From Data to Description — What CAS survey results tell us

April 2, 2010

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Program Evaluation
ANR Extension
Crop Advantage Series

• Several educational opportunities
  – Not an isolated event
• Focused on a clear issue
  – Predetermined outcomes
Crop Advantage Series Evaluation

- **Before** drafting questions
  - Benchmark
  - Know what intend to report
  - Don’t ask what you won’t use
Crop Advantage Series Evaluation

- Clearly defined audience
  - Measure changes over time
  - Follow-up
  - Benefits to participants
<table>
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<tr>
<th>Short-term</th>
<th>Mid-term</th>
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<tr>
<td>Awareness created</td>
<td>Behavior changed</td>
<td>Improved conditions</td>
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<td>Knowledge gained</td>
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<td>Problems identified</td>
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<td>Attitudes changed</td>
<td>Recommendations adopted</td>
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<td>Skills learned</td>
<td>Profitability increased</td>
<td>Enhanced quality of life</td>
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<td>Incentives created</td>
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<td>Revitalized community</td>
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New standard or benchmark for:
- enterprise
- environment
- society
- sustainability
Q3: I mixed an insecticide w/ the last application of a post-emergence herbicide in an attempt to prevent an aphid infestation.  
Yes  No

- 89.6% CAS participants did not apply an insecticide in 2009 based on what they learned at the 2009 CAS program
  - Aphid numbers not at action threshold (82.5%)
  - Beneficials would have been destroyed (63.6%)
  - Not economical (69%)
Q3: I mixed an insecticide with the last application of a post-emergence herbicide in an attempt to prevent an aphid infestation. Most said “No”

• Participants made a decision because of an Extension recommendation not to apply an insecticide in 2009 based on what they learned at the CAS program. This decision had a direct impact on their cost inputs.
Q6: In deciding to apply or not apply P and K fertilizer for the 2009 growing season:

- The soil tests were taken within the last 4 years. (96.6%)
- Crop removal was considered if the soil test was in optimum range. (89.1%)
- The likelihood of a yield increase that would more than pay for fertilizer and application costs was taken into account. (83.1%)
Q6: In deciding to apply or not apply P and K fertilizer for the 2009 growing season:

- Participants used the knowledge they gained thru the CAS program to make decisions about their operation that affected their profitability.
Q8: In deciding to apply a specific rate of nitrogen to corn for the 2009 growing season:

- Less nitrogen after soybean was applied than to corn following corn (88%)
- The N rate applied was adjusted based on the current price ratio of N to corn (57.9%)
- The range of rates around the maximum return to N rate was considered. (78.2%)
Q8: In deciding to apply a specific rate of nitrogen to corn for the 2009 growing season:

- Participants took action that impacted their cost per unit of N fertilizer based on the recommendations made by Extension personnel at CAS programs. We might make a case re a spin-off effect that they are more competitive.
Q9: I applied a foliar fungicide to some of my fields. Yes  No

- Corn  (No = 59.6%)
- Soybean  (No = 68.9%)

The high percentage who answered NO may have made their decision based on what they learned thru CAS, but we don’t know that because we didn’t ask that question.
What else did we ask CAS participants?

• Total SB acres grown
• Brand names of insecticides used
• Gender
• Profession
• Age range
How will the Crops team use this information in annual reports?

• Total SB acres grown
• Brand names of insecticides used
• Gender
• Profession
• Age range
Evaluating ANRE Programs

• Value from education
  - Apply research to field situations
  - Interpret information in timely manner

• Practical benefits
  - Save money, time
  - Support producer goals and values

• Rational change
  - Help remove barriers
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