, TX and Plano ISD, Plano, TX in obtaining IPM Star Certification from the IPM Institute of North America. Star Certification is a rigorous process in which the school must show active participation in an IPM program, with good recordkeeping, adopting all levels of IPM practices and educating their staff about IPM needs and having an IPM policy adopted by the School Board. This provided Texas AgriLife Extension, the Texas Legislature, and other interested parties with external verification of the strengths of the Texas School IPM program. The districts selected were based on a couple of facts, proximity in distance, one was an award winner, the other had never attempted to apply, both had worked closely with the SWTRC and wanted to know where their program stood in the nation. CFB ISD came within the top 5% of all the schools inspected by Dr. Tom Green, while Plano ISD was in the top 12%.

- o 2008 IPM Winners
  - Klein ISD, Klein, TX
  - Arlington ISD, Arlington, TX
  - Plano ISD, Plano, TX
- o 2007 2006 There were insufficient applicants to make awards
- o 2005 Winners
  - Frisco ISD, Frisco, TX
  - Brenham ISD, Brenham, TX
- o 2004 Winners
  - Carrollton-Farmers Branch ISD, Farmers Branch, TX
  - Brenham ISD, Brenham, TX
  - Frisco ISD, Frisco, TX
  - Katy ISD, Katy, TX
- o 2003 Winners
  - La Vega ISD, Waco, TX
  - Carrollton-Farmers Branch ISD, Farmers Branch, TX
- Facilitated the development of a school IPM coordinator professional association Texas Integrated Pest Management Affiliate for Public Schools (TIPMAPS). This group was an affiliate chapter through Texas Association of School Business Officials (TASBO). In 2013 this group dropped their affiliation from TASBO and is now part of the Texas Pest Management Association (TPMA).
  - o 2016 there was no statewide conference
  - 2015 Texas Integrated Pest Management Affiliate for Public Schools Annual Coordinator Conference held in conjunction with the Winfield Solutions, Waco Convention Center, Waco, TX November 11 – 12, 2015. Total attendance 141 people.
  - 2014 Texas Integrated Pest Management Affiliate for Public Schools Annual Coordinator Conference held in conjunction with the Coastal Bend Pest Control Association, Corpus Christi, TX, Nov. 2014
  - 2013 Texas Integrated Pest Management Affiliate for Public Schools Annual Coordinator Conference
    - Held in conjunction with Entomological Society of America (ESA) annual conference

- in Austin, TX
- Total paid attendance was 82 there were 78 school districts represented, along with TDA personnel, with vendors and guests added total attendance was 90
- 2012 Texas Integrated Pest Management Affiliate for Public Schools Annual Coordinator Conference. Total attendances 116, of the attendees 70 school districts were represented. Conference was merged with the TASBO, TASB, SchoolDude Facility Masters conference, and the M&O Academy.
- 2011 Texas Integrated Pest Management Affiliate for Public Schools Annual Coordinator Conference
  - Total attendance 144, of the attendees 70 school districts was represented.
  - Conference was merged with the TASBO, TASB, SchoolDude Facility Masters conference, and the M&O Academy. By adding the additional conferences there was a more than 50% attendance from FM to the TIPMAPS conference. This was good since many of the school IPM coordinators were not allowed to travel to the conference.
- o 2010 Annual School IPM Coordinator Statewide Symposium
  - Total attendance 216, of the attendees 108 school districts were represented, which is about 10.4% of the total number of schools in Texas
  - TIPMAPS General Meeting
  - 90 potential and current members attended
- o 2009 First Annual School IPM Coordinator Statewide Symposium
  - Total attendance 237, of the attendees 115 school districts were represented, which is about 11% of the total number of schools in Texas.
  - First TIPMAPS general meeting
  - 48 potential members attended
- Development of an Integrated Bat Management workshop for schools in conjunction with Bat Conservation International. Brought in bat biologist and exclusion specialist Laura Seckbach Finn, Director, Fly By Night, Inc., Olsteen, FL and for the Round Rock location, Beverlee E. Nix, Zoonosis Control Veterinarian, Texas Department of State Health Services. Two workshops were held August 4 & 5, 2010 at Spring ISD High School and Round Rock ISD Athletic complex. The workshop was designed to cover the basic information on identifying the most problematic bats that come into human contact and evade buildings, exclusion techniques, and the most effective way to evict bats from buildings and why it's important to think about relocating bats from building once they have been excluded.
  - August 4, 2010 Spring ISD, Spring, TX
    - 35 attendees
  - August 5, 2010 Round Rock ISD, Round Rock, TX
    - 22 attendees
- Development of a Green Schools Workshop which was co-organized by Auburn University, the University of Florida IFAS Extension and AgriLife Extension personnel on behalf of the Southern Region School IPM Working group. This workshop was held on February 13-15, 2008 in Dallas, TX, and was funded by a National Extension IPM grant secured by the coorganizers for Marketing IPM as Green School Technology.
  - Workshop presentations included:
    - An introduction to the US Green Building Council and the LEED rating system by Michael Kawecki, North Texas U.S. Green Building Council
    - The role of architects and engineers in school building design by James McClure, Estes, McClure and Associates

- Green building design meets IPM: an entomologist's perspective by Al Greene, General Services Administration
- Commercial building design: A pest control company's perspective by Frank Meek and Paul Hardy, Orkin
- School maintenance department's Perspective: A TEAMS approach to School IPM,
   Victor Melton and Tom Bell, Carrollton-Farmer's Branch ISD
- The workshop also included breakout sessions. Subgroups were tasked with developing recommendations for 5 areas:
  - Landscape, lighting, and perimeter issues, including rodent, bird and wildlife pests. Facilitated by Tom Green, IPM Institute and Tom Fuchs, Texas AgriLife Extension.
  - Building envelope issues, including birds, bats, and bees. Facilitated by Al Greene, GSA and Tanya Franke, Oklahoma State University.
  - Foundation and drainage issues, including termites. Facilitated by Faith Oi and Rebecca Baldwin, University of Florida IFAS Extension.
  - Interior areas and doors, including crawling pests, ants, flies, and rodents.
     Facilitated by Lawrence "Fudd" Graham, Auburn University and Rosemary
     Hallberg, Southern Region IPM Center.
  - Food service areas, including cockroaches, rodents, and flies. Facilitated by Janet Hurley, Texas AgriLife Extension and Carmen Russell, Oklahoma State University.
- Development of compliance assistance and school site audits for IPM Coordinators seeking help with their IPM program. The Structural Pest Control Service is the regulatory branch, which verifies that schools comply with the school IPM rules. Assisting schools so they can stay in compliance and avoid fines is one of the goals of these site visits. Additionally, IPM coordinators seek help with understanding tough pest problems or they need assistance with program organization. To aid schools in these areas:
  - 2016 Conducted 2 in state site audits with schools for compliance audit and newsletter story
    - Conducted In-depth IPM cost analysis at Plano, Conroe, Killeen, and East Central ISDs, plus their IPM Star Audits
  - 2015 Conducted 5 in state site audits
    - Plano ISD Dr. Blake Bennett and I began tracking this district as an in-depth case study to see how much they are spending on their IPM program. While investigating their records, we noticed a persistent American Cockroach problem at Otto Middle School. Spent several weeks inspecting the campus and implementing a gel bait program to reduce the population and gain control by the time August arrived for back to school.
    - Pewitt ISD Originally called out for a TDA records check of program, worked with district on training of staff, obtaining applicator license and implementing an IPM program.
  - o 2014 Conducted 5 in state site audits and 3 for grant with City of New Orleans.
    - Keller ISD Administrative leadership changed in the district and the IPM program suffered, worked with new IPM coordinator to map out a plan to bid for a pest control contractor for kitchens, teachers lounge and specific treatments for fire ants and American cockroaches. District modified contract to their needs, hired a contractor and IPM program is progressing, but still needs constant reminders as to how to educate school staff not to treat themselves.
    - Westlake Academy Requested assistance due to a roof rat infestation that

involved students, teachers and parent volunteers seeing evidence of rats. Worked with school administrators and IPM coordinator to develop a plan for educating staff about how they have a role in IPM, presented to parents an educational program on rodents and how they can reinforce IPM to the teachers to keep areas clean. Inspected campus buildings with IPM Calculator to offer suggestions on how to reduce ways for rodents and other pests to enter buildings. Coordinator will report progress after the start of 2015 school year, as changes will not be noticed until teachers are back in school.

- Ennis ISD Originally called out for a TDA records check of program, which needed minimal improvement. Upon arrival, Coordinator/Facility Director received call from pest control contractor about an "unknown" pest at an elementary campus and wanted approval for indiscriminate spraying. Was able to educate coordinator, school principal and pest control technician about looking for source of problem, which was a bird nest in the soffit where the insect pests were found. Recommended a solution of removing the nest, fixing the hole in the soffit, using a Green Category product to help reduce the presence of bird mites and monitor the area.
- 2013 conducted 10 in state school site visits and 1 out of state for PRIA grant, 2 for school IPM grant with City of New Orleans
  - Spring Branch ISD required special assistance as they were cited in noncompliance twice by TDA for school IPM violations. The new district IPM coordinator was able to bring the school up from a lackadaisical program to one that passed a TDA inspection with flying colors
  - Corpus Christi ISD Was called in to assist district with fire ant protocol and IPM, after a middle school student dies from fire ant stings. Used Dr. Paul Nester and Dr. Mike Merchant to help develop a comprehensive fire ant management-baiting program for the two years to help them control fire ants on open areas where students can congregate.
- 2012 conducted 12 in state school site visits and 10 out of state for PRIA grant and to assist South Carolina develop a school IPM program for an EPA Region 4 grant
  - Houston ISD asked AgriLife Extension in to assist with their IPM program. The plan for this district is to work with Extension on building inspections, bid specifications and training for staff in 2012. Training was conducted on a one to one basis, several campus inspections were made, but more importantly working with Mr. Brian Busby and John Perry this district is now in compliance with the school IPM rules enforced by TDA. This took the full year to accomplish as many of the suggested documents and guidelines had to be submitted to upper and middle management at HISD for approval and then disseminated out.
- o 2011 conducted 11 in state school site visits and 4 out of state for PRIA grant
  - Premont ISD was audited per a request from the Texas Education Agency-report found that both schools being used were below safety standard. TEA made the decision to close this district down and move students to another district. This move resulted in the recommendations for bringing the schools up to safety standards which were not implemented.
  - Houston ISD asked AgriLife Extension in to assist with their IPM program. The plan for this district to work with Extension on building inspections, bid specifications and training for staff in 2012

o 2010 conducted 15 school site visits

- 2009 conducted 7 school site visits, plus 6 follow up site audits in conjunction with the IPM Cost Calculator.
- 2008 conducted 12 school site visits
- o 2007 conducted 15 school site visits
- 2006 conducted 4 school site visits and 19 face-to-face interviews for school IPM survey
- o 2005 conducted 9 school site visits
- o 2004 conducted 20 school site visits
- o 2003 conducted 16 school site visits
- 2002 conducted 65 school site visits during this year the Structural Pest Control Board inspected 80% of the Texas School Districts finding several schools out of compliance.

## 2. Faculty and Staff Training/Assistance

- Texas Association of Extension 4-H Agents, Working Across Generations, August 11, 2016 − 2 professional development sessions 12 attendees
- As part of the IPM for Colleges, Universities, and LEEDs Buildings course trained 10 employees of the SSC facilities branch for Texas A&M University, College Station, 2014
- Grant Writing Tips, Tricks, and What you need to know before and after you submit your proposal, co presented with Tribbie Sandner- Program Manager- Research Administration Liaison, at Texas Extension Specialist Association annual summer meeting San Antonio (2014)
- Brief overview on eXtension for Texas Extension Specialist Association annual summer meeting, Port Aransas (2013), D-4 Agent training
- Provided training on Pesticides Regulations updates at Departmental Science Conference (2011)
- Provided training on School IPM updates at Departmental Science Conference (2009)
- Provided extensive training on school IPM site audits and cost calculator inspections to the four urban IPM specialists (2008)
- Provided training on School IPM rules and what project group needs to know when asked by clients at Extension Entomology Retreat (2007)
- Provided training on School IPM research that Dr. Merchant and I conducted at Departmental Science Conference (2006)

# 3. Implementation of Educational Programs

- a. Individual Presentations
  - **Extension Presentations**
  - o 2016 Total Direct Contacts 1162
    - 2016 School IPM Rule Update, Texas A&M University Urban Pest Management Conference & Workshop, Bryan, TX (January 2016) 102
    - Laws and Regulations for SPCS & TDA, Grayson County Extension, Sherman, TX
       (January 2016) 91
    - Texas Worker Protection Law Update on Record Keeping for All, Hopkins & Collin County (November 2016) 80, 45
    - Using IPM Strategies In and Around Buildings and Grounds: What You Should Be Aware Of, McLennan County/Virkim, Hewitt, TX (Sept. 2016) 122;
    - The Indoor Environment How Cleaning, Bugs, and Dust All Play a Part in the Child's Health, Hopkins County Extension, Child Care conference, (Oct. 2016) 120

- Texas Worker Protection Law Update on Record Keeping for All; Hopkins County CEU workshop, Sulphur Springs, Collin County private applicator training, McKinney, (Nov. 2016) 80, 45
- Laws and Regulations for TDA: SPCS and AG, AgriLife Extension Dallas Fall IPM Seminar, Dallas, TX, Montgomery/Ft. Bend Private applicator training, Conroe, TX (Nov. & Dec. 2016) 364, 43
- Managing the Outdoor Landscape using IPM, Angelina County Extension CEU, Lufkin, TX (Dec. 2016) 45
- Weed ID and Management, Angelina County Extension CEU, Lufkin, TX (Dec. 2016)

## o 2015 Total Direct Contacts - 1,080

- School IPM Compliance: Labels, Bid Specs, Contracts and Justification forms, Texas A&M University Urban Pest Management Conference & Workshop, Bryan, TX (January 2015) 95
- Laws and Regulations for SPCS & TDA, Grayson County Extension, Sherman, TX (January 2015) 87
- IPM Practices in Local School Districts, Texas A&M AgriLife Extension, Overton, TX (February 2015) 109
- Update on TDA Rules, Texas A&M AgriLife Extension, Dallas, TX (March 2015) 87
- Record keeping practice writing up entire job at house, Texas A&M AgriLife Extension, Dallas, TX (July 2015) 14
- Laws and rules governing wildlife control, Texas A&M AgriLife Extension, Dallas, TX (July 2015) 14
- How to do IPM, McLennan County/Virkem Annual CEU Workshop, Hewitt, TX (September 2015) 170
- Laws and Regulations for TDA: SPCS and AG, Texas A&M AgriLife Extension, Dallas, TX; Hopkins County Extension, Sulphur Springs, TX (November 2015) 400, 104

# o 2014 Total Direct Contacts - 884

- School IPM Update on Laws and Rules, Texas A&M University Urban Pest Management Conference & Workshop, Bryan, TX (January 2014) 65
- Pesticide Regulatory Update, Dallas Center IPM Seminar, Dallas, TX (March 2014) 180
- Laws and Regulation Update on School IPM for Ag teachers, Texas Agricultural Teachers Annual Meeting, Abilene, TX (July 2014) 40
- History of IPM And Basic Principles of IPM, McLennan County/Virkim CEU workshop, Hewitt, TX (September 2014) 146; Taylor County, Abilene, TX (December 2014) 80
- Pesticide Labels and Labeling, Collin County, McKinney, TX (September 2014; Hopkins County, Sulphur Springs, TX (December 2014) 92, 114
- School IPM the Latest on Noncompliance Issues, Corpus Christi, TX (November 2014)
   167

# o 2013 Total Direct Contacts – 1514

- School IPM Update on Laws and Rules, Texas A&M University Urban Pest Management Conference & Workshop, Bryan, TX; 27th Annual Professional Grounds Conference, Belton, TX (January 2013) 110 + 456
- Laws, Regulations, and Impending Pesticide Changes. Grayson County (Jan 2013) 85
- IPM & It's Role In Local School Districts, East TX CEU workshop, Overton, TX (February 2013) 102
- New Pyrethroid Insecticide Rules & Other Regulator Updates, Spring IPM Seminar, Dallas, TX (March 2013) 187

- Understanding the New Clean Water Act Pesticide Rules, Collin County Summer Crops Program, McKinney, TX (July 2013) 35
- School IPM Top Ten Most Common Mistakes, McLennan County Extension/Virkim CEU workshop, Hewitt, TX (September 2013) 160
- Regulatory Changes Affecting Your Business, Montgomery County PCO and Lawn workshop, Conroe, TX (October 2013) 140
- IPM For Childcare, Collin County Childcare Provider Workshop, Dallas, TX (October 2013) 149
- Pollinators and Pesticide Stewardship, Collin County Fall CEU Program, McKinney, TX (November 2013) 90
- o 2012 Total Direct Contacts 1442
  - School IPM Top Ten Most Common Mistakes, Texas A&M University Urban Pest Management Conference & Workshop, Bryan, TX (January 2012)
  - Update on Water Quality Rules. Grayson County (Jan 2012)
  - Understanding the New Clean Water Act Pesticide Rules, Texas Pecan Growers Association Meeting, San Marcos, TX (July 2012)
  - Pest Prevention and Exclusion, Urban CoP extension Webinar (September 2012)
  - Fire Ant Biology and Control, McLennan County Extension, Hewitt, TX (September 2012)
  - The Importance of School IPM in TX, McLennan County Extension, Hewitt, TX; Texas
     Pest Control Association Meeting, Lubbock, TX (September 2012)
  - Pesticide Safety, pyrethroid updates and TDA Top Ten, Dallas Center IPM Seminar, Collin county CEU program (November 2012)
- o 2011 Total Direct Contacts 582
  - Developing Bid Contracts for Schools with IPM Coordinator, Lenny Carley, Houston ISD, Texas A&M University Urban Pest Management Conference & Workshop, Bryan, TX (January 2011)
  - Understanding the revised school IPM rules. Grayson County (Jan 2011)
  - Bexar County Youth Gardens Program Spring Teachers Training (Jan 2011)
  - Paris Junior College Sponsored Child Care Program Pesticide Rules For Childcare and Introduction to IPM, Paris, TX (Feb. 2011)
  - School Garden Based Learning, IPM For Teachers, Texas AgriLife Research & Extension Center, Dallas, TX (September 2011)
  - Update on Water Quality Rules for TDA and SPCS, Collin County CEU workshop, McKinney, TX (November 2011); Bexar County Extension Office, San Antonio, TX (December 2011)
- o 2010 Total Direct Contacts 1078
  - Documenting and Accountability for School IPM. Texas A&M University Urban Pest Management Conference & Workshop, Bryan, TX (January 2010)
  - Understanding the revised school IPM rules. McLennan County CEU workshop, Hewitt, TX (September 2010); Montgomery County, Conroe, TX
  - IPM Principles, pesticide safety and new rules for childcare centers. Dallas County Extension Office, Dallas, TX (October 2009)
  - IPM Business Practices, Texas AgriLife Extension Fall IPM Seminar (November 2010)
  - Laws and Regulations update for TDA. Collin County CEU program, McKinney, TX (November 2010) Taylor County CEU program, Abilene, TX (December 2010)
  - IPM: Learning how to be a pest detective. Taylor County CEU program, Abilene, TX (December 2010)

- 2009 Total Direct Contacts 1751
  - School IPM Laws and Regulations. Texas A&M University Urban Pest Management Conference & Workshop, Bryan, TX (January 2009)
  - TDA & SPCS Laws and Regulations. Williamson County Professional Grounds Conference, Belton, TX (January 2009): Dallas County CEU program, Dallas, TX (February 2009, September 2009)
  - Situations and Solutions for Bat Management. Dallas County Urban Wildlife Management Program, Dallas, TX (March 2009)
  - School IPM Understanding the new rules, McLennan County CEU workshop, Hewitt, TX (September 2009)
  - Laws and Regulations update for TDA and SPCS, Texas AgriLife Extension Fall IPM Seminar (November 2009); Dallas County CEU program (November 2009)
  - Green vs. IPM What's the Difference, Dallas County CEU program (November 2009)
- o 2008 Total Direct Contacts 799
  - School IPM Legislative Update. Texas A&M University Urban Pest Management Conference & Workshop, Bryan, TX (January 2008)
  - Pesticide Safety. Grayson County CEU program. Sherman, TX (January 2008)
  - SPCS Laws and Regulations and Pesticide Safety, Titus County CEU workshop, Mt. Pleasant, TX (June 2008)
  - Green vs. IPM What's the Difference, McLennan County CEU workshop, Hewitt, TX (September 2008); Texas AgriLife Research and Extension Center Annual Fall IPM Seminar, Dallas, TX (November 2008)
  - SPCS and TDA Laws and Regulations. Texas AgriLife Research and Extension Center Annual Fall IPM Seminar, Dallas, TX (November 2008)
- o 2007 Total Direct Contacts 1117
  - School IPM Ten Years Later. Texas A&M University Urban Pest Management Conference & Workshop, College Station, TX (January 2007); Grayson County CEU program. Sherman, TX (January 2007); Titus County CEU workshop, Mt. Pleasant, TX (June 2007)
  - IPM: Understanding non-chemical controls. Texas A & M Research and Extension Center Annual Spring IPM Seminar, Dallas, TX (February 2007)
  - How to Service Your Schools Using IPM. Texas A & M Research and Extension Center Annual Fall IPM Seminar, Dallas, TX (November 2007); Tarrant County CEU workshop, Ft. Worth, TX (November 2007)

# Pest Control Industry Presentations

- o 2016 Total Direct Contacts 627
- Laws and Rules Update Tarrant County Pest Control Association, Arlington, TX (February 2016) 27
- Living with Bats and Managing them, training for technicians, ABC Pest & Lawn, San Antonio, TX (March 2016) 50
- Using IPM Strategies In and Around Buildings and Grounds: What You Should Be Aware Of. Texas Turfgrass Association Annual Meeting, Bastrop, TX (July 2016) 125; Texas Pest Control Association Annual Meeting, Lubbock, TX (Sept. 2016) 54
- Laws & Rules Update focus on School IPM requirements, Winfield Solutions CEU workshop, Tyler, FT. Worth, Lubbock, Wichita Falls, TX (Nov. 2016) 82, 227, 114, 111
- Managing the Outdoor Landscape using IPM, Winfield Solutions CEU workshop, Waco, TX (Nov. 2106) 62

- o 2015 Total Direct Contacts 489
  - History and Basic Principals of IPM, Texas Pest Control Association, El Paso, TX (January 2015) 46
  - Pesticide Safety for PMPs, Univar USA Pechanga, Harlingen, TX (June 2015) 192
  - How to do IPM, Texas Pest Control Association, Lubbock, TX (September 2015) 107
  - Fire Ant control for schools and cities, Winfield Solutions CEU Roundup, Tyler, and Wichita Falls (October 2015) 90, 54
- o 2014 Total Direct Contacts 304
  - IPM and Reduced Impact Services, Univar, USA Pest Control Workshop, Tyler, TX (February 2014) 205
  - School IPM Update and Rules changes, Texas Pest Control Association –Tarrant County Monthly Meeting. Ft. Worth, TX (February 2014) 56
  - How to Implement and Maintain a grounds IPM program for schools, municipalities and colleges, Texas Turfgrass Association Summer Annual Meeting, Bastrop, TX (July 2014)43
  - An Ounce of Prevention History of IPM, Texas Tech Pest Control Workshop, Lubbock, TX (September 2014) 50
- o 2013 Total Direct Contacts 625
  - Laws and Regulations and Impending Pesticide Change for Lawn Care Workers,
     Target Specialty Products Pest Management CEU workshop. Dallas and Houston,
     (January, February 2013) 24, 125
  - School IPM Update and Rules changes, Texas Pest Control Association El Paso Workshop (January 2013); Univar Pechanga, Hidalgo County, TX 91, 180
  - IPM things you need to know, Texas Turfgrass Association Summer Annual Meeting, Arlington, TX (July 2013)185
  - Recognizing Green Category Pesticides, Texas Pest Control Association, Lubbock Workshop (September 2013) 20
- o 2012 Total Direct Contacts 913
  - Effective IPM Practices, Target Specialty Products Pest Management CEU workshop.
     Arlington, Houston, and San Antonio, TX (January, February 2012)
  - Fire Ant Biology and Control, Target Specialty Products, Oklahoma City, OK (February 2012)
  - IPM for Sports Turf, Texas Turfgrass Association annual meeting, Galveston, TX (July 2012)
  - Pesticide Safety, pyrethroid updates and TDA Top Ten, Target Specialty Products Pest Management CEU workshop. Ft. Worth, TX (October 2012)
  - Principles of IPM, Target Specialty Products Pest Management CEU workshop.
     Houston, and Austin, TX (November 2012)
- o 2011 Total Direct Contacts –1168
  - National School IPM rules and How it affects Turf Managers, National Sports Turf Management Association Annual Meeting, Austin, TX (Jan 2011)
  - History of IPM, Target Pest Management CEU workshop. Arlington, TX, Houston, TX (February 2011)
  - Pesticide Safety, Target Pest Management CEU workshop, Houston, TX (February 2011); Texas Pest Control Association El Paso Workshop, El Paso, TX (March 2011)
  - Rodent IPM for Sensitive Environments, Texas Pest Control Association El Paso Workshop, El Paso, TX (March 2011)
  - Best Management Practices for School IPM, LSU AgCenter Sponsored Pest Control

- Workshop, Alexandra, LA (April 2011)
- Top Ten Mistakes SPCS TDA is Finding When They Conduct Site Inspections, Univar Pachanga CEU workshop, Mercedes, TX (June 2011)
- Essentials of the School IPM Rules, VirKim Chemical with McLennan County Extension, Hewitt, TX (Sept. 2011); Texas Pest control Association Lubbock PCO Workshop, Lubbock, TX (Sept. 2011)
- Fire Ant Basics, Target Pest Management CEU workshop, Austin, TX (September 2011)
- Effective IPM Practices for Kitchens and School Buildings; City of New Orleans and the Greater New Orleans Pest Control Association Pest Control Academy, New Orleans, LA (October 2011)
- School IPM Rules in the United States; City of New Orleans and the Greater New Orleans Pest Control Association Pest Control Academy, New Orleans, LA (October 2011)
- Weed Management and ID, Univar CEU workshop, Grand Prairie, TX (October 2011)
- o 2010 Total Direct Contacts 950
  - IPM Inspections, B&G Chemical & Equipment CEU workshop. Arlington, TX (January 2010); Houston, TX (February 2010)
  - Pesticide Safety, B&G Chemical & Equipment CEU workshop. Arlington, TX (January 2010)
  - SPCS Laws and Regulations. Univar Pachanga, Mercedes, TX (June 2010)
  - Understanding the revised school IPM rules. TPC Texas Tech PCO Workshop, Lubbock, TX (September 2010)
  - IPM Business Practices, B&G Chemical & Equipment CEU workshop. Arlington, El Paso, & Houston, TX (October 2010)
  - IPM Best Management Practices School IPM. Alabama School IPM Coalition meeting and CEU workshop, Montgomery, AL (November 2010)
- o 2009 Total Direct Contacts 936
  - Green vs. IPM What's the Difference, B&G Chemical & Equipment CEU workshop.
     Dallas and Houston, TX (January 2009); San Antonio, TX (February 2009)
  - SPCS Laws and Regulations. Central Texas Pest Control Association monthly meeting, Waco, TX (February 2009)
  - The New School IPM Rules, East Texas Pest Control Association monthly meeting, Tyler, TX (April 2009) B&G Chemical & Equipment CEU workshop. Dallas and Austin, TX (September 2009)
  - IPM Inspections Using the new Cost Calculator, Central Texas Pest Control Association CEU workshop, Belton, TX (September 2009); Univar USA Fall CEU workshop (October 2009)
  - Understanding IPM Plans and Setting Thresholds for common school pests, Tech PCO Workshop, Lubbock, TX (September 2009)
- o 2008 Total Direct Contacts 1,175
  - School IPM How to service your schools better. Amarillo Area CEU workshop, Amarillo, TX (January 2008)
  - School IPM training for Pest Control. Pest Fog/Portland Pest Control Company inservice training, Corpus Christi, TX (February 2008)
  - The School IPM Rules, East Texas Pest Control Association monthly meeting, Tyler, TX (July 2008)
  - School IPM Greater Houston Pest Control Association Monthly Meeting, Houston,

- TX (August 2008)
- Green vs. IPM What's the Difference. Texas Tech PCO Workshop, Lubbock, TX (September 2008); Estes Chemical Annual Fall CEU Round Up, Tyler, Dallas, Houston and San Antonio, TX (October 2008)
- How to Service Your Schools Using IPM. B&G Chemical & Equipment CEU workshop.
   El Paso, TX (October 2008)
- o 2007 Total Direct Contacts 974
  - How to Service Your Schools Using IPM. Estes Chemical Annual Fall CEU Round Up, Tyler, Dallas, Lubbock, Waco, Houston and San Antonio, TX (October & November 2007)

# **School Organizations Presentations**

- o 2016 Total Direct Contacts 263
- IPM for Custodians, Lubbock ISD, Lubbock, TX June 2016 95
- IPM for Maintenance and Grounds, Lubbock ISD, Lubbock, TX June 2016 168
- 2015 Total Direct Contacts 33
  - Introducing Stop School Pest Modules and IPM updates, Houston Area TIPMAPS meeting, Spring, TX (April 2015) 15
  - School IPM most common pests found in schools, City of New Orleans Mosquito and Termite Control Board, New Orleans, LA (July 2015) 18
- o 2014 Total Direct Contacts 64
  - Management of the Physical Environment & IPM: A Winning Team for School Health, Co-presented with Nancy M. Crider, PhD, MS, RN, Assistant Professor, UT Health Science Center – Houston, Texas Healthy School Environments Symposium, Houston, TX (April 2014) 19
  - A+ Schools Getting Everyone Involved in the IPM Program, South Texas Association of School Maintenance Officials Summer Conference, South Padre Island, TX (June 2014) 30
  - An Introduction to IPM, Developing IPM programs and plans, City of New Orleans Mosquito, Termite, Rodent Control Board Summer School IPM meeting for LA schools, New Orleans, LA (July 2014) 15
  - Four Generations in the Workplace, TIPMAPS Conference, Corpus Christi, TX (November 2014) 20
  - Round Table Discussion What does it take to bid for IPM? TIPMAPS Conference, Corpus Christi, TX (November 2014) 40
- o 2013 Total Direct Contacts 176
  - School IPM Discussion Topics Roundtable Discussion at Area TIPMAPS Coalition Meeting, Frisco (DFW)ISD, Frisco, TX; Houston (Harris), TX (Feb) 10, 15
  - Understanding Green Pesticides, LSU School IPM Coalition Meeting, Baton Rouge, LA (Feb) 10
  - Most common pests for schools and How to write an IPM program City of New Orleans Mosquito, Termite, Rodent Control Board Summer School IPM meeting for LA schools, New Orleans, LA (July 2013) 40
  - School IPM Recordkeeping Principles and Introduction to IPM Action Plans,
     Michigan School Business Officials Meeting on School IPM, Lansing, MI (July 2013)
     25
  - School IPM for Teachers and Staff, Springtown ISD in-service training (August 2013),
     Connelly ISD Maintenance and Operations staff in-service training (September 2013)
     65, 11

- 2012 Total Direct Contacts 681
  - Children Deserve a Safe Place to Learn and Grow an Introduction to IPM; Boerne ISD, Teacher In-Service Training, Boerne, TX (January 2012); Arkansas Association of Education Administrators, Little Rock, AR (August 2012); Arkansas School Plant Management Association, Hot Springs, AR (October 2012)
  - IPM Recordkeeping, What is High Performing School IPM, LA School IPM Coalition meeting, Baton Rouge, LA (January 2012)
  - School IPM Top Ten Mistakes to Avoid Compliance Issues, Houston Area TIPMAPS meeting, Houston, TX (February 2012)
  - Living with Bats and Avoiding Rabies, IPM Best management practices and bats of southern TX, Co-sponsored event with Laredo and United ISD in-service training, Laredo, TX (February 2012)
  - IPM Kitchen Inspections, LA School IPM Coalition Meeting, Iberville Parish, LA (July 2012)
  - What's Bugging You? Pests, Pesticides and IPM What every teacher needs to know, Brooks County ISD – Full Staff In-service training, Falfurrias, TX (August 2012)
- o 2011 Total Direct Contacts –399
  - Introduction of IPM for Schools with info about Bed Bugs. UT Public Health in Tyler hosted this webinar (April 2011)
  - School IPM Updates. Texas Association of School Business Officials Summer Conference, Corpus Christi, TX (June 2011)
  - Children Deserve a Safe Place to Learn and Grow an Introduction to IPM; It's Time School Summit, Austin, TX (June 2011)
  - Children's Environmental Health Workshop, Weslaco, TX (June 2011)
  - Effective IPM: Safeguarding Kitchens, Cafeteria and Classrooms, Facility Masters, SchoolDude and Roger Young webinar (August 2011), TX Facility Master's Conference, San Marcos, TX (November 2011)
  - Budgeting for Your IPM Program, TX Facility Master's Conference, San Marcos, TX (November 2011)
  - Bed Bugs in Schools General Information and Discussion on how Facility Directors should "react to this problem", TX Facility Master's Conference, San Marcos, TX (November 2011)
- 2010 Total Direct Contacts 477
  - How to Prepare for a TDA school IPM audit. Texas Association of School Business Officials Annual Conference, San Antonio, TX (February 2010)
  - How to help your school with a TDA audit, adopting an IPM policy and what is TIPMAPS, Fort Worth ISD, Ft. Worth, TX
  - Making sure your district has an up-to-date IPM policy statement, North Texas
     Maintenance and Operations Association meeting, Dallas, TX
  - The Top 5 items you need to have to pass a TDA inspection. Texas Association of School Business Officials Summer Conference, Kerrville, TX (June 2010)
  - Managing Bats on School Campuses Texas Association of School Business Officials Summer Conference, Kerrville, TX (June 2010)
  - In-service training for Pecos ISD teachers and custodians. Pecos, TX
  - IPM Inspections Facilities Masters Webinar hosted by Roger Young & Associates (September 2010)
- 2009 Total Direct Contacts 180
  - IPM for custodial and Maintenance workers. Victoria ISD, Victoria, TX (February

2009)

- Writing Good Bid Specs for IPM. Texas Association of School Business Officials Annual Conference, San Antonio, TX (February 2009); Summer TASBO, Colleyville, TX (June 2009)
- Pest Control and Your Maintenance Program Why Adopt IPM, National School Plant Management Association Annual Meeting, Atlantic City, NJ. (April 2009)
- Pest Control and Your Maintenance Program Why Adopt IPM, Introduction to the cost Calculator. California Facility Maintenance & Operations Skills Academy, San Jose, CA (July 2009)
- School IPM Legislative and Rule Update. Gulf Coast Maintenance and Operations monthly meeting, Spring, TX (April 2009); Summer TASBO, Colleyville, TX (June 2009)
- School IPM and Preparing for an audit from TDA, TASBO Facility Masters meeting, Garland, TX (October 2009)
- Roundtable discussion for Region 4 ESC facility director's discussion, (October 2009)
- o 2008 Total Direct Contacts 86
  - IPM for the Maintenance Dept. Plano ISD In-service training, Plano, TX (February 2008)
  - How to Train Your Staff about School IPM. Texas Association of School Business Officials Annual Conference, Ft. Worth, TX (March 2008)
  - Pest Control and Your Maintenance Program Why Adopt IPM; Southeastern Association of School Business Officials Facilities Masters Conference, Little Rock, AR (November 2008); New Mexico Facility Master's Conference, Albuquerque, NM (December 2008)
- o 2007 Total Direct Contacts 125
  - School IPM Legislative Update. Texas Association of School Business Officials Annual Conference, Dallas, TX (February 2007); Summer TASBO, Corpus Christi, TX (June 2007); Gulf Coast M&O Monthly Meeting, Spring, TX; Region 6 ESC M&O Group, Huntsville, TX (October 2007)
  - School IPM for Risk Managers. Texas School Risk Managers Association, San Antonio, TX (April 2007)
  - School IPM for Maintenance and Grounds Workers, Lubbock ISD, Lubbock, TX (May 2007)
  - Back to School IPM Connelly, ISD, Waco, TX; West ISD, West, TX (August 2007) Other Presentation Requests
  - Pest management standards for housing and community bed bugs, cockroaches, mice and rats what you should know, City of Plano Property Standards Division (January 2016) 25
  - Understanding the signs & symptoms of a sick home/school insects as indicators,
     National Environmental Health Association Annual Meeting, Hyatt Hotels Riverwalk,
     San Antonio, TX (July 2016) 28
  - IPM toolbox Introducing the IPM Calculator, iSchoolPestManager and Stop School Pests, University of Nebraska Cooperative Extension School IPM Meeting, Lincoln, NE (July 2016) 35
  - How Bats in Your School Building Can Go from Beneficial to Disruptive: How You Can Help Your District Keep the Bats for Educational Purposes, North American Society for Bat Research Annual meeting, San Antonio, TX (Oct. 2016) 50

- Bats, Bed bugs and Bees, animal control response; Texas Environmental Health Association annual conference, Double Tree Hotel, Austin, TX (October 2015)
- Laws and regulations and IPM strategies pertaining to bat control as part of the "Living Among Bats and Avoiding Rabies Seminar" hosted by Department of State Health Services – San Antonio, TX (April 2014)
- Food, Water, Air There are no Boundaries with IPM, TX Environmental Health Association Annual Conference, Austin, TX (October 2013)
- School IPM Weed and Turf IPM for the south, School IPM Partnerships Workshop, University of Florida IFAS, MREC, Apopka, FL (September 2013)
- Texas Extension Specialists Association, eXtension how to engage in a Community of Practice, Annual Meeting, Port Aransas, TX (July 2013)
- Effective & Efficient School Facilities Maintenance Integrated Pest Management Webinar, TX Center for Educational Facilities, Web Conference Services TAMU System (March 2013) 40
- FL Dept of Health Webinar via Adobe Connect, Children Deserve a Safe Place to Learn – How IPM can help (November 2012)
- Children Deserve a Safe Place to Learn, Intertribal Environmental Meeting, Dallas, TX (December 2012)
- Leadership Metrocrest, Food, Water, Air how it all relates to municipalities and how IPM helps, Carrollton, TX (October 2012)
- What's Bugging YOU Pests, Pesticides and IPM, what is your best option, Inter Tribal Environmental Meeting, Tulsa, Ok (August 2012)
- IPM for Kitchens, Texas Environmental Health Bexar County Association, San Marcos, TX (May 2012 – 147)
- Managing Bats and Avoiding Rabies TEHA Branch meeting, Baytown, TX (March 2012); Region 6 DSHS, Pearland, TX (April 2012); Region 7 DSHS, North Richland Hills, TX (August 2012)
- School IPM in TX Texas Pest Management Association Annual Meeting, San Angelo, TX (February 2012)
- Dallas A&M Club Monthly meeting What is the Land Grant System, Texas A&M AgriLife Research and Extension Center and What is School IPM. (January 2012)
- Interstate Chemical Threats Workgroup (ICTW) webinar on School Pesticide Exposures & Effective Policies (December 2011)
- Answering the Call for Common Pests for Animal Control Officers, Texas
   Environmental Health Association Annual Conference, Austin, TX (October 2011)
- School IPM for Sanitarians and Enforcement Officers, Texas Environmental Health Association Annual Conference, Austin, TX (October 2011)
- Bat Biology and IPM procedures, Region 1 Dept. Of State Health Services Animal Control Officers workshop, Amarillo, TX (April 2011)
- Answering the call for bats, bees, and other common pests for animal control officers. Texas Animal Control Association Annual Meeting. Abilene, TX (November 2010)
- Understanding and Managing Bats and Preventing Rabies Exposure. Texas Environmental Health Association, Austin, TX (October 2010); Abilene, TX (December 2010)
- Bat biology, habitat and management for schools and communities. Wildlife Management and Animal Control, Wichita Falls and Corpus Christi, TX (May 2010), Harlingen, TX (June 2010) Abilene, TX (December 2010)

- IPM strategies pertaining to bat control as part of the "Living Among Bats and Avoiding Rabies Seminar" hosted by Department of State Health – Region 7 and Texas Association of School Boards Austin, TX; Department of State Health – Region 4/5N, Tyler, TX (2009)
- Laws and regulations and IPM strategies pertaining to bat control as part of the "Living Among Bats and Avoiding Rabies Seminar" hosted by Department of State Health Region 7 and Texas Association of School Boards Austin, TX (2009)
- o Presented information on school IPM at the national and regional level, then lead a round table discussion for the EPA Region 6 states meeting, Dallas, TX (2009)
- Integrated Pest Management for Bats. Disease in Nature Conference, Ft. Worth, TX;
   2nd Annual Veterinary Conference, Houston, TX (2009)
- The Texas Model. Association of Structural Pest Control Regulatory Officials
   (ASPCRO) annual meeting, Denver, CO. Was part of a panel discussion on school
   IPM, gave a brief overview of the Texas school IPM rules. Answered questions about
   the Texas program, plus the effectiveness of having a state mandate. (2009)
- o Introduction to IPM and the Cost Calculator. Florida School IPM semi-annual workgroup meeting, Apopka, FL (2009)
- Introduction to IPM and the Cost Calculator. Presented for Maine Department of Agriculture as part of their School IPM training. Bangor and Portland, ME (2009)
- Blueprint for Schools, what is school IPM. Presentation made for UT School of Public Health event. Houston, TX (2009)
- o IPM and Green Schools a report on an initial workgroup meeting to discuss this topic at the Southwestern Branch ESA meeting, Ft. Worth, TX (2008)
- Laws and regulations pertaining to bat control as part of the "Living Among Bats and Avoiding Rabies Seminar" co-hosted with Texas Parks and Wildlife, Department of State Health Services, and Bat Conservation International – Dallas and Brazoria (2008)
- Made a brief presentation to the Southern Region IPM Center Steering and Advisory committee on the school IPM workgroup (2008)
- Laws and regulations pertaining to bat control as part of the "Living Among Bats and Avoiding Rabies Seminar" co-hosted with Texas Parks and Wildlife, Department of State Health Services, and Bat Conservation International (2007)
- Gave a 1-hour presentation on school IPM and greenhouses for Texas Agricultural
   Science teachers at their annual summer conference (2007)

#### Posters and Presentations at Scientific Meetings

- Nester, Paul, Janet Hurley, Brett Bostian, and Walter "Buster" Terry. 2016. Red imported fire ant management efforts in Corpus Christi Independent School District

   Three Years Later. Southwestern Branch meeting of the Entomological Society of America, Tyler, TX. February 24, 2016
- Janet Hurley, Blake Bennett, and Michael Merchant. 2016 Plano ISD School IPM program: An in-depth case study analysis. Southwestern Branch meeting of the Entomological Society of America, Tyler, TX. February 24, 2016
- Janet Hurley, Blake Bennett, Michael Merchant, and Thomas Green. 2016.
   Quantifying the Financial Costs of School IPM. Southern IPM Center IPM Roundtable meeting Southeastern Branch, Raleigh, NC. March 16, 2016

- Janet Hurley, Blake Bennett, and Michael Merchant. 2016 Modeling for pest risk in and around school buildings, how the IPM Calculator can help you prevent and solve tough pest problems. National Conference on Urban Entomology, Albuquerque, NM. May 23, 2016
- Nester, Paul R., Janet A. Hurley Brett Bostian, and Hector Hernandez, 2016. Red Imported Fire Ant Management Efforts in Corpus Christi Independent School District: Avoiding Tragedy. National Conference on Urban Entomology, Albuquerque, NM. May 23, 2016
- Janet Hurley and Dawn Gouge. 2016 Creating a searchable toolbox for school IPM introducing iSchoolPestManager and Stop School Pests. National Conference on Urban Entomology, Albuquerque, NM. May 24, 2016
- Janet Hurley. 2016. Working with public health professionals: why they need to know about insects and diseases. Symposium: Entomologists without Borders: The Need for Collaboration Between Medical Professionals and Entomologists for the Betterment of Global Public Health. 2016 XXV International Congress of Entomology/Entomological Society of America, Orlando, FL. September 29, 2016
- Michael Merchant and Janet Hurley. 2016. Adopting IPM for public school settings: The Texas, USA, model 2016 XXV International Congress of Entomology/Entomological Society of America, Orlando, FL. September 30, 2016
- Nester, Paul, Janet Hurley, Brett Bostian, and Walter "Buster" Terry. 2015. Tackling fire ants, after a student death, a case study for school IPM in Texas. 8th International IPM Symposium, March 2015.
   http://www.ipmcenters.org/ipmsymposium15/Documents/Posters/152 Hurley.pdf
- Nester, Paul, Janet Hurley, Brett Bostian, and Walter "Buster" Terry. 2015. Tackling fire ants, after a student death, a case study for school IPM in Texas. 2015 Imported Fire Ant and Invasive Pest Ant Conference
   <a href="http://articles.extension.org/sites/default/files/2015%20Conference%20Proceedings.o.pdf">http://articles.extension.org/sites/default/files/2015%20Conference%20Proceedings.o.pdf</a>
- Dawn Gouge, Lucy Li, Shaku Nair, Dave Kopec, Kai Umeda, Lynn Braband, Erin Bauer, Clyde Ogg, Herb Bolton, Marcia Duke, Carrie Foss, Sherry Glick, Fudd Graham, Janet Hurley, Kathy Murray, Michael Page, Susan T. Ratcliffe, Gregg Smith, Tim Stock, Carol Westinghouse, Deborah Young, and Tom Green. 2015. Stop School Pests: Standardized national school IPM training Poster P149 8th International IPM Symposium, March 24 & 25, 2015 <a href="http://www.ipmcenters.org/ipmsymposium15/posters.html">http://www.ipmcenters.org/ipmsymposium15/posters.html</a>
- Fudd Graham, Janet Hurley, and Kathy Flanders. 2015. Presentation Track #10 Increasing connections between IPM and wildlife damage management: Wildlife
  damage management in the digital age: Collaborating with others to spread the
  message 8th International IPM Symposium, March 24, 2015
- http://www.ipmcenters.org/ipmsymposium15/Documents/Presentations/10 Graham.pdf
- Janet Hurley, Blake Bennett, and Michael Merchant. 2015. Presentation Track #39 Tools for successful IPM in schools and childcare centers: Measuring and evaluating
  verifiable school IPM: Quantifying pest's risks using the ipmcalculator.com. 8th
  International IPM Symposium, March 25, 2015
  <a href="http://www.ipmcenters.org/ipmsymposium15/presentations.html">http://www.ipmcenters.org/ipmsymposium15/presentations.html</a>

- Blake Bennett, Michael Merchant, and Janet Hurley. Design, use and evaluation of an online IPM risk calculator for public schools. Poster D3415, Entomological Society of America Annual Conference, Minneapolis, MN. November 18, 2015.
- Hurley, J. 2014. A+ Schools getting everyone involved in the IPM Program,
   Symposium Session IPM teams at work: success storied from community IPM
   Programs. National Conference on Urban Entomology, San Antonio, TX
- Hurley, J. 2014 Organizer and Moderator for Special Symposium Session: School IPM: Moving the ball forward and keeping it sustainable. National Conference on Urban Entomology, San Antonio, TX
- Hurley, J.A. 2013 Health & Economic Benefits of IPM School IPM Regulations Nationwide MUVE Section Symposium: Healthy Schools: Research, Benefits and Impacts in the Classroom 61<sup>st</sup> Annual Meeting of the Entomological Society of America, Austin, TX
- Hurley, J.A., M. Merchant, & D. Renchie. 2012. The Texas school IPM model: How an EPA seed grant helped build a program, Poster Sessions, 7<sup>th</sup> International IPM Symposium, Memphis, TN
- Hurley, J.A., L. Braband, C. Foss, & L. Jones. 2012 The IPM Star Process—What it takes to achieve IPM Star status., Poster Sessions, 7<sup>th</sup> International IPM Symposium, Memphis, TN
- Green, T. A., D. H. Gouge, J. A. Hurley, L. F. Graham, K. Murray, L Braband, C Foss, T. Stock, B Stoddard, Z Bruns, and M Anderson. 2012 A Growing National Effort: Progress towards implementing IPM in all US K-12 public schools by 2015., Poster Sessions, 7<sup>th</sup> International IPM Symposium, Memphis, TN
- Teel, P. D., O. F. Strey, & J.A. Hurley. 2012 The "TickApp" for Texas and the Southern Region, IPM Delivery: Got an App for That?, 7<sup>th</sup> International IPM Symposium, Memphis, TN
- Merchant, M., F. M. Oi, & J.A. Hurley. 2010 Getting School districts involved in IPM programs: Florida and Texas experiences. MUVE Section Symposium: Engaging People from Diverse Fields in Urban IPM Programs. 58<sup>th</sup> Annual Meeting of the Entomological Society of America, San Diego, CA
- Hurley, J. & M. Merchant. 2010. Developing a professional association for Texas school IPM coordinators and hosting a statewide conference. National Conference on Urban Entomology, Portland, OR.
- Hurley, J. 2009. Promoting Implementation of IPM in Schools: The Success and Challenges of Mandating School IPM in Texas. 6<sup>th</sup> International IPM Symposium, Portland, OR
- Graham, L., & J. Hurley. 2009. Hands-on Introduction to Integrated Pest
   Management Tools: eXtension. 6<sup>th</sup> International IPM Symposium, Portland, OR
- Merchant, M. B. Bennett & J. Hurley. 2009. New Tool to Help Schools Calculate the Costs of IPM. 6<sup>th</sup> International IPM Symposium, Portland, OR
- O Hurley, J., M. Merchant & P. Pope. 2006. Measuring the Success of School IPM in Texas. National IPM Symposium. St. Louis, MO
- Merchant, M. B. Bennett & J. Hurley. 2006. IPM Budget Calculator National IPM Symposium. St. Louis, MO
- Merchant, M., J. Hurley & D. Renchie. 2004. Southwest Technical Resource Center for IPM in Schools. Texas A&M Research and Extension Center presentation to Texas Cooperative Extension and Texas Agricultural Experiment Station stakeholders in preparation for the 2005 Legislative Session.

- b. Publications & Educational Support Materials Developed
  - 1) Extension bulletins, fact sheets, leaflets, studies, reports, monographs, etc.:
    - Gouge, D. H., T. Stock, S. Nair, S. L. Li, S. Bryks, J. Hurley and A. Fournier. 2015.
       Preparing Your School Integrated Pest Management (IPM) Plan, Arizona
       Cooperative Extension #AZ1669 <a href="https://extension.arizona.edu/pubs/preparing-your-school-integrated-pest-management-ipm-plan">https://extension.arizona.edu/pubs/preparing-your-school-integrated-pest-management-ipm-plan</a>
    - Gouge, D. H., t. Stock, S. Nair, S. L. Li, S. Bryks, J. Hurley and A. Fournier. 2015.
       Preparing Your School Integrated Pest Management (IPM) Plan, Arizona
       Cooperative Extension #AZ1669 <a href="https://extension.arizona.edu/pubs/preparing-your-school-integrated-pest-management-ipm-plan">https://extension.arizona.edu/pubs/preparing-your-school-integrated-pest-management-ipm-plan</a>
    - Nester, P. M. and J.A. Hurley. 2014. Fire Ants and the Texas IPM in Schools Program, Texas A&M AgriLife Extension Publication, ENTO-017 (02/14)
    - Hurley, J. 2014. Urban IPM Programs Legislator One pager, developed by Ag Communications for building awareness about the Texas School IPM program. Not published online.
    - Hurley, J. 2014. School IPM Program One Pager for schools and county agents what they need to know about school IPM developed by Ag Communications
    - Hurley, J. 2014. Urban IPM Programs One Pager on community IPM project developed by Ag Communications for marketing purposes – available at <a href="http://communityipm.tamu.edu/current-topics/">http://communityipm.tamu.edu/current-topics/</a>
    - Hurley, J. and B. Nix. 2013. Controlling Pests in Animal Shelters
       http://www.agrilifebookstore.org/product-p/ento-032.htm
       English and Spanish (New)
    - Hurley, J.A., C.T. Allen, M. Merchant, and D. McCorkle. 2013. Overview of the School IPM Program in Texas: a brief background on the School Integrated Pest Management Program in Texas Prepared for 83rd Texas Legislative Session. <a href="http://ipm.tamu.edu/files/2013/02/School-IPM-White-paper-Final.pdf">http://ipm.tamu.edu/files/2013/02/School-IPM-White-paper-Final.pdf</a>
    - Ring, D., D. Pollet, J. Hurley, L.C. Graham, F. Oi, J. Hopkins, K. Vail, M.
       Merchant. 2010. Pest Identification Guide: For Pests in and Around
       Buildings. Southern Region School IPM Working Group/Southern IPM Center. LSU
       Ag Center Pub. 3158. (pocket flip guide to pests of schools and buildings) 48 pp.
    - Hurley, J. D. Odegard, D. Foss, & B. E. Nix. 2010. Bat Control in Schools. AgriLife Extension, Texas A&M AgriLife Communications, B-6220, College Station, TX
    - Gouge, D., T. Green, M. Lame, M. Shour, J. Hurley, L. Braband, S. Glick, F. Graham, and K. Murray. 2009. Integrated Pest Management: The Most Effective Way to Manage Pests in Your School. Arizona Cooperative Extension AZ1234, Tucson, AZ
    - Baldwin, R, & J. Hurley. 2009. IPM Plan for Commensal Rodents, 2 pages, <a href="http://schoolipm.tamu.edu/IPM">http://schoolipm.tamu.edu/IPM</a> forms.asp and <a href="http://www.extension.org/pages/School IPM">http://www.extension.org/pages/School IPM</a> Action Plan for Rats
    - Merchant, M., J. Hurley. 2005, 2007, 2009. Recognizing Green Category Pesticides for Use in Texas Schools. 5 pages. http://schoolipm.tamu.edu/IPM\_forms.asp
    - Hurley, J, B. French, M. Goodman, & B. Nix. 2007. Integrated Pest Management Plan for Bats. 4 pages <a href="http://schoolipm.tamu.edu/dev/IPM">http://schoolipm.tamu.edu/dev/IPM</a> forms.asp
    - Nester, P. & J. Hurley. 2005, 2014. Managing Fire Ants in Texas Schoolyards & Butterfly Gardens. FAFSP - 016
    - Merchant, M., J. Hurley, & D. Renchie, 2004. An Introduction to IPM in Schools: a

- Manual for Facilities Maintenance Professionals. Texas Cooperative Extension B-6015, College Station, TX
- 2) Special industry or commodity group reports or handouts
  - Hurley, J. 2004. The Sweet (Gum) Smell of Success. Compost Matters Newsletter, page 4
- 3) Slide sets, narratives, and tapes
- 4) Video tapes and satellite training resources:
  - 2014 Located at <a href="https://txn.esslearning.com/catalogs/agrilife/">https://txn.esslearning.com/catalogs/agrilife/</a> are nine online courses. Each course contains a pre-test to gauge current knowledge, and slides and handouts on pest biology and management procedures. The courses include:
    - Ants 101
    - Bats 101
    - IPM Basics
    - Texas School IPM Coordinator Crash Course
    - Mosquitoes 101
    - Pollinators 101
    - IPM for School Gardens 101
    - IPM for Texas Schools 101
    - Stinging Insects 101
  - 2007 Had the ABCs of IPM video series converted to DVD and promoted this via the Texas School IPM website <a href="http://schoolipm.tamu.edu">http://schoolipm.tamu.edu</a> and Florida school IPM website <a href="http://schoolipm.ifas.ufl.edu/">http://schoolipm.ifas.ufl.edu/</a>
- 5) Professional papers and proceedings:
  - Hurley, J., B. Bennett, and M. Merchant. 2016 Modeling for pest risk in and around school buildings, how the IPM Calculator can help you prevent and solve tough pest problems. Proceedings from National Conference on Urban Entomology, Albuquerque, NM May 2016 <a href="http://ncue.tamu.edu/index.html">http://ncue.tamu.edu/index.html</a>
  - Nester, Paul R., Janet A. Hurley Brett Bostian, and Hector Hernandez, 2016. Red Imported Fire Ant Management Efforts in Corpus Christi Independent School District: Avoiding Tragedy. Proceedings from National Conference on Urban Entomology and 2016 Imported Fire Ant Conference, Albuquerque, NM. May 23, 2016
  - Hurley, J. & M. Merchant. 2010. Developing a professional association for Texas school IPM coordinators and hosting a statewide conference. National Conference on Urban Entomology, Portland, OR May 18, 2010.
  - Hurley, J. 2008. Advocacy, Policy, and Regulations a summary of the laws and regulations governing school IPM in the United States. National Conference on Urban Entomology, Tulsa, OK. May 20, 2008.
  - Merchant, M.E., K. Schofield, E. Brown, P. Nester, C. Helpert, J. Hurley and M. Keck. 2008. Fire ants in Texas nursing homes: survey of staff attitudes and new training materials. Twenty-minute submitted paper. Southwestern Branch Meeting of the Entomological Society of America, Fort Worth, TX. February 25, 2008
  - Merchant, M. E., K. Schofield, E. Brown, P. Nester, C. Helpert, J. Hurley and M. Keck. 2007. Ten-minute submitted paper. Fire ants in Texas nursing homes: Staff attitudes and management options. Annual Conference, Entomological Society of America, San Diego, CA. December 12, 2007.

- 6) Computer software:
  - iSchoolPestManager national website http://ischoolpestmanager.org
  - The IPM Calculator http://ipmcalculator.com
  - The TickApp for Texas & the Southern Region, a Smart Phone Application http://tickapp.tamu.edu/
- 7) Refereed articles and abstracts published:
  - Bennett, Blake, Janet Hurley, and Mike Merchant. "An Integrated Pest Management Tool for Evaluating Schools." Journal of Extension. Vol. 54, No 2. April 2016. Available at: <a href="https://www.joe.org/joe/2016april/tt4.php">https://www.joe.org/joe/2016april/tt4.php</a>
  - Graham, L. C. (Fudd), Janet Hurley, and Kathy Flanders. 2015. Wildlife Damage Management in the Digital Age: Collaborating with Others. Human-Wildlife Interactions. 9(02):163-165.
  - Hurley, J.A., T.A. Green, D. H. Gouge, Z.T. Bruns, T. Stock, L. Braband, K. Murray, C. Westinghouse, S. Ratcliffe, D. Pehlman, and L. Crane. 2014. Regulating Pesticide Use in United States Schools. American Entomologist. 60(02):105-114.

# **Submitted For Publication**

- Hurley, J. A., M.E. Merchant, P. E. Pope, and C. Boleman. 2008. Using
  Retrospective-Post Evaluations to Measure the Impact of Pest Management
  Training for School IPM Coordinators in Texas. Journal of Extension (rejected)
- 8) Thesis and /or dissertation: NA
- 9) Books or chapters therein:
  - Hurley, J.A., T. Sidwa, and S. Swiger. 2014. Texas Mosquito Manual. Section D, "Selecting a Contractor"
- 10) Review articles: NA
- 11) Texas AgriLife Research & Extension joint publications: NA
- 12) Curricula/syllabus: NA
- 13) Popular articles (or citation in newspapers, magazine, etc.)
  - Alberts, C. 2016. IPM Calculator guides schools in pest intervention. Institute of Agriculture and Natural Resources News, University of Nebraska –Lincoln. Posted August 23, 2016 (Featured Janet Hurley) <a href="http://ianrnews.unl.edu/ipm-calculator-guides-schools-pest-intervention">http://ianrnews.unl.edu/ipm-calculator-guides-schools-pest-intervention</a>
  - Hallberg, R. 2016 Two new online resources provide a wealth of information on managing pests in schools. Posted on June 6, 2016 to Southern IPM Center Blog. (Featured Janet Hurley) <a href="https://ipmsouth.com/2016/06/06/two-new-online-resources-provide-a-wealth-of-information-on-managing-pests-in-schools/">https://ipmsouth.com/2016/06/06/two-new-online-resources-provide-a-wealth-of-information-on-managing-pests-in-schools/</a>
  - Hallberg, R. 2016 Online pest risk school IPM tool helps schools locate pest problems Posted on May 3, 2016 to Southern IPM Center Blog. (Featured Janet Hurley) <a href="https://ipmsouth.com/2016/05/03/online-pest-risk-school-ipm-tool-helps-schools-locate-pest-problems/">https://ipmsouth.com/2016/05/03/online-pest-risk-school-ipm-tool-helps-schools-locate-pest-problems/</a>
  - Schattenberg, P., M. Elmore, and J. Hurley. 2016. It's crabgrass time again, AgriLife Extension experts provide control advice for homeowners, others. AgriLife Today February 24, 2016. <a href="http://today.agrilife.org/2016/02/24/crabgrass-dallas">http://today.agrilife.org/2016/02/24/crabgrass-dallas</a>
    - Byrns, Steve 2015. Texas School IPM Pest Management Program receives AgriLife Extension Superior Service Award (Features J. Hurley, M. Merchant, B. Bennett and D. Renchie) <a href="http://today.agrilife.org/2015/01/06/texas-school-ipm-pest-management-program-receives-agrilife-extension-superior-service-award/1/6/15">http://today.agrilife.org/2015/01/06/texas-school-ipm-pest-management-program-receives-agrilife-extension-superior-service-award/1/6/15</a>
    - Burns, Robert. 2015. East Texas Turfgrass Conference set Feb. 5 at Overton

- (features J. Hurley) <a href="http://today.agrilife.org/2015/01/08/east-texas-turfgrass-conference-3/">http://today.agrilife.org/2015/01/08/east-texas-turfgrass-conference-3/</a> 1/8/15
- Ledbetter, Kay. 2015 School integrated pest management training set for June 11 in Amarillo (features J. Hurley) <a href="http://today.agrilife.org/2015/05/18/school-integrated-pest-management-training-set-for-june-11-in-amarillo/">http://today.agrilife.org/2015/05/18/school-integrated-pest-management-training-set-for-june-11-in-amarillo/</a> 5/18/15
- Schattenberg, Paul. 2015. School integrated pest management training set July 28 in Dallas (features J. Hurley) <a href="http://today.agrilife.org/2015/06/23/school-ipm-training-july-28-dallas/">http://today.agrilife.org/2015/06/23/school-ipm-training-july-28-dallas/</a> 6/23/15
- Schattenberg, Paul. 2015. Urban Wildlife Management conference slated for July 29 in Dallas (features J. Hurley) <a href="http://today.agrilife.org/2015/06/24/urban-wildlife-mgmt-conf-dallas/">http://today.agrilife.org/2015/06/24/urban-wildlife-mgmt-conf-dallas/</a> 6/24/15
- Schattenberg, Paul. 2015. Rodent exclusion training set for July 30 in Dallas (features J. Hurley) <a href="http://today.agrilife.org/2015/06/26/rodent-exclusion-july-30-dallas/6/30/15">http://today.agrilife.org/2015/06/26/rodent-exclusion-july-30-dallas/6/30/15</a>
- Schattenberg, Paul. 2015. Pest control experts learn by doing at Texas A&M
   AgriLife program (features M. Merchant and J. Hurley)
   http://today.agrilife.org/2015/08/18/pest-control-ipmexperiencedallas/
   8/18/15
- Schattenberg, Paul. 2015. AgriLife Extension entomologists: Expect invaders as weather gets colder (features M. Merchant, E. Brown, and J. Hurley) 11/26/15
- Hallberg, R. 2014. IPM Training from Your Desk: pest management professionals can receive web-based training and CEU credits thanks to a new Web-based school IPM course curriculum from Texas A&M AgriLife. November 2014. PCT Magazine (featured Janet Hurley) pp 48 49 www.pctonline.com
- Schattenberg, P. 2014. New mosquito-borne viral disease found in South Central Texas (featured J. Hurley, July) <a href="http://today.agrilife.org/2014/07/31/chikungunya-texas/">http://today.agrilife.org/2014/07/31/chikungunya-texas/</a>
- Byrns, S. 2014. AgriLife Extension sets institutional IPM coordinator training for Aug. 6, 7 (featured J. Hurley, July) <a href="https://today.agrilife.org/2014/07/11/agrilife-extension-sets-institutional-ipm-coordinator-training-for-aug-6-7/">https://today.agrilife.org/2014/07/11/agrilife-extension-sets-institutional-ipm-coordinator-training-for-aug-6-7/</a>
- Hallberg, R. and J. Hurley. 2014. Forming a battlefront against pests in schools: the pest management team. Southern IPM Center Quarterly Newsletter (July) <a href="http://ipmsouth.com/">http://ipmsouth.com/</a>
- Byrns, S. 2014. Just in Time for School: new pest control calculator now available for maintenance professionals (featured J. Hurley, August ) <a href="http://today.agrilife.org/2014/08/12/just-in-time-for-school-new-pest-control-calculator-now-available-for-maintenance-professionals/">http://today.agrilife.org/2014/08/12/just-in-time-for-school-new-pest-control-calculator-now-available-for-maintenance-professionals/</a>
- Schattenberg, P. 2014. Rats! Rodent populations proliferate in some parts of Texas (featured J. Hurley, March) <a href="http://today.agrilife.org/2014/03/18/rats-rodent-proliferate-in-texas/">http://today.agrilife.org/2014/03/18/rats-rodent-proliferate-in-texas/</a>
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#### **National Publications**

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- Hurley, J. 2010. Southwest Technical Resource Center for IPM in Schools.
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  an energy-efficient and virtually pest-free school for years. American School
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# State and Local Publications

Hurley, Janet. 2015. There is No "I" in IPM; It's All About Team. Texas Pest Control
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- Hurley, J. 2013. Announcing a Unique Training Opportunity for Schools and Pest Management Professionals in TX. Texas Pest Control Official Publication of the Texas Pest Control Association. October 2013:9.
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- Hurley, J., D. Odegard & L. S. Finn. 2010. Bat Management: What every pest management professional needs to know. Texas Pest Control Official Publication of the Texas Pest Control Association. October 2010:12-14.
- Hurley, J. 2009. The New Rules: What you need to know Part 1. Texas Pest Control, Official Publication of the Texas Pest Control Association. June 2009:12-14.
- Hurley, J. 2009. The New Rules: What you need to know Part 2. Texas Pest Control, Official Publication of the Texas Pest Control Association. August 2009:6-9.
- Citation in Fort Worth Star Telegram November 17, 2008 Rat population growing fast in North Texas.

### 14) Grant or contract reports:

- 2106 Hurley, J. Final report to U.S. EPA for iSchoolPestManager developing a clearing house for School IPM materials.
- 2016 Hurley, J Final report to Southern IPM Center for Enhancement Grant -Quantifying the Financial Cost and Benefits of School IPM – workgroup grant
- 2014 Hurley, J. Final report to Southern IPM Center for Seed Grant A Low-cost,
   IPM Curriculum for the Public Schools and Municipalities
  - 2012 Hurley, J. Final report to Southern IPM Center for Capstone Grant School IPM Cost Calculator Expansion and Marketing <a href="http://projects.ipmcenters.org/Southern/public/ViewProject.cfm?projectID=6688">http://projects.ipmcenters.org/Southern/public/ViewProject.cfm?projectID=6688</a>
     241
  - 2010 Hurley, J. Final report to U.S. EPA Region 6 PESP Hosting an IPM Coordinator Statewide Symposium and Facilitating the Adoption of a Professional Association
  - 2007 Hurley, J. Final report to U.S. EPA Region 6 PESP Measuring Success of School IPM in Texas
  - 2005 Merchant, M.E. and J. Hurley. Final Technical Report to National Foundation for IPM Education: A Model IPM Program for Hospitals
  - 2005 Hurley, J. Final Compliance Narrative for Texas Department of Agriculture:
     Marketing and Support for School IPM in Texas
  - 2004 Hurley, J. Final Compliance Narrative for Texas Department of Agriculture: Texas School IPM Coordinator Manual & Pilot Training Workshops and Texas

- School IPM Coordinator Training Workshops and Evaluation of Manuals
- 2004 Hurley, J. Final report to U.S. EPA Region 6 Marketing IPM to School Business Officials in Texas and Arkansas
- 2004 Hurley, J. and M.E. Merchant. Final Technical Report to National Foundation for IPM Education: Interactive IPM Assistance Program for Schools in Texas, New Mexico, and Oklahoma
- 15) Self-study guide: NA
- 16) Annual plan/report to CSREES:
  - Hurley, J. and M. Merchant 2010 CRIS AD-421 Final Report Southern Region IPM Program: Multi-state Evaluation of School IPM Cost Calculator & Training Model
  - Hurley, J. and M. Merchant 2009 CRIS AD-421 Annual Progress Report Southern Region IPM Program: Multi-state Evaluation of School IPM Cost Calculator & Training Model
  - Hurley, J. and M. Merchant 2008 CRIS AD-421 Annual Progress Report Southern Region IPM Program: Multi-state Evaluation of School IPM Cost Calculator & Training Model
  - Hurley, J. and M. Merchant 2007 CRIS AD-421 Annual Progress Report Southern Region IPM Program: Multi-state Evaluation of School IPM Cost Calculator & Training Model
  - Hurley, J. and M. Merchant 2005 CRIS AD-421 Annual Progress Report for Southern Regional IPM Program: IPM Cost-Benefit Analysis Tool for Schools Distribution and Evaluation
  - Hurley, J. and M. Merchant 2004 CRIS AD-421 Annual Progress Report for Southern Regional IPM Program: IPM Cost-Benefit Analysis Tool for Schools
- 17) Other scholarly endeavors: NA
- c. Evidence of Plans, Designs and/or Implementation of Field or Other Projects that Demonstrate, Evaluate, and/or Validate New Technology to Clientele
- d. Program Evaluation:
  - In an attempt to determine the programmatic impact of the School IPM Coordinator training (Day 1), a retrospective post evaluation is provided at the end of the program for the first day of training. This retrospective post first implemented in 2005.
    - 2016: 135 participants of the first day of school IPM training completed posttest surveys there was a 13.8% increase of knowledge, this is based on an overall average of class participants which makes up brand new IPM coordinators and returning IPM coordinators.
    - 2015: 167 participants completed a retrospective-post evaluation instrument. The participant's level of knowledge was increased by 47% in "understanding their role as an IPM Coordinator." In obtaining a new skill 48% of the participants feel they have the skills to "implement an IPM program within "their" district". User satisfaction with the program was 99%; participants were "mostly" or completely satisfied with the program. 69% of respondents anticipate benefiting economically as a direct result of what they learned from this Extension activity.

- O 2014: 172 participants completed a retrospective-post evaluation instrument. The participant's level of knowledge was increased by 39% in "understanding their role as an IPM Coordinator." In obtaining a new skill 47% of the participants feel they have the skills to "implement an IPM program within "their" district". User satisfaction with the program was 97%; participants were "mostly" or completely satisfied with the program. 47% of respondents anticipate benefiting economically as a direct result of what they learned from this Extension activity.
- 2013: 223 surveys sent via email with 115 people responding 93 which were classified as the Responsible IPM Coordinator for school district. Over 80% of respondents reported that they are responsible for pest management recordkeeping, conducting facility inspections and overseeing pest management contractors.
- o 2012: 108 participants used Turning Point Technologies audience response system to measure knowledge learned at the time of training.
- O 2011: 175 participants completed a retrospective-post evaluation instrument. The participant's level of knowledge was increased by 74% in "understanding their role as an IPM Coordinator." In obtaining a new skill 76% of the participants feel they have the skills to "implement an IPM program within "their" district". User satisfaction with the program was 99%; participants were "mostly" or completely satisfied with the program. 28% of respondents anticipate benefiting economically as a direct result of what they learned from this Extension activity
- O 2010: 176 participants completed a retrospective-post evaluation instrument. The participant's level of knowledge was increased by 70% in "understanding their role as an IPM Coordinator". In obtaining a new skill 77% of the participants feel they have the skills to "implement an IPM program within "their" district". User satisfaction with the program was 97%; participants were "mostly" or completely satisfied with the program. 46.8% of respondents anticipate benefiting economically as a direct result of what they learned from this Extension activity
- O 2009: 177 participants completed a retrospective-post evaluation instrument. The participant's level of knowledge was increased by 47% in "understanding their role as an IPM Coordinator". In obtaining a new skill 52% of the participants feel they have the skills to "implement an IPM program within "their" district". User satisfaction with the program was 97%; participants were "mostly" or completely satisfied with the program.
- 2008: 139 participants responded to the survey. Results of these evaluations indicated that coordinators gained 67% increase in knowledge in "understanding their role as the Coordinator" and 65% feel they have the skills to "implement an IPM program within "their" district". User satisfaction with the program was 97% participants were "mostly" or completely satisfied with the program.
- o 2007: 148 participants responded to the survey. Results of these evaluations indicated that coordinators gained 67% increase in knowledge in "understanding their role as the Coordinator" and 67% feel they have the skills to "implement an IPM program within "their" district". User satisfaction with the program was 98.6% participants were "mostly" or completely satisfied with the program.
- o 2006: 115 participants completed a retrospective-post evaluation instrument. Results indicated that coordinators were highly satisfied with the day-one training with an average satisfaction rating of 4.8 (out of 5). All coordinators

- were "completely" (84%) or "mostly" (16%) satisfied with the training on both days. The coordinators also found the training useful. Course content was useful to participants with an average score of 4.7 (out of 5).
- O 2005: 134 participants completed a retrospective-post evaluation instrument. Results indicated that coordinators had high satisfaction levels with the training overall. On a five-point scale of satisfaction ranging from 1= "not at all" satisfied to 5="completely" satisfied, the mean score was 4.8. Virtually all coordinators (99%) were "completely" or "mostly" satisfied with the training. Similarly, results indicated that coordinators found the training useful. On a five-point scale of usefulness ranging from 1= "not useful" to 5= "highly useful", the mean score on five facets of the training ranged from 4.6 to 4.7.
- O 2003 and 2004: Evaluated twenty-four groups of school district IPM coordinators who attended training courses taught by faculty of the SWTRC. Participants were asked to answer ten multiple-choice questions about school IPM concepts and regulations related to pesticide use in schools. Participants improved their scores 27% and 22% in 2002 and 2003, respectively.
- In an attempt to determine the programmatic impact of the School IPM Coordinator training for advanced training (Day2), a retrospective post evaluation is provided at the end of the program for the second day of training. The program is different for each year, but evaluations vary depending on content.
  - o 2016 no additional measurement was conducted for Day 2 training.
  - 2015: Turning Point is a plug-in application that allows real-time audience feedback during a PowerPoint presentation was used again in 2015. To determine measurement of knowledge and compare from class to class, we still have not achieved that level of data collection. Using standardized questions about IPM, at the end of the second day of school IPM training we asked the participants 9 questions about IPM. Of the 67 people who were present on the second day and using the clicker devices, we saw that the average passing rate for the final test was 95%. This is based on overall scores for all participates; total number correct verses incorrect answers. The two urban areas Houston and Dallas, the attendees scored higher that in east and south TX participants. This may also have to do with the number of new IPM coordinators in this region as well.
  - 2014: Class participants were asked using Turning Point technology questions regarding IPM program implementation the results are as follows:
    - 98% Improve student and teacher wellness
    - 97% Result in cleaner, safer school environment
    - 98% Lower pest populations in school buildings
    - 98% Help me pass IPM inspections with TDA
  - 2013: 223 surveys sent via email with 115 people responding 93 which were classified as the Responsible IPM Coordinator for school district. Participants were asked to rank the most important parts of school IPM training, their top four responses were:
    - Laws and regulations pertaining to school IPM
    - Difference between sampling and monitoring
    - Role of the IPM coordinator
    - Paperwork requirements for pesticide applicators

- 2012: Turning Point Audience Response system was utilized during the class sessions to assist instructors on level of knowledge gained at the time of each session.
- 2011: 94% of the respondents plan to take actions or make changes based on the information from this training activity. 81.5% of the respondents <u>anticipate</u> <u>benefiting economically</u> as a <u>direct</u> result of what they learned from this Extension activity.
- Our group used an audience response system to measure participant knowledge, but not all the data was collected as required. Some observations we were able to draw on was that IPM Coordinator's still have trouble understanding posting requirements, when to notify parents and pesticide use recordkeeping.
- 2009: 83 participants completed the instrument for training. Results of these evaluations indicated that coordinators gained 70% increase in knowledge in "understanding the difference between sampling and monitoring" and 77% can indentify at least three different types of Green category products. 58% plan to adopt "organizing their IPM records."
- 2008: 97 participants completed the instrument for training. Results of these
  evaluations indicated that the level of understanding for turf and mosquito
  management were 66% increase for "IPM principles for healthy turfgrass
  growth" and 62% "understand the treatment options for mosquito control under
  the school IPM program".
- 2008: 52 participants completed the instrument for training. Results of these evaluations indicated that the level of understanding "the different types of non-chemical measures that can be used around schools" was increased by 63%.
   98.1% of the participants said the information presented on IPM understanding non-chemical control was "very useful" or "highly useful."
- o 2006: 67 participants completed the instrument for training. Results of these evaluations indicated that coordinators were highly satisfied with the training, with an average satisfaction rating 4.82 (out of 5.0). All coordinators were "completely" (82%) or "mostly" (18%) satisfied with the training. Course content was useful to participants with an average score of 4.65 (out of 5).
- To measure the success of the TIPMAPS Annual School IPM Coordinator Statewide Symposium a retrospective post and intention to adopt survey was developed for the conference.
  - o 2010 of the 216 attendees people responded to the surveys.
    - To measure the level of knowledge participants were asked several questions, a sample of their response are below
    - To measure adoption rates a sample of responses are below
  - o 2009 of the 237 attendees 110 people responded to the surveys.
    - To measure the level of knowledge participants were asked several questions, a sample of their response are below
    - Results of these evaluations indicated that coordinators gained 30% increase in knowledge in "understanding how TX school IPM rules compare to other states" and 54% feel they have the skills to "recognized three types of zoonotic disease associated with urban wildlife"
    - To measure adoption rates a sample of responses are below

- Results taken indicate an adoption rate with new technology presented was high. 58% indicated they would "use the information from the conference to improve pest reporting process", while 23% had already adopted a procedure in place to report accurately
- A standard evaluation was used to measure anticipated changes, economic impact, knowledge and behavior changes, as well as plans to adopt some of the strategies discussed at the Integrated Bat Management workshop for schools, August 2010.
  - o 97% of respondents were mostly or completely satisfied with the activity
  - 100% of respondents were mostly or completely satisfied with the instructor's knowledge level on the subject.
  - o 88% of respondents plan to take actions or make changes based on the information from this activity.
  - o 77% of respondents <u>anticipate benefiting economically</u> as a <u>direct</u> result of what they learned from this Extension activity.
- In 2005, a 12-page survey with 50 questions regarding school IPM adoption, implementation, and perceptions was developed. This assessment was to give the Southwest Technical Resource Center and Structural Pest Control Service an idea of the current level of adoption of IPM practices in Texas schools and to provide a reference point to the levels of adoption prior to implementation of the mandatory IPM state law in 1995. The survey was sent to the 1,033 school districts in Texas, the response was 553 competed surveys (53%). A sample of the results is below.
  - 73.4% of the respondents were "mostly" familiar with "Texas IPM laws and regulations governing schools". This information was used by Texas AgriLife Extension and the Sunset Commission to revise the school IPM rules to require additional training for IPM Coordinators.
  - 94.7% of the schools that responded that they had an "IPM Policy adopted by the School Board."
  - 79% were "mostly" familiar with the concept of integrated pest management, but only 67.2% could properly identify the correct IPM definition in the next question.
  - In a sampling questions regarding rule adoption, respondents averaged an 84% rate of adoption.
  - o 75.1% respondents said that the state's mandatory IPM law and regulations has resulted in a more effective pest management program.
- 2004 -2005 conducted random web based surveys on the Texas School IPM program to determine programming needs.
  - 2004 Conducted a survey on the school IPM website, how often site was visited, type of content found on website, need for specific forms. Of the 201 respondents, 96.7% rated the content of the newsletter as "excellent" or "good".
     157 respondents use the website to find information about school IPM training.
  - 2005 January conducted a survey on proposed regulation changes pertaining to school IPM. Had 145 respondents who answered questions regarding the changes to green category wording, to re-entry intervals and posting requirements. Information from this survey was used when Texas AgriLife Extension was asked to give input to the Sunset Commissions questions regarding the Structural Pest Control Board and the Texas School IPM rules.

- 2005 April conducted a survey on New Construction and Remodeling issues pertaining to pest control. Of the 88 respondents, only 48 (54.5%) experienced problems with mice within the first two years after the building was constructed. Only 36.8% considered pest proofing the new building a concern, prior to student occupation.
- 2005 July conducted a survey on fire ant control practices for the Texas Fire Ant Team. Of the 1,508 respondents, only 24.1% (251) were "mostly" or "somewhat" with the Texas Two-Step Method for controlling fire ants.
- 2005 December conducted a survey on IPM coordinator training. Of the 170 respondents, 82.4% felt that they could attend an IPM training once a year. 4.1% felt that they could attend a training every three year. 74.1% were interested in learning more about the school IPM law and rules. 70.6% were interested in information pertaining to IPM plans and thresholds.
- O 2009 July conducted a survey for the newly formed IPM coordinator association to help obtain information for the new association and what to offer at the statewide conference. Received 100 responses. 51% of the respondents answered that their pest control program is spilt between some outside contractor and in-house personnel. 73% of the respondents are interested in a professional conference based on cost and location.

# 4. Financial Support of Extension Activities

a. Grants/Contracts Funded

2014: \$39,997

 Southern Region IPM Center Enhancement Grants – IPM Working Group. Hurley, J, M. Merchant, B. Bennett, and T. Green Quantifying the financial costs and benefits of school IPM: a collaborative workgroup project \$39,997 {\$16,662 goes to TAMU for travel and a student worker}

2013: \$279,214

- Southern Region IPM Center Enhancement Grants Seed. Hurley, J, A Low-cost, IPM
   Curriculum for the Public Schools and Municipalities \$30,000 {\$23,810 went directly to
   TX School IPM program to support travel, an intern and HTML coding for the online
   courses}
- U.S. EPA School IPM Cooperative Grants Program, iSchool Pest Manager Project –
   School IPM Enhancement Program, J. Hurley, L.C. Graham, K. Buhl, D. Stone, D. Young,
   M. Merchant, and C. Allen, \$249,218 {\$113,246 goes to TAMU for travel, part time
   assistant and other supplies}

2011: \$19,982

- Southern Region IPM Center Enhancement Grants Capstone. Hurley, J, M.
   Merchant and B. Bennett School IPM Cost calculator expansion and marketing
   \$19,982 {\$3,000 went to cover travel expenses for Ms. Hurley to work with
   schools and others on this project, bulk of money went to programmer.}
- U.S. Environmental Protection Agency Office of Chemical Safety and Pollution (OCSPP),
   Office of Pesticide Programs (OPP) School IPM Grant, Riegel, C and J. Hurley,
   Implementing a Verifiable School IPM Program in the Orleans Parish School System, a
   Collaborative Partnership, \$113,570 {\$21,205 salary to support a project intern,
   computer programming work on the ipmcalculator.com, and travel to New Orleans for
   Ms. Hurley}

# 2010: \$10,624

- US Environmental Protection Agency, Office of Pesticide Programs, Pesticide
  Registration Improvement Renewal Act (PRIA 2) IPM Institute of North America, Tom
  Green et. al. Healthy School Communities through IPM and Expanded Partnerships:
  reducing Pest and pesticide risks, Improving Asthma Outcomes and Furthering
  Environmental Justices listed as major co-investigator on project as representative for
  Southern Region School IPM Working Group \$250,000 {\$20,000 portion of amount
  was salary enhancement dollars for Ms. Hurley, funds were used for out of state travel}
   2009: No direct funds to AgriLife Extension
- Southern Region IPM Center Enhancement Grants State Contacts/IPM Documents. Ring, D., Pollet, D., Graham, L. and J. Hurley. Leveraging Resources through the Southern Regional School IPM Working Group in Support of Children's Environmental Health \$13,371 (No direct funds to AgriLife Extension)

<u>2008</u>: \$55,337

- United States Environmental Protection Agency Region 6 Headquarters PESP Hurley, J.A., Merchant, M.E., and D. Renchie. Hosting an Integrated Pest Management Coordinator Statewide Symposium - \$50,337
- USDA/EIPM Special Projects Oi, F. M., J. A. Hurley, L. Graham, R. Baldwin, and M.
   Merchant Marketing IPM as Green School Technology for Southern Schools \$57,456 (No funds directly to AgriLife Extension)
- US Environmental Protection Agency, Office of Pesticide Programs, Pesticide
  Registration Improvement Renewal Act (PRIA 2) IPM Institute of North America, Tom
  Green et. al. IPM in All US Schools by 2015 listed as co-collaborator on project as
  representative for Southern Region School IPM Working Group \$250,000 (\$5,000 to
  AgriLife Extension)

# 2007: \$160,686

- USDA/EIPM Special Projects Oi, F. Hurley, J., Merchant, M.E. and R. Baldwin.
   Marketing IPM as Green School Technology for Southern Schools \$78,432
- USDA/CSREES Merchant, M.E., Hurley, J.A., and B. Bennett. Southern Region IPM Program: Multi-state Evaluation of School IPM Cost Calculator & Training Model \$82,254

# 2006: \$25,422

 Texas Fire Ant Research and Management Project – Merchant, M.E., Hurley, J.A., Brown, E., Keck, M., Nester, P. and K. Scholfield. Reducing fire ant risks to critical health care facilities in Texas: Nursing home survey and treatment evaluation \$25,422

## 2005: \$73,593

- United States Environmental Protection Agency Region 6 Headquarters PESP Hurley, J.A., Merchant, M.E., and D. Renchie. Measuring the Success of School IPM in Texas \$39,587.00
- Texas Department of Agriculture: Marketing School IPM in Texas \$9,764
- Texas Fire Ant Research and Management Project Merchant, M.E., Hurley, J.A., Brown, E., Keck, M., Nester, P. and K. Scholfield. Reducing fire ant risks to critical health care facilities in Texas: Nursing home survey and treatment evaluation \$24,242

2004: \$68,316

- USDA/CSREES Merchant, M.E., Hurley, J.A., and B. Bennett Southern Regional IPM Program: IPM Cost-Benefit Analysis Tool for Schools Distribution and Evaluation \$36,978
- National Foundation for IPM Education (NFIPME)/Pesticide Environmental Stewardship Program (PESP) – Hurley, J.A., Merchant, M.E. and D. Renchie.
   National Foundation for IPM Education: Model IPM Program for Hospitals \$31,388

2003: \$92,716

- USDA/CSREES Merchant, M.E., Hurley, J.A., and B. Bennett. Southern Regional IPM Program: IPM Cost-Benefit Analysis Tool for Schools \$32,517
- Texas Department of Agriculture/IPM Hurley, J.A., Merchant, M.E., and D. Renchie. Texas School IPM Coordinator Manual Evaluation \$14,783
- National Foundation for IPM Education (NFIPME)/Pesticide Environmental Stewardship Program (PESP) – Hurley, J.A., Merchant, M.E. and D. Renchie National Foundation for IPM Education: *Interactive IPM Assistance Program for Schools* \$34,478
- US EPA Hurley, J.A., Merchant, M.E. and D. Renchie United States Environmental Protection Agency Child's Health Division: Marketing IPM to School Business Officials in Texas and Arkansas \$10,938

<u>2002</u>: \$52,995

- Texas Department of Agriculture/IPM Hurley, J.A., Merchant, M.E. and D. Renchie Texas School IPM Coordinator Manual and Pilot Training Workshop \$14,992
- US EPA/ Pesticide Environmental Stewardship Program (PESP) Hurley, J.A., Merchant, M.E. and D. Renchie Interactive IPM Assistance Program for Schools in Texas, New Mexico and Oklahoma \$38,003
- b. Grants/Contracts Proposals Submitted but not Funded 2016: \$334,845
  - J. Hurley, B. Bennett, M. Merchant &D. Renchie, J. LaForest, and T. Green. June 2018. School IPM Assist: building a sustainable technology to help schools adopt, manage, and maintain a verifiable IPM program, \$324,845. USDA-NIFA
  - Oi, F and J. Hurley. Priority Setting for New Urban IPM Work Group, \$10,000, Southern IPM Center Enhancement Grants 2016/2017

2015: \$549,952

- Braband, L., Carella, V., Connett, J., Ellis, D., Gouge, D. H., Green, T., Hurley, J. Murray, K., Nelson 55, and Stock, T. January 2016-December, 2017. Increasing IPM Adoption in US Schools by Activating Educational Networks to Apply Existing Resources to Educate, Motivate and Train Network Members, \$250,000. US-EPA.
- U.S. EPA Office of Pesticide Program (EPA-OPP-2015-007) Cooperative Grants Program, Quantifying the financial costs, benefits, and health related aspects of school IPM - a nationwide effort, J. Hurley, B. Bennett, M. Merchant, L. Braband, D. Gouge, S. Nair, S. Li, R. Kerzee, M. Dunn and C. Riegel \$299,952

## 2013: \$100,000

 USDA/ NIFA Southern Region IPM Competitive Grants Program, Evaluation of the IPM-SPA Calculator - comparing schools and costs in the U.S. Hurley, J.; Bennett, B., McCorkle, D., and Merchant, M. \$100,000

#### 2011: \$101,117

- U.S. Environmental Protection Agency Office of Chemical Safety and Pollution (OCSPP),
   Office of Pesticide Programs (OPP) School IPM Grant, A Low-cost, Standardized IPM
   Curriculum for the Nation's Public Schools: A Southern Region Partnership; VanKirk, J.
   R., M.E. Merchant, L. C. Graham (contributing author J. Hurley), \$133,429
- U.S. EPA Community Action for a Renewed Environment (CARE) Program Grant, Riegel,
   C., J Carlson, and J. Hurley, Reduction of pesticide and hazardous chemical exposure in public schools in New Orleans, LA. \$99,783 \$10,000 was to come to AgriLife Extension

# 2010: \$51,660

 U.S. EPA Region VI, PESP. Hurley, J.A., L.F. Graham, and F. Oi. Facilitating a face-toface meeting of the southern school IPM regional workgroup to re-set priorities and to develop materials for Spanish translation and Smart Phone applications. \$51,660

# 2009: \$123,502

- U.S. EPA Region VI, Regional Geographic Initiative. Hurley, J.A., Merchant, M.E. and D. Renchie. School Chemical Cleanout and Small-Scale Chemistry Pilot Program in North East Texas, \$73,847
- U.S. EPA Region VI, Environmental Education Grants. Hurley, J.A., Merchant, M.E. and D. Renchie. School Environment Management Systems: A symposium for the southern region, \$49, 655

# 2005: \$45,454

• USDA/CSREES, Southern Region IPM. Merchant, M.E. and J.A. Hurley. Reducing fire ant risks to critical health care facilities in the southern U.S., \$45,454

# <u>2004</u>: \$16,648

 U.S. EPA, Region VI, Environmental Education Grants. Hurley, J.A., Merchant, M.E. and D. Renchie. Getting the ABCs of DVD: English to Spanish pest management training for school personnel, \$16,648

# <u>2002</u>: \$74,999

- EPA, Environmental Education Grants. Hurley, J.A., Merchant, M.E. and B. Bennett. IPM Cost-Benefit Analysis Tool for Schools \$35,268
- National Foundation for IPM Education- PESP Hurley, J.A., Merchant, M.E. and D. Renchie. Interactive Assistance Program for Schools, \$39,731

# c. Gifts

Year	Donor	Description Of Gift	Approx. Value
2106	Metro Custom Plastics,		\$125

	Inc		
2016	Catchmaster	Snap traps, glueboards, and monitoring stations	\$500
2016	Meers Enterprises (Kyle Meers)	Mosquito Fortress Max (25b)	\$100
2015	Ross Eckstein, Syngenta	Stihl SR 450 backpack sprayer, duster, fogger	\$700
2015	Nisus Corp, Lee Barrett	True Tech 2000 Power Cart – sprayer	\$750
2015	Erick Wolf, OvaControl	Time and travel to come to Waco to \$1500 present at TIPMAPS	
2015	Dianne Odegard, BCI	Time and travel to come to Waco to \$100 present at TIPMAPS	
2015	BASF (For PISD)	Phantom SC	\$250
2015	Bayer (for PISD)	Maxforce Impact cockroach gel bait	\$100
2015	Wellmark (for PISD)	IGR for cockroaches	\$200
2014	J.T. Eaton	Rodent bait stations, skunk trap, snap traps	\$1,000.00
2014	Xcluder Paul Bonn	Steel wool mesh for rodent exclusion, sample door sweeps, starter kits	\$1,000.00
2013	Seventh Generation and Jeffrey Hollander	440 Planet Home books author Jeffrey Hollander	\$ 8,795.60
2013	Carol Westinghouse – Green Cleaning (NE School IPM Workgroup)	Naturally Clean Books by Jeffrey \$2692.50 Hollander and Geoff Davis	
2013	Xcluder Paul Bonn	Xcluder Demo products, door sweep, stuffing material for rodent exclusion	225.00
2013	Anstar Jerry O'Hara	http://www.anstarproducts.com/product -lines/traprite/ Cardboard devices for mice and rat snap traps, 2 bottles of Biozyme	400.00
Year	Donor	Description Of Gift	Approx. Value
2013	Wellmark/Central Life Science	Extinguish Plus Fire Ant Bait and Wasp-X	700.00

<sup>\*\*</sup> Began tracking in-kind data in 2013

# d. Fee Based Program

Year	School IPM	Other Educational Programming	Online**	Total
2016	\$32,135			\$32,135
2015	\$35,195	\$6,925		\$42,120
2014	\$49,768	\$15,911		\$65,679

2013	\$40,183	\$1,200	\$41,383
2012	\$15,282	\$9,325	\$24,607
2011	\$24,312	\$4,900	\$29,212
2010	\$34,601	\$3,080	\$37,681
2009	\$20,430	\$22,600	\$43,030

<sup>\*</sup>Online courses were developed in 2014 will begin tracking in FY 2015

# 5. Coordination and Cooperation

- a. Committee activities within TAMUS units
  - 2015: Department of Entomology Promotion committee for Molly Keck
  - 2015: Department of Nutrition and Food Science Promotion Committee for Rebecca Dittmar
  - 2015: Texas Extension Specialists Association (TESA) Promotion Task Force Committee
  - 2014: Department of Nutrition and Food Science Promotion Committee for Amanda Scott and Jon Perrot. Was chosen as Chair of the committee to write up recommendation letters for Dr. Jenna Anding.
  - 2012 2015: West Nile Virus Task Force committee was formulated in Nov 2012 to help TAMU, DSHS and others to begin working together to address WNV and other issues associated with mosquitoes
    - Assisted Wizzie Brown and Sonja Swiger with submitting Symposia Session for the annual ESA meeting in Austin in Nov 2013, which was accepted.
  - 2011& 2015: Department of Entomology Extension Project Group Retreat Chair. Oversaw the retreat program, helped obtain speakers, and sent out an evaluation.
- b. Participation with industry groups/other governmental agencies
  - 2015: Texas Chagas Taskforce member of the Media and Entomology Subcommittees
  - 2012 2014: Western IPM Center, IPM Dynamics and Impact Assessment Workgroup
    - Part of panel that is assisting the Western IPM Center to develop a guide for all IPM Centers on the IPM assessment process.
    - 2012 Attended a face-to-face meeting in Davis, CA to discuss elements of a
      website and documents to be used as guidance tools for all researchers and
      extension personnel to use to write up success stories and the like after being
      awarded a grant.
  - 2012 2013: National Education Association and School IPM National Committee
    - One of five members from National school IPM group working with NEA to develop educational materials for use with teachers and administrators
  - 2009 Present: Community of Practice (CoP) Leader for Urban IPM eXtension workgroup. Help oversee content for school IPM – urban integrated pest management webpage within eXtension.
    - o 2015: Began the new transition of the New eXtension website. Participated in the i-Three Corps Innovation program.
    - 2014: Oversaw Urban IPM CoP face to face workgroup meetings at Annual eXtension conference in Sacramento, CA and at the National Conference on Urban Entomology, San Antonio, TX
      - Coauthored annual report for CoP to eXtension
    - 2013: Coauthored annual report for CoP to eXtension, oversaw updating of IPM action plans and overall content
    - o 2012: Presented what is eXtension and Extension to US EPA School IPM team via

- Adobe Connect webinar
- 2012: Oversaw development integrated pest management plans on several common pests
- o 2010: Developed integrated pest management plans on bats and rodents
- Oversee and edit content on several content pages
- Respond to Ask the Expert questions when time allows
- 2011: Represented workgroup at an USDA- NIFA meeting to see how to expand IPM participation with eXtension.
- 2010: Collaborated with Texas Parks and Wildlife, Department of State Health Services, Zoonosis Control, and Bat Conservation International to develop an Extension publication on bat management in schools; this included the development of a website as well.
- 2009- 2014: Association of Structural Pest Control Regulatory Officials (ASPCRO) Pest
  Management in Schools Committee. A newly formed committee will be meeting in the
  next year to discuss school IPM as a regulatory issue and how states can coordinate
  their efforts to train their inspectors.
  - 2012: Participated in face-to-face meeting in Seattle, WA to discuss EPA School IPM Implementation documents
- 2008-Present: Member of National School IPM Steering Committee this committee meets monthly to update each region on work being done in the region, plus work on a variety of publications.
  - o 2011: Group developed four publications on IPM and Asthma
  - 2009 2013: Worked with Tom Green and Dawn Gouge to develop a journal article on pesticide safety rules for schools in the United States.
- 2008 Present: Co-chair for the Southern Region School IPM Working group.
  - o 2015: Oversee the Quantifying Financial Costs workgroup grant.
  - 2014: Oversee Quarterly Conference Calls to update committee members on region and national school IPM issues
  - o 2013: Oversee Monthly Conference Calls to update committee members on region and national school IPM issues.
    - Traveled to LA to assist Ascension Parish Schools with IPM Star Assessment
    - Nominated City of New Orleans Mosquito, Termite and Rodent Control Department for Friends of IPM Award which they received in May 2014
  - o 2012: Oversee monthly conference calls to update committee members on region and national school IPM issues.
    - Worked with Co-chair to plan, attend, scribe for face-to-face workgroup meeting held in conjunction with ESA Joint Branch meeting.
    - Traveled to LA to assist Ascension Parish Schools with IPM demonstration project.
      - Also did an IPM Star Certification assessment in July 2012
    - Traveled to Russellville, AR to assist with school IPM demonstration project with Russellville Schools.
      - Also presented at two Arkansas school events with John Hopkins on school IPM
    - Traveled to Oklahoma to give a CEU presentations for Tribal Pesticide Meetings
    - Nominated Dan Lisenko, IPM coordinator, Manatee Public Schools, Tampa, FL for Friends of IPM Award which he received in April 2013

- 2011: Oversee monthly conference calls to update committee members on region and national school IPM issues.
  - Traveled to LA to assist Ascension Parish Schools with IPM demonstration project.
  - Traveled to Russellville, AR to assist with school IPM demonstration project with Russellville Schools.
  - Traveled to Oklahoma to give a two-day school IPM workshop for Cherokee Nation.
- 2010: Oversee monthly conference calls to update committee members on region and national school IPM issues. Traveled to LA to assist Ascension Parish Schools with IPM demonstration project. Traveled to Montgomery, AL to assist with school IPM coalition meeting. Traveled to Russellville, AR to assist with school IPM demonstration project with Russellville Schools.
- 2009: Traveled to Atlantic City, NJ to attend and present to the National School Plant Managers Association annual meeting. Oversee monthly conference calls to update committee members on region and national school IPM issues. Attended the 2009 Southeastern Branch ESA spring meeting to receive southern Region IPM Bright Idea Award and co-chair Workgroup meeting on eXtension.
- O 2008: Traveled to Nashville, TN to attend the National School Plant Managers Association meeting. As co-chair for the Southern Region, this allows me to interact with the other three regional school IPM workgroups, and the national school IPM workgroup. Participants were invited to Reno, NV in November 2008 to attend a school IPM meeting. There the national working group met to discuss objectives for the Pesticide Registration Improvement Renewal Act (PRIA 2) Partnership grant and implementation into each region.
  - http://www.ipminstitute.org/school\_ipm\_2015/school\_ipm\_2015\_Get\_Involved.ht m
- 2007-Present: Member of the International IPM Symposium Steering Committee
  - o 2007 2015: Member of the Awards Subcommittee this committee reviews and nominates teams and individuals to the Steering Committee
  - o 2009- 2012: Co-chair with Pete Goodell for Awards Subcommittee this committee reviews and nominates teams and individuals to the Steering Committee
    - Developed a nomination packet to be used by all applicants. Also developed a uniform scoring document
  - For the IPM Symposium, we split responsibilities on making presentations, developing an image driven power point, and delivered winner packet information to the Steering Committee to be used on the 8th Symposium
    - Inclusion means also being part of the larger steering committee for this threeyear conference.
  - o 2012-2015: Co-Chair with Megha Parajulee for Awards Subcommittee committee reviews and nominates potential winners to full steering committee.
  - 2012-2015: Member of Program Committee help with program development and special professional development sessions.
- 2008: Collaborated with Texas Parks and Wildlife, Department of State Health Services, Zoonosis Control, and Bat Conservation International to develop a one-day seminar on "Living among bats and avoiding rabies". The presentations were made in Dallas and Brazoria (south Houston); total clients trained 112. From the Dallas workshop, an interest in expanding the topic to urban wildlife was generated and a

- new committee was formed to address this issue.
- 2007: Participated in the first meeting of the Southern Region IPM Center School IPM workgroup held in Atlanta. Interested stakeholders from the twelve southern region states met to discuss possible collaborative efforts. Three items were developed because of this meeting they were: 1) priorities document with areas of focus for research, extension and regulatory, 2) tables of all the school IPM material developed by each state in the region, and 3) selection of officers provide organizational structure and direction to move the school IPM effort forward in the southern region. Because of this meeting, the group prepared and submitted a grant to USDA Extension IPM Special Projects grant awarded in October 2007.
- 2007: Collaborated with Texas Parks and Wildlife, Department of State Health Services, Zoonosis Control, and Bat Conservation International to develop a one-day seminar on "Living among bats and avoiding rabies". The presentations were made in Austin, Houston, and San Antonio areas total clients trained 203. An article about this seminar was placed in our June issue of School Pest News and a management plan for school administrators was also developed to be distributed by all four agencies.
- 2006: Served on the Texas Pest Control Association Rules and Regulations Committee. This committee helped with the Structural Pest Control Board regulations prior to the Sunset Commission hearings.
- c. Collaboration and coordination with colleagues
  - 2016: Northeast IPM Center Grant Review panel (January 2016)
  - 2016: Western IPM Center Grant Review Panel (February 2016)
  - 2016: Friends of IPM Award Student Review Panel, Southern IPM Center, (January 2016)
  - 2014: Northeast IPM Center Grant Review panel
     Participated in Center review of IPM partnership grants for funding in 2014.
  - 2012: North Central IPM Center Grant Review panel
     Participated in the Center review of grant proposals for funding in 2012
  - 2009 2011: Collaborated with Mike Merchant and Blake Bennett on the IPM Cost Calculators for schools. With the assistance of computer programmer Nate VanBusKirk we have developed a heuristic web-based tool for schools to input data into a worksheet to give them an overall score of the school campus as it relates to pests. www.ipmcalculator.com
  - 2008-2009: Collaborated with Dallas County Ag/NR Agent Fred Burrell on a Managing Urban Wildlife Workshop held at the District 4 Center.
  - 2005 2009: Collaborated with Mike Merchant and Blake Bennett on the IPM Cost Calculators for schools. Assisted with the development of weighted scores for pest presence and areas of improvement during IPM inspections. I have worked with school districts in Texas to assist them in learning how to use the Excel spreadsheet program on the cost calculator.
  - 2004 2005: Collaborated with Mike Merchant and Paul Pope to develop a 12-page, 50 question survey to send to all public schools in Texas.
  - 2001 2007: Collaborated with Mike Merchant and Don Renchie to develop school IPM Coordinator training materials and training schedules. In 2004 our team wrote a manual for use in our trainings. B-6015 is currently on sale at the Texas AgriLife Extension Bookstore.

# B. Professionalism and Service

- 1. Membership in Professional and Honor Societies
  - Maintain Structural Pest Control non-commercial license (pest, lawn & ornamental, weed)
  - Entomological Society of America, MUVE Section 2013 Present
  - Association of Structural Pest Control Regulatory Officials Member
  - American Society for Public Administration 2006 2008; Member of the North Texas Chapter.
  - Texas Society for Public Health Educators (TSOPHE) 2007 –2008, Member
  - Texas Extension Specialist Association, Member 2012, D-4 Chapter Director 2013 -2015, Executive Board Secretary Position 2015 – Present

#### 2. TAMUS Service:

 Texas A&M Invitational Golf Tournament – 2003 to 2007. Coordinated golf tournament benefiting the Texas A&M Foundation and the Department of Soils and Crops Sciences.
 Was instrumental in developing new promotional materials and website.

## 3. Public Service:

- Institutional Animal Care and Use Committee, Central Life Sciences/Wellmark International, Farmers Branch, TX (Community Member)
  - 2013 Met in May as a committee to discuss new members, review protocol and inspect animal facilities
  - 2014 Met in May as a committee to review protocol and inspect animal facilities
  - 2015 Met in May as a committee to review protocol and inspect animal facilities
  - 2016

     Met in May as a committee to review protocol and inspect animal facilities
- City of Plano Master Composter 2000 2010; Advisory Board Member 2001-2005
   Certified Master Composter through TNRCC now TCEQ. Instrumental in developing the
   organization of Master Composters in an advisory position. Developed and implemented
   YardWise Fair station Healthy Environment, which incorporated, integrated pest
   management. Developed an IPM handout to be used at spring fair and future classroom
   events.
  - 2009: Gave two presentations for the Cities quarterly YardWise series on IPM and plant selection for homeowners
  - 2008: Gave three presentations for the Cities quarterly YardWise series on IPM and plant selection for homeowners
  - 2007: Gave four presentations for the Cities quarterly YardWise series on IPM and plant selection for homeowners
  - 2006: Developed a 16-hour Master Composter program for communities to use to educate their clientele about the benefits of compost – taught classes for the City of Rowlett.
  - 2004: Present Developed YardWise class on integrated pest management for homeowners, teach class for the City of Plano 4 times each year.

## 4. Self-Improvement Activities:

- Turfgrass Training for Agents and Specialists East Region, Dallas County Extension Office, TX (May 2014)
- Biology and Control of Vectors and Pests: The Importance of integrated Pest Management workshop sponsored by the Centers of Disease Control and Boston University of Public Health, Norwood, MA (May 2013).
- National eXtension Conference (2010, 2011, 2012, 2014, 2016)
- Association of Structural Pest Control Regulatory Officials (ASPCRO) annual meeting (2009, 2010, 2012, 2014)

- Texas A&M University Urban Pest Management Conference & Workshop (2002 2016)
- Texas AgriLife Program Conference (2007-2010, 2013)
- Texas Society of Public Health Educators Fall Conference: Work Smarter Not Harder Professional Preparation and Development (2007)
- International IPM Symposium (2006, 2009, 2012)
- National Conference on Urban Entomology (2008,2010, 2012,2014)
- Entomological Society of America attended annual conference (2013,2014,2015)
   Regional Branch Meetings

2012 Southwest and Southeast Branch Meeting, Little Rock Arkansas 2016 Southwestern Branch Meeting, Tyler, TX

# C. Supervisory Duties

- 1. Percent of professional time required 5%
- 2. Scope of supervisory assignment
  - Interview and hire interns and/or project assistants.
  - Help worker understand concepts of educational programming and evaluation methods
  - Training in putting together training folders and other tasks assigned.
  - Organize internship program tasks (update websites, develop content for online courses, work on detailed spreadsheets, etc.)
  - Oversee and approval of timesheets
- 3. Personnel supervised
  - Mary Mays-Delamater (May 2014 present) budgeted employee under iSchoolPestManager project 35 hours per week. Duties include maintain school IPM coordinator database, sending out mailers for regional school IPM trainings, working with conference services, maintain all training materials for each training, obtaining, tracking and sending CEU credits to TDA (Ag & SPCS), tracking documents for the iSchoolPestManager project, and other tasks as assigned.
  - Michelle Wood-Ramirez (August 2014 December 2016)
  - Bryant McDowell (Feb 2014 May 2014)
  - Marjorie Kim Flynn (2013)
  - Xanthe Shirley (June 2012 August 2012)
  - Zenobya Peffers (June 2008 Sept 2008)

## D. Teaching

- Guest speaker for Texas A&M University, Department of Entomology ENTO 482, career and internship opportunities for students. (November 2012, November 2013)
- Guest lecture. Pesticide safety and toxicity. Texas Woman's University (Fall 2007, Fall 2008)
- Guest lecture. What is school and urban IPM? West Texas A&M University (Fall 2007)
- Guest lecture. What is school IPM? Texas A&M Kingsville (Fall 2008)
- Guest speaker for Texas A&M Kingsville, IPM Class, Introduction to school IPM (Spring 2009)
- E. Research Activities: N/A
- F. Continuing Education/International Programs: N/A