2010 Pesticide Safety Education Program (PSEP)

Project title: IPM and Pesticide Safety Training for Arizona Green Industry Professionals

Project Leader Ursula Schuch, Environmental Horticulture Specialist and Professor, School of Plant Sciences

Team Members Jack Kelly, Commercial Horticulture, Pima County Cooperative Extension
Rob Call, Cochise County Cooperative Extension
Elizabeth Davison, School of Plant Sciences, University of Arizona
Margaret Livingston, School of Architecture and Landscape Architecture
Industry representatives from the landscape, nursery, and design sector

Specific activities proposed
Provide CEU’s for Pesticide Applicator’s, Arborists, and Golf Course Superintendents in the area of IPM and pesticide safety in urban landscapes.

Location of activities and extent of expected impact
The training of green industry professionals will be accomplished through the Desert Horticulture Conference that will be held this year on May 21, 2010 in Tucson Arizona. We are expecting around 300 people at this year’s conference.

Identify target audience and benefits
Desert Horticulture is the premier annual conference for all members of the southwest green industry and includes landscape architects, designers, nursery producers, retailers, contractors, landscape maintenance personnel, suppliers, and educators. The conference is well known for providing timely and research-based information relevant for designing, building, maintaining, and producing plants for urban landscapes in the arid Southwest. Desert Horticulture has attracted between 325 to 540 participants in previous years and is a valued and anticipated educational event based on the evaluations we have received from participants. The majority of conference attendees come from urban areas in Arizona, but we have a small number of people from neighboring states. The conference offers topics for a wide range of interests and specializations, but many speakers focus on or address IPM or pesticide safety. This event serves to educate a large number of professionals that impact the urban environment in Arizona and neighboring states. The 2010 conference has the following CEU approved: 6 Office of Pest Management (OPM), 5 International Society of Arboriculture (ISA), and 0.5 Golf Course Superintendent Association of America (GCSAA).

Requested budget
Travel for Dr. Loren Oki $ 600
Salary for conference assistant (Tilak Mahato) for 14 h over 5 weeks for a total of 70 h $2,000
Total $2,600

The travel funds for Dr. Oki who is a speaker at the conference will help with partial reimbursement for his airfare and lodging.
Salary for Mr. Mahato will help for part of the time he spends on conference coordination including registrations, sponsorships, and other arrangements.
Expected outcomes and impacts

Output

Based on previous conferences, we expect to train about 30-50 participants who will sign up for OPM CEU’s and 70-90 participants who will sign up for ISA CEU’s.

Specific outcomes:
• To understand the ecology and invasive nature of buffelgrass and effective ways to control it.
• Understand the role of insects including predators, beneficial and harmful insects on urban landscape plants.
• Become familiar with identification of palm diseases common in Arizona, use proper diagnostic tools, and consider appropriate actions including IPM approaches.
• Become aware of the fate of chemicals that are applied to urban landscapes and that are found in runoff. Consider alternative treatments to reduce pesticide and nutrient load in runoff.
• Reminder of basic pesticide application principles including applicator safety, risk assessment, and IPM principles.
• Become aware of how soil properties and fertilizer management affect plant health and how proper management can help maintain healthy plants.
• Increase awareness of how irrigation management is an important tool to maintain healthy plants and prevent problems.

Short term outcomes from the Desert Horticulture Conference will be increased knowledge and awareness of participants related to integrated approaches to maintain healthy plants in the urban landscape. Long term outcomes will be that landscapes will be maintained using IPM practices resulting in more preventative maintenance, fewer pesticides and fertilizers applied, and overall healthier landscapes. Additional outcomes will be reduced pesticide exposure of humans and animals using residential and commercial landscapes.

Evaluation plan

Participants are encouraged to answer a survey where they can indicate their evaluation of each presentation and some demographic information. The evaluation also asks whether presentations included information that participants will use in their professional duties. Future topics for other conferences and open ended questions encourage specific feedback. In future evaluations we will add a section in the survey for people who sign up for CEU’s related to IPM and will gather specific data from this group related to their learning experience during the conference.
Desert Horticulture Conference 2010
May 21, 2010, Tucson Convention Center

"Resource-Full Industry/Community"

**Arboriculture**
- Structured Soils for Tight Urban Spaces
  - Richard Dunwoody, AZ Best, LLC

**Black Rot of Palm and Other Insidious Diseases**
- Dr. Mary Olsen, UA Plant Sciences
- Climbing Higher – Arborist Certification
- Dennis Swartzell, Horticulture Consultants Inc.
- Libby Davison, UA Plant Sciences
- John Eisenhower, Integrity Tree Service Inc.
- Tucson's Street Trees
- Irene Ogata, City of Tucson

**Safety Aloft - Basic Safety**
- Knots, PPE, and Tools
- Tim Johnson, Artistic Arborist

**100 Years of Research in Tree Care**
- Libby Davison, UA Plant Sciences

**Web Portfolio**
- Rose Hessmiller, Ferguson Lynch Consulting and Architecture, New Mexico
- Water Quality - Contaminants in Runoff from Urban Landscapes
  - Dr. Loren Oki, University of California Davis

**Buffelgrass: The Threat to Native Vegetation**
- Lindy Brigham, Buffelgrass Coordination Center

**Adeniums**
- Gene Joseph, Plants for the Southwest

**CEU SIGNUP IN THE LOBBY AT THE END OF THE DAY**

**Design**
- Can I Get There From Here? Accessibility in Landscape Design
  - Renée S. Schaefer, Outside Views LLC

**APLD Certification - Designs on Designing?**
- Diana Turner, Turner Design

**City of Tucson Rainwater Harvesting Ordinance**
- Fernando Molina et al., City of Tucson

**Irrigation and Plant Performance of 5 Shrub Species**
- Rob Call, Cochise Co. Coop. Extension
- Gary Gruenhagen, Cochise Co. Master Gardener
- Claud Cluff, City of Chandler

**Using the Computer to Communicate your Design**
- Oscar Blazquez, UA Landscape Architecture

**Economic Outlook and Business Strategies for the Green Industry**
- Dr. Russell Tronstad, UA Agricultural/Resource Economics

**Landscaping for Wildlife and Sustainability**
- Kendall Kroesen, Tucson Audubon Society

**Irrigation and Plant Performance of 5 Shrub Species**
- Rob Call, Cochise Co. Coop. Extension
- Gary Gruenhagen, Cochise Co. Master Gardener
- Claud Cluff, City of Chandler

**Soils and Fertilizer Management in the Landscape**
- Dr. Jim Walworth, UA Soil, Water, and Environmental Sciences

**Maintenance/Construction**
- Drought Survival Strategies - Water Now or Remove Later
  - Jack Kelly, Pima Co. Cooperative Extension
- Battle of the Bugs - Predators and Prey
  - Dr. David Byrne, UA Entomology
- Pesticide Application 101
  - Dr. Paul Baker, UA Entomology

**Structures Soils for Tight Urban Spaces**
- Richard Dunwoody, AZ Best, LLC

**Landscaping with Desert Edibles**
- Mary Irish, Author, Phoenix

**Can I Get There From Here? Accessibility in Landscape Design**
- Renée S. Schaefer, Outside Views LLC

**APLD Certification - Designs on Designing?**
- Diana Turner, Turner Design

**City of Tucson Rainwater Harvesting Ordinance**
- Fernando Molina et al., City of Tucson