

## **NYS IPM Project Annual Report**

**Project Title:** Improving Field Crop Extension outreach through enhanced growing season communication and outreach

**Principal Investigators:** Ken Wise<sup>1</sup> and John Keith Waldron<sup>1</sup>

<sup>1</sup>NYS Integrated Pest Management Program,

**Project Start:** 5/5/2016

**Project Term:** 9/21/2016

**Report Fiscal Year:** 2016

### **Executive Summary**

Cornell Cooperative Extension (CCE) educators are Cornell University's front line in helping New York field crop producer clientele with crop production and pest management issues. Keeping CCE personnel informed on the latest information and developments helps us meet Cornell's high standards for extension outreach and provides clientele with quality, pertinent, timely and user-friendly programs and resources that maximize our educational impacts. Enhancing communication opportunities between CCE county and campus personnel helps strengthen the outreach network, and is an important component of CCE's professional development. 2016 marked the 9th year of the call series. This season twenty-two conference calls were held between 5/5/16 and 9/21/16 to improve campus and field staff communication regarding field crop pest and crop management issues during the growing season. Each forty-five minute call averaged 11.5 participants. Conference call participants were better equipped to conduct their outreach efforts and meet the field crop pest management needs of their stakeholders. Enhanced communication among CCE personnel with field crop responsibilities improved effectiveness of outreach efforts regarding timely pest management issues. In addition to direct communication during the conference call, topics discussed were summarized and highlights made available to other stakeholders weekly through on-line NYS IPM Weekly Pest Report blogs available at the NYS IPM Program field crops website. Articles from the Weekly Pest Report are frequently used in various extension newsletters and other media including Facebook and Twitter postings with an estimated outreach of 10,000 subscribers. End of season discussions with participants were very positive with much interest and support to continue the conference call series in 2016.

### **Issue**

County and regional Cornell Cooperative Extension (CCE) field crop educators are Cornell University's front line in helping New York field crop producer clientele with crop production and pest management issues. Keeping CCE personnel informed on the latest information and developments helps us meet Cornell's high standards for extension outreach and provides clientele with quality, pertinent, timely and user-friendly programs and resources that maximize our educational impacts. Regular communication between CCE county and campus personnel helps strengthen the outreach network, and is an important component of CCE's professional development. CCE personnel translate knowledge gained from these educational opportunities into outreach materials and other resources to effectively meet needs of clientele.

Integral to regular communication and team building is an open exchange of information between individuals with varying levels of experience. Seasoned experts are able to help new extension personnel gain a statewide perspective of production issues and opportunities in real time. Regular dialogues provide a forum for review and discussion of new information and

technologies, including strengths, weaknesses, and advantages of adoption. Frequent communication assures our unified vision and strengthens our consistent outreach message. These exchanges are often instrumental in helping to identify applied research needs, local demonstration opportunities, and the development of outreach resources / programs.

### **Progress Summary**

Cornell Cooperative Extension (CCE) educators are Cornell University's front line in helping New York field crop producer clientele with crop production and pest management issues. Keeping CCE personnel informed on the latest information and developments helps us meet Cornell's high standards for extension outreach and provides clientele with quality, pertinent, timely and user-friendly programs and resources that maximize our educational impacts. Enhancing communication opportunities between CCE county and campus personnel helps strengthen the outreach network, and is an important component of CCE's professional development. In 2016, twenty conference calls were held between 4/5/16 and 9/21/16 to improve campus and field staff communication regarding field crop pest and crop management issues during the growing season. Each call averaged 11.5 participants and lasted forty-five minutes.

Enhanced communication among CCE personnel with field crop responsibilities improved effectiveness of outreach efforts regarding timely pest management issues. In addition to direct communication during the conference call, topics discussed were summarized and made available to other stakeholders through 20 on-line NYS IPM Weekly Pest Report blogs (<http://blogs.cornell.edu/ipmwpr/>) available at the NYS IPM Program field crops website. Weekly Field Crop Pest Report 2016 reached over 450 subscribers directly via blog and list-serves, and over 2,500 more with reposts to other newsletters, and re-tweets to Facebook (614 followers) and Twitter (390 followers).

This year's call was particularly effective in communicating timely information on pest activity such as outbreaks of armyworm in corn and small grains, western bean cutworm damage in corn, potato leafhopper in alfalfa, spider mites in soybeans, stored grain insect pests and dairy cattle fly pests. End of season discussions with participants confirmed overwhelming support and interest to continue the conference call series in 2016.

### **Expected and Observed Impact**

The objective of this effort was to improve the timely statewide communication of pest management and crop production among field crop CCE personnel during the growing season. As in previous years (2008-2015) of field crop conference call implementation, CCE personnel with field crop responsibilities took advantage of the weekly opportunity to share observations, gain insights, acquire and present practical knowledge and technical information in an in-house professional development environment. These timely efforts enhanced field crop extension personnel (educators and faculty) communication and awareness on current pest and crop conditions. In addition, the timely forum allowed for discussion of anticipated pest, crop and weather issues, integrated pest and crop management and potential extension programming opportunities. The majority of those involved participated every year with new extension field staff joining in the discussions with more experienced field staff. A total of twenty-five individuals have actively participated and contributed to this project's success over its seven-year duration. Project evaluations each year have documented participants found value in the timely

updates, discussion, professional development and team building aspects of the conference calls that could then be used to increase potential extension outreach impacts with stakeholders.

The primary benefit of the conference call program lies in the enhanced communication and professional development of the extension personnel involved. Stakeholders ultimately benefit from this effort through the potential enhanced extension outreach impacts related to an increased timely awareness of pest issues, pre-emptive monitoring and management of potential pest problems that help grower stakeholders minimize or avoid pest impacts, better address pesticide use decisions and protect net profitability.

All Cornell Cooperative Extension (CCE) educators and Cornell faculty with field crop responsibilities were invited to participate. In 2016 a total of 25 CCE county and regional based educators and Cornell extension field crop specialist faculty participated in the twenty calls held during the growing season between 5/5/16 and 9/21/16. Weekly calls averaged 11.5 participants with active participation and contributions by Cornell field crop specialists Drs. Russ Hahn (weed scientist), Gary Bergstrom (plant pathologist), Elson Shields (entomologist) and Margaret Smith (plant breeder). Weekly Field Crop IPM Conference Calls included roll call, weather outlook (Northeast Region Climate Center), participant sharing of statewide pest and crop observations, and a review of the following week's pest watch list. The weather outlook was provided by Jessica Spaccio and others from the Northeast Climate Center. Field observations were shared by field crop CCE educators, IPM personnel and crop specialist faculty. Highlights of current pest status discussions were summarized for inclusion in the "View from the Field" feature of the NYS IPM Weekly Field Crop Pest Report blog (<http://blogs.cornell.edu/ipmwpr/#>). The target audience for this on-line newsletter are field crop professionals including producers, extension, agribusinesses, consultants, federal, state and local personnel and the general public. Articles from the Weekly Pest Report are frequently used in various extension newsletters and other media including Facebook and Twitter postings. The Weekly Field Crop Pest Report 2016 reached over 450 subscribers directly via blog and list-serves, and over 5,000 more with reposts to other newsletters, and re-tweets to Facebook (415 followers) and Twitter (390 followers).

The season 2016 growing season was marked by very dry to drought conditions. Western NY had extreme drought conditions that effected the yield on field crops. In other parts of the state were dry but had timely rains to help maintain yields of corn and soybeans. Total alfalfa and grass forage were down in yield because of the dry conditions. For the first time we had western bean cutworm damage to corn that caused economic losses on some hybrids. True armyworm was a problem in corn, small grains and some grass hay fields in western NY. Spider mites were a problem in soybeans because of the drought conditions in western NY. Disease pressure was down in corn and soybeans. Bird damage to early corn was economic in some fields in the Catskills.

Weekly calls helped CCE field crop personnel keep informed on current status of statewide pest issues and provided a forum for detailed discussions on a variety of topics including: updates on the Fusarium Head Blight prediction model and fungicide use decision making (wheat), corn fungicide use considerations, western bean cutworm updates on risk to sweet and field corn and dry bean, weed management recommendations and decision making, vertebrate damage to field crops, sharing of timely resources and field monitoring reminders.

Participation in the field crop conference calls enhanced CCE outreach through timely communication among extension field staff enabling improvements to local outreach. CCE personnel could easily transform knowledge and insights gained from conference call discussions into direct outreach to local stakeholders resulting in improvements in cost effective and environmentally sound pest management decision-making.

A Google survey tool was used to collect end of season program evaluations. Evaluations were very positive with participants reporting the conference calls were a very worthwhile, helpful experience, increased participant awareness of current field issues, provided pertinent timely information critical for outreach and identified a “go-to” person or resources if additional information was needed. In addition to the weekly conference call audience, the Weekly Field Crop Conference call was discussed and the program evaluation shared as a topic within the Livestock and Field Crop IPM update at the Cornell Cooperative Extension November 2016 CCE In Service, Ithaca NY 11/3/16. Participants expressed much interest and support to continue the conference call series in 2017.

### **Project Conclusion:**

2016 marked the 9<sup>th</sup> year of this project. The objective of this effort was to improve the timely statewide communication of pest and crop production management issues among field crop CCE personnel during the growing season.

Over the nine seasons of field crop conference calls, CCE personnel with field crop responsibilities contributed to this weekly opportunity to share observations, gain insights, acquire and present practical knowledge and technical information in an in-house professional development environment. These timely efforts enhanced communication by field crop extension personnel (educators and faculty) and the collective awareness on current pest and crop conditions. Dairy cattle pest management issues of timely significance were also discussed on occasion. In addition, the timely forum allowed for discussion of anticipated pest, crop and weather issues, integrated pest and crop management including reviews of problem identification, assessment and management alternatives, and identification of research and resource needs and potential extension programming opportunities. The majority of those involved participated each of the eight years with new extension field staff joining in the discussions with more experienced field staff. In addition to extension field staff educators and NYS IPM Program personnel Cornell field crop specialists Russ Hahn (weed scientist), Gary Bergstrom (plant pathologist) and Margaret Smith (plant breeder) consistently contributed providing their expertise and perspectives to the discussion.

The Weekly Field Crop Pest Conference Call successfully continued to strengthen communication among field crop extension personnel actively engaging up to \_\_\_ extension educators and specialists in timely conversation about current pest observations and issues. These efforts have enhanced the field crop extension team effectiveness and our ability to anticipate, prepare and respond to seasonal pest management challenges. In addition, the calls have contributed to professional development and team building of this extension network.

Post-meeting activities included summarizing the weekly weather outlook and field observations for inclusion in the NYS IPM Weekly Field Crop Pest Report blog

(<http://blogs.cornell.edu/ipmwpr/#>) an on-line newsletter. The intended audience for this newsletter includes CCE personnel, crop advisors, agricultural industry, farmers and others. Direct and multiplier effect distribution of this blog, including articles extracted for other newsletters, posts and tweets to Facebook and Twitter, was estimated at 10,000 in 2015.

Resource links and supplemental information discussed during the conference call were [http://www.nysipm.cornell.edu/organic\\_guide/dairy\\_org\\_guide.asp](http://www.nysipm.cornell.edu/organic_guide/dairy_org_guide.asp) shared with CCE participants via follow up email.

Participants were regularly polled during the season for feedback regarding the conference call. An end of season questionnaire was shared each year. Responses were consistently universally very positive emphasizing the value of timely updates, discussion, professional development and team building.

The following responses to the 2016 evaluation are consistent to the types of responses to the same question in previous years.

**Were there one or two items discussed during the conference call that helped you make an impact with producers or clientele?**

- Pest Status around the state, Crop conditions, answers to specific weed control questions from our area (late emerging fall panicum)
- Drought related crop discussions were very useful this year.

The primary benefit and potential impact of the conference call program lies in enhanced communication and professional development of the extension personnel involved. Stakeholders ultimately benefit from this effort through enhanced extension outreach impacts related to increased timely awareness of pest issues, pre-emptive monitoring and management of potential pest problems that help grower stakeholders minimize or avoid pest impacts, better address pesticide use decisions, and protect net profitability.

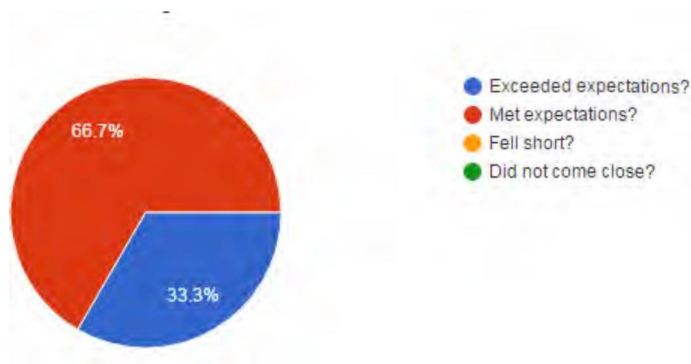
Plans for 2017: We will continue to have the call on Thursdays from 8:30am to 9:15am via a new platform called Zoom. Cornell is going to be using Zoom instead of WebEx in the coming year. We will also include 2 new IPM specialists one in biological control and alternative weed management will be included as part of the team. We will also include more weed related information to the meetings. The expansion of short IPM related presentations will continue in 2017 for field crop staff.

**Appendix: 2016 NYS IPM Field Crop Weekly Conference Call - Evaluation Summary**  
(Summary modified from Google Survey Instrument)

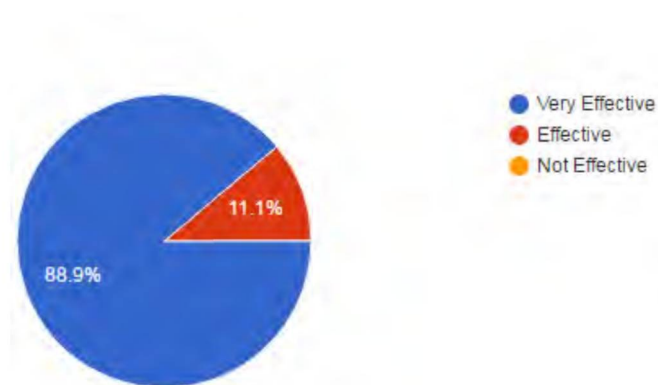
## Appendix: 2016 NYS IPM Field Crop Weekly Conference Call Evaluation Summary

The goals of our 2016 NYS IPM Field Crop Weekly Conference Call series were to “Improve timely statewide communication of pest management and crop production among field crop CCE personnel during the growing season.”

How well have we met our goal this season? (N=9)



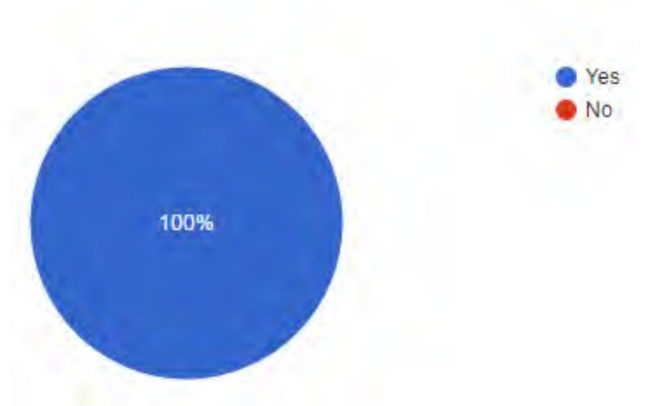
Was the conference call a good medium for timely statewide communication of CCE Pest Management information? (N=9)



Were there one or two items discussed during the conference call that helped you make an impact with producers or clientele?

- Pest Status around the state, Crop conditions, answers to specific weed control questions from our area (late emerging fall panicum)
- Drought related crop discussions were very useful this year.

Would you recommend participation in these field crop conference calls to other CCE personnel? (N=9)



**Do you have any suggestions on how to strengthen involvement by other CCE educators?**

- Just Keep doing it they will get involved

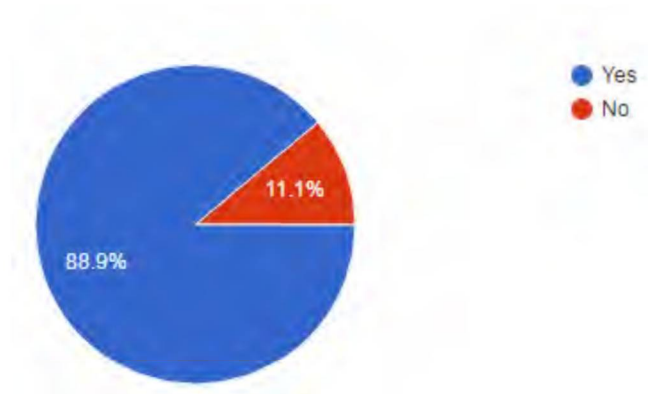
**What did you like the most about the NYS Field Crop Weekly Conference Call?**

- Linking us as a system
- The chance to be part of the "field crop group", to be up-to-date on what is going on across the State,
- A time to ask questions and hear what other educators are seeing.
- The information exchange each week

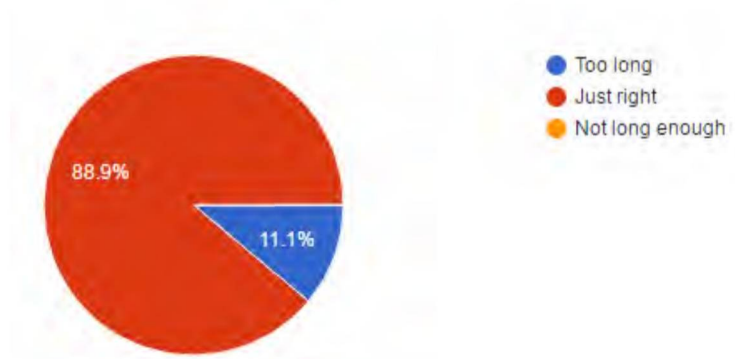
**What did you like the least about the NYS Field Crop Weekly Conference Call?**

- The timing of the calls was as good as it can be, but I had multiple conflicts that keep me from joining as regularly as I would like
- It is not personal, but my brain does not digest the long list of details of the weather summary. I would like to know what is happening in the big picture of weather over the next week and month. What highs and lows are developing. Are they strong - time to cut hay- or short - do not expect low humidity, etc.

**Was the 8:30 - 9:15 am Thursday a convenient meeting time? (N=9)**



The meeting length was: (N=9)



We are interested in your assessment of the following components of the Conference Call. (N=9)



Do you have any specific comments or suggestions to improve next season's NYS IPM Field Crop Weekly Conference Call series to better suit your field crop IPM extension needs and those of your clientele?

- No Responses

Do you have any suggestions for additional pest management or professional development topics to be subjects for off-season field crop conference calls?

- No Responses

Future pest management programming? We would like to ask for your input regarding needs, opportunities and priorities for field crop or livestock pest management related research and extension. Please take a moment to share your thoughts and suggestions:



- We need to continue to strengthen state-wide coordination of efforts, as the size of our group shrinks and changes, we will need to re-establish how we work together and where leadership is coming from.

**What do you see as the most important pest(s) or pest management issues/challenges you and/or your clients will face in the next 5 years?**

- Weed control, adapting related to resistance management etc.
- Diseases of field crops, foliar corn diseases,
- Resistance management, Cost vs benefits for treatment, Identifying emerging pests
- Herbicide and fungicide resistance in field crops.

**Are there specific field crop pest management areas you feel need additional extension efforts, resources?**

- Western bean cutworm

## 2016 Weekly Field Crops Conference Call – Survey Instrument

Thank you for your active participation and contributions to our 8th season of Weekly Field Crop Conference Calls. There were twenty-two weekly field crop conference calls this season. Your involvement and input enhances the value of these meetings.

We would like to request a few minutes of your valuable time to provide feedback on this season's calls and some thoughts for the future. Your responses and constructive suggestions will be very helpful for improving next season's program.

Thank you in advance for your help!

Ken

The goals of our 2016 NYS IPM Field Crop Weekly Conference Call series were to “Improve timely statewide communication of pest management and crop production among field crop CCE personnel during the growing season.” \*Required How well have we met our goal this season?

- Exceeded expectations?
- Met expectations?
- Fell short?
- Did not come close?

Was the conference call a good medium for timely statewide communication of CCE Pest Management information? \*Required

- Very Effective
- Effective
- Not Effective

Were there one or two items discussed during the conference call that helped you make an impact with producers or clientele? If so please list 1, 2 or more examples

Would you recommend participation in these field crop conference calls to other CCE personnel? \*Required

- Yes
- No

Do you have any suggestions on how to strengthen involvement by other CCE educators?

What did you like the most about the NYS Field Crop Weekly Conference Call?

What did you like the least about the NYS Field Crop Weekly Conference Call?

Was the 8:30 - 9:15 am Thursday a convenient meeting time? \*Required

- Yes
- No

The meeting length was:

- Too Long
- Just Right
- Could be longer

We are interested in your assessment of the following components of the Conference Call\*Required

	Very Useful	Somewhat Useful	Not Useful	No Opinion
Weather Outlook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CCE County Updates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Featured Pest topic(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Specialist Updates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presentation (Powerpoint, shared photo's)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do you have any specific comments or suggestions to improve next season's NYS IPM Field Crop Weekly Conference Call series to better suit your field crop IPM extension needs and those of your clientele?

Do you have any suggestions for additional pest management or professional development topics to be subjects for off-season field crop conference calls?

Future pest management programming? We would like to ask for your input regarding needs, opportunities and priorities for field crop or livestock pest management related research and

extension. Please take a moment to share your thoughts and suggestions: \*Required What do you see as the most important pest(s) or pest management issues/challenges you and/or your clients will face in the next 5 years?

Are there specific field crop pest management areas you feel need additional extension efforts, resources?