

## **NYS IPM Project Annual Report**

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

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**Project Start:** 4/30/2015

**Project Term:** 10/1/2015

**Report Fiscal Year:** 2015

### **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. 2015 marked the eighth year of the call series. This season twenty-two conference calls were held between 4/30/15 and 10/1/15 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 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 2015, twenty-two conference calls were held between 4/30/15 and 10/1/15 to improve campus and field staff communication regarding field crop pest and crop management issues during the growing season. Each call averaged 11 participants and lasted forty-five minutes. Our co-moderator Russ Hahn unfortunately had a health issue which caused him to leave the project in mid-June.

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 22 on-line NYS IPM Weekly Pest Report blogs (<http://blogs.cornell.edu/ipmwpr/2015/>) available at the NYS IPM Program field crops website. Weekly Field Crop Pest Report 2015 reached over 450 subscribers directly via blog and list-serves, and over 10,000 more with reposts to other newsletters, and re-tweets to Facebook (160 followers) and Twitter (266 followers). This year's call was particularly effective in communicating timely information on pest activity such as outbreaks of white mold of soybeans, western bean cutworm, wheat and corn fungicide use decisions, 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 (2008-2014) 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-seven 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 2015 a total of twenty-seven CCE county and regional based educators and Cornell extension field crop specialist faculty participated in the twenty-two calls held during the growing season between 4/30/15 and 10/1/15. Weekly calls averaged 13 participants with active participation and contributions by Cornell field crop specialists Drs. Russ Hahn (weed scientist), Gary Bergstrom (plant pathologist) and Margaret Smith (plant breeder). As was previously mentioned Dr. Hahn was unfortunately not able to participate in the calls for the majority of the summer season. 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 weeks 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 2015 reached over 450 subscribers directly via blog and list-serves, and over 10,000 more with reposts to other newsletters, and re-tweets to Facebook (160 followers) and Twitter (266 followers).

The season 2015 growing season was marked by early season rainy weather conditions that delayed planting, affected weed control efforts including timing of pre- and post-plant herbicide applications. Insect and disease issues were generally moderate this season with the exception of white mold of soybeans, an increase in western bean cutworm populations, late season issues with soybean aphids, northern corn leaf blight and Gray leaf spot in corn. New or unusual pest issues observed and discussed this season included potential glyphosate resistant tall water hemp; Cercospora leaf blight (soybean – purple seed stain); northern corn leaf blight on brown midrib corn; stem canker (soybean); and epidemics of white mold detected in northern NY counties for 1<sup>st</sup> time (soybeans). Bird damage to corn and wheat presented issues again this season.

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 2015 CCE In Service, Ithaca NY 11/14/15. Participants expressed much interest and support to continue the conference call series in 2016.

### **Project Conclusion:**

2015 marked the 8<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 eight 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 27 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 2015 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?**

- I use the conference call to communicate what I saw over the week and to help write our statewide weekly pest publication on all the observations made. This call is VERY useful and helps farmers current up to date pest issues.
- Reports of white mold in soybeans in western NY alerted me to look more closely in local fields and I started to find some in my area.
- Specific weed management issues
- An example from our 2013 Call evaluation: Weather during flowering of wheat in our area was not supportive of fusarium development. The map showed us at low levels for that period. When Mike mentioned that they had growers that tested their wheat and they had significant levels of DON I immediately called the 6 major wheat growers and they tested their wheat. Some found significant DON levels. The testing saved them an expensive trip to the mill and refusal.

This season's evaluation also received suggestions for additional pest management or professional development topics as subjects for off-season field crop conference calls. These will be helpful in development of future field crop IPM programming. Results of the evaluation survey are available on request.

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 2016: There is much enthusiasm and support for continuing the Weekly Field Crop Pest Conference call series indefinitely. In 2016, the “call” will utilize the Cornell supported WebEx platform. WebEx will enhance our communication and collaborative mission providing conference call access through phone or internet. WebEx is free to Cornell Cooperative Extension personnel and is widely used by CCE field educators. An additional feature is the ability to archive any presentations made enabling us to create a library of resources on pertinent field crop pest management topics. Our 2016 effort will continue to enhance networking among field crop extension educators, strive to increase the number of participants, incorporate more use of WebX collaboration software to archive presentations for training purposes and invite presentations by subject matter specialists.

**Appendix: 2015 NYS IPM Field Crop Weekly Conference Call - Evaluation Summary**  
(Summary modified from Google Survey Instrument)

## **Appendix: 2015 NYS IPM Field Crop Weekly Conference Call Evaluation Summary**

**The goals of our 2015 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.” Exceeded expectations 40%, Met expectations 60%.**

**Was the conference call a good medium for timely statewide communication of CCE Pest Management information? Very Effective 80%, Effective 20%**

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

- I use the conference call to communicate what I saw over the week and to help write our statewide weekly pest publication on all the observations made. This call is VERY useful and helps farmers current up to date pest issues.
- Reports of white mold in soybeans in western ny alerted me to look more closely in local fields and I started to find some in my area.
- Specific weed management issues

**Would you recommend participation in these field crop conference calls to other CCE personnel? 100% Yes**

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

- There is a lot of turn over in county extension. I think you have to be vigilant in making sure new agents know about the conference call
- Survey associations to see who covers field crops. Contact them directly and tell them about the phone conference
- Sometimes I am unable to attend, but then sometimes I just forget. If I knew a particular important topic would be discussed (ie "pesticide recommendations for alfalfa weevil this week") maybe I would focus my mind more and would not forget to dial in.
- Maybe the timing is poor for some, I too would like to see more participation from across the state. I think field agents get caught up in the projects they are working and tend to mark it in their calendars. Maybe a broad-based invitation through Outlook as well, some will actually accept, but at least it would appear on their calendars.

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

- The weekly county reports
- Updates from around the state on crop progress and pest issues.
- Reports of crop conditions and pests from all participants
- Pest updates, and the experience of the other educators.
- I truly missed Russ's commentary (and wisdom) throughout the spring-glad to hear him back this fall.

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

- Nothing
- Weather -- that seems relevant, but available in other ways...
- like all aspects of the call
- I can not follow the weather summary and the list weather details. A big picture view to understand if a high or low pressure system is here for a while or just passing, would be helpful.
- Long-windedness

**Was the 8:30 - 9:15 am Thursday a convenient meeting time? 100% Yes**

**The meeting length was: Just right 100%**

**Weather Outlook [We are interested in your assessment of the following components of the Conference Call]. 20% Very Useful, 80% Somewhat useful.**

**CCE County Updates [We are interested in your assessment of the following components of the Conference Call] 100% Very Useful**

**Featured Pest topic(s) [We are interested in your assessment of the following components of the Conference Call] 100% Very Useful**

**Specialist Updates [We are interested in your assessment of the following components of the Conference Call] 100% Very Useful**

**Presentation (Powerpoint, shared photo's) [We are interested in your assessment of the following components of the Conference Call] 100% Very Useful**

**Links - (follow up email) [We are interested in your assessment of the following components of the Conference Call] 100% Very Useful**

**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?**

- Ask participants to summarize local prices and share 2-3 times each season, inputs and custom rates
- No -- I think it is really helpful.

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

- Maybe Gary Bergstrom could summarize new field crop diseases that have shown up recently in other areas of the country, so people can keep an eye out fore them? We just heard about bacterial stripe on corn in IL, and it seems like there have been several others this season. A recap would help me.

- Maybe still doing some conference calls (very thankful for the webex venue) to help field staff with some future planning ideas for programs?

**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:**

- More combined IPM and ICM team work.
- Northern leaf blight of corn
- How can we participate in ground truthing in season photos Using NDVI of fields to move forward the use of this technology for field scouting
- A few farmers are trying out sorghum. For a dairy farmer with continuous corn, I am wondering if you added sorghum every two years to a corn rotation, if it would prevent the build up of corn rootworm.
- With Climate Change more species of flies (longer survival rates)
- More resistant weeds and fewer options available.
- Conservation tilling can work, but how can our clients manage weeds without tilling up the soil (goes to carbon footprints and other environmental issues that face our farmers).
- Variety trial regarding yield pest resistance, pesticide resistance management, evaluation of “Plant Health” pesticide application demonstrations, improved management for specific pest(s), soybean sentinel field monitoring, dairy cattle IPM demo or field meeting, field crop IPM field meeting
- Improved management for specific pest(s)
- Improved management for specific pest(s), soybean sentinel field monitoring
- Field crop diseases
- Variety trial regarding yield pest resistance, pesticide resistance management, improved management for specific pest(s), soybean sentinel field monitoring, field crop IPM field meeting
- White mold management in soybeans
- Maybe some of the more invasive species

N = 5

JKW, November 2015

## 2015 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!

Keith and Russ

The goals of our 2015 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"/>
Links - (follow up email)	<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?