

## **Formative Assessment of BMP Concepts on New York State Golf Courses.**

### **Demographic Summary of Responses**

A formative assessment (Quiz) of New York State golf courses was conducted in 2015 for six months and was promoted at large educational events, website banners, GCSA member email blasts, and social media. Of the 816 18-hole equivalent golf facilities in NYS 62 counties, 145 completed assessments were returned from 18 percent of NYS golf facilities (45 percent of the counties responded).

This low response rate is further skewed by 50 percent of total respondents from four counties in SE NYS Region. The next largest Central region returned 21 percent and Western NY 10 percent. The Northeast section of the state returned only one completed response. Therefore, some targeted educational events highlighting BMP's should be conducted in partnership with NE GCSA.

The golf course superintendent at a facility completed seventy-five percent of the assessments. Superintendents completing the assessments averaged 15 years of experience, better than 60 percent college educated, 17 percent Certified GC Superintendent, and 43 percent class A GCSAA Member. So by every measure a majority of the respondents were highly qualified and educated professionals.

### **Key Results from Assessment**

Overall 85 percent of the respondents answered about 75 percent of the questions acceptably for this formative assessment. Key environmental concepts such as runoff and leaching were well understood, but there were several answers that suggested more knowledge of products could be provided to improve site specificity and precise application timing.

A few of the answers to assessment questions regarding Facility Management indicated that some additional training could be provided on regulations and guidelines related to fertilizer and pesticide storage. There was a poor understanding of the P-fertilizer restrictions with less than 50 percent of respondents aware of the specific aspects of the law.

One particular question on IPM approach suggested a strong misconception. In answer to the question regarding the definition of IPM that allowed the selection of multiple answers, 45 percent of respondents selected "allows lower quality turf if beneficial to the environment". This suggests a strong need to re-introduce golf turf IPM programs that stress the balance of environmental and economic thresholds.

### **Moving Forward**

Based on the results of this formative assessment, a statewide educational plan focused on environmental stewardship should emphasize pesticide and fertilizer storage, handling, application, and regulations such as the P-law. A plan should also include education regarding the key elements of a progressive golf turf IPM program. Specific educational efforts should be discussed with Northeast Region of GCSA to improve involvement with this important industry-wide initiative.