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# The University of Florida IFAS (UF/IFAS) Aquatic Weed Control Short Course: A Statewide Training Program for Pesticide Applicators

#### Abstract

The University of Florida IFAS Aquatic Weed Control Short Course is an Extension program that has been in existence since the 1980's. A primary goal of the program is to provide training to Florida's licensed pesticide applicators and individuals seeking initial licensing. Historically, surveys reveal that the vast majority gained useful knowledge and insights applicable to their situations, their expectations for learning were met, and they were overwhelmingly satisfied with their experience. Stakeholders include individuals from a diversity of employment sectors with varying levels of experience. Results show that the needs of these stakeholders are being met by the annual event.

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## Introduction

Federal and Florida law require that applicators of "restricted" pesticides be certified and licensed. During the mid-1970's, the Federal Insecticide, Fungicide, and Rodenticide Act (USEPA, FIFRA, 2005) was amended to authorize each state to enact a certification/licensing program for these applicators. All states have specific, but similar, requirements; the regulating agency for this program in Florida is the Florida Department of Agriculture and Consumer Services (FDACS, 2007). For individuals to become certified to purchase and handle restricted use pesticides, they must meet competency standards as demonstrated by passing (70%) mandated examinations.

To keep the license valid, recertification is necessary. Pesticide license holders must accumulate continuing education units (CEUs) every 4 years. FDACS is very flexible in the type of CEU programs they approve (Fishel, 2008). Although distance media is currently in use (Ferrell & Fishel, 2007), face-to-face programs conducted by Extension have been the most common venue.

Surveys have been used historically by Extension educators as a means of needs assessment. Needs

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assessment is a process that "identifies needs and decides upon priorities among them" (Encyclopedia of Educational Evaluation, 1975). These types of surveys have been used extensively by Extension over the years (Beckley & Smith, 1985; Gilmore, Meehan-Strub, & Mormann, 1994). Selected results from previous surveys of Florida-licensed applicators who work in aquatic, natural areas, and rights-of-way (Langeland, 2004) have indicated that:

- The majority of applicators are employed by county government.
- Most applicators live and work in south Florida. Only approximately 10, 12, and 20% of aquatic, natural areas, and rights-of-way applicators, respectively, live and work in north Florida.
- The majority of applicators prefer to attend meetings to obtain CEUs rather than retest.
- Many applicators will pay up to \$500 for attending a CEU meeting.
- Most applicators are able to travel to attend a regional CEU meeting.

The UF/IFAS Aquatic Weed Control Short Course (AWCSC) is an annual event that has been ongoing for more than three decades and is currently held in south Florida. More than 400 people attend the AWCSC annually; registration costs are less than \$300 for the entire 2.5-day event, and licensed applicators can earn up to 22 CEUs in a number of categories. Aspiring applicators have the opportunity to take initial state certification exams during the event.

This article reports selected results of surveys conducted at the conclusion of the AWCSC in the years 2003 through 2013.

## Methodology

AWCSC organizers have conducted yearly surveying of attendees for a number of years to evaluate the effectiveness of the program. The primary goal of surveys developed by organizers of the AWCSC is to determine whether the program provides an effective venue for the distribution of information relevant to licensed pesticide applicators in Florida.

This event has historically:

- Invited subject matter specialists from around the United States to speak.
- Been held in a large-scale conference and golf resort hotel.
- Been offered during May when hotel rates are off-season in south Florida.
- Held a large reception on the opening night.
- Offered an industry display room to accommodate event sponsors with their product literature.
- Had UF/IFAS Extension Bookstore representatives on hand where university publications, including exam study manuals, were sold.

## **Results and Discussion**

Survey results (Table 1) revealed that respondents had overwhelmingly positive experiences at the AWCSC. For example, analysis of 11 years of data showed that the mean value for "The Short Course met my expectations for learning" was 4.39(SD = 0.65), indicating that they were satisfied or very satisfied. The vast majority of respondents during this same period believed that the insights gained were applicable to their situation and were satisfied or very satisfied (response mean = 4.30; SD = 0.66). Most attendees reported that they obtained some or a significant amount of new information during the AWCSC (response mean = 3.35; SD = 0.24). Finally, respondents surveyed from 2003 through 2013 gave the AWCSC an overall rating of 4.31 (SD = 0.72), with respondents indicating they felt the AWCSC was very good to excellent.

	1			
	Response			
	Mean2			%
Survey Statement1		SD3	N4	Responses
Q1: The Short Course met my	4.39	0.65	1,434	30.6
expectations for learning				
Q2: Insights gained were applicable to my situation	4.30	0.66	1,433	30.6
Q3: How much NEW information did you obtain at this Short Course?	3.35	0.24	917	31.4
Q4: What is your OVERALL rating of this Short Course?	4.31	0.72	1,328	28.4
<sup>1</sup> Questions 1, 2 and 4 were asked yearly from 2003 to 2013; question 3 was asked yearly from 2007 to 2013. Data are pooled over years.				
<sup>2</sup> Q1 and Q2 mean was based on a 5-point scale where $5 =$ very satisfied, $4 =$ satisfied, $3 =$ neutral, $2 =$ dissatisfied, and $1 =$ very dissatisfied. Q3 mean was based on a 4-point scale where $4 =$ significant amount, $3 =$ some, $2 =$ very little, and $1 =$ none. Q4 mean was based on a 5-point scale where $5 =$ excellent, $4 =$ very good, $3 =$ good, $2 =$ fair, and $1 =$ poor.				
<sup>3</sup> Standard deviation. <sup>4</sup> Number of responses.				

Table 1.

Selected Pesticide Applicator Responses to the UF/IFAS AWCSC Survey

Questions related to employment status were included in AWCSC surveys in 2011 through 2013. The majority of respondents (56.2%; 260 of 463) were employed by public agencies. City employees ©2013 Extension Journal Inc.

accounted for around 24% of all respondents, while county, state, and federal workers comprised 13.4, 16.6, and 2.2%, respectively, of respondents. Private-sector professionals and consultants comprised 35.6% (165 of 463) of respondents. Other attendees included university employees (2.6%), nonprofit workers (0.9%), tribal employees (1.7%), industry representatives (1.1%), and individuals employed in other areas (1.9%).

Experience level varied among participants, with more than one quarter of respondents (26.5%) new to the field or with fewer than 5 years of experience; 25% reported they had 6 to 10 years of experience. Experienced applicators were also well represented at the AWCSC, with nearly half of respondents stating they had worked in the field for more than a decade. Individuals with 11 to 15 or 16 to 20 years of experience comprised 15.4 and 14.6% of respondents, respectively, while 18.5% reported they had been involved in pesticide application for more than 21 years.

### Implications

More than a decade of survey data from attendees of the AWCSC indicate that the vast majority of participants were satisfied with their experience at the AWCSC. Attendees stated that the AWCSC met their expectations for learning and allowed them to gain useful knowledge and insights that could be applied in performance of their duties, whether they were new to the field or had been working in the pesticide application industry for decades. The majority of participants were employed in the public sector, but many worked in other industry segments as well. These results suggest that the AWCSC has been successful at attracting a broad stakeholder audience from a diversity of fields and with varying levels of experience and that attendee satisfaction remains high. The AWCSC has been—and remains—a valuable resource for licensed pesticide applicators and is an ideal example of a large-scale, long-term successful Extension program.

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