Year 4

Climate Extension Educator Checklist

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<th>Year 4</th>
<th>Complete</th>
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<td>Discuss survey and interview findings with extension educators to inform ongoing development of outreach strategies and materials.</td>
<td>In progress</td>
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<td>- Jan Voit uploaded quarterly reports for 2012 through 2014 to the Heron Lake Watershed District website.</td>
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<td>- On October 20, 2014, Jan Voit participated in a webinar for the CSCAP Extension Team. State updates were given for Michigan, Wisconsin, Minnesota, South Dakota, Missouri, Iowa, and Ohio. Lori Abendroth gave an operations update. Conference materials were distributed to extension leads. The contract with Emily Lundt for design and communication was official. There will be a strategic planning session in Chicago for principle investigators on November 10 and 11, 2014. The farmer payment forms are all current. Work continues on the extension output projects.</td>
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<td>- On November 3, 2014, a webinar was held for the CSCAP Extension Team. Catherine Sereg and Jan Voit participated. Blog ideas were discussed. Extension work group teams gave progress updates. Groups will put together a timeline and report back at the December team meeting.</td>
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<td>- The National Wildlife Federation (NWF) had the opportunity to send a few people to the Cover Crop Solutions (CCS) field day in Memphis, Tennessee. The NWF provided the airfare, hotel, meals, and registration fee for attendance at the event. Jerry and Nancy Ackermann and Jan Voit were chosen to attend. The event began with a “Meeting of the Minds”. Ray Archuleta, NRCS, gave a presentation entitled, “Soil Health Indicators: How Cover Crops Build Soil Health and Profit.” He stressed the importance of residue, earthworms, roots, soil food web, and soil livestock. Cover crops are not optional when soil function is understood. Dr. Tracy Blackmer, CCS, gave a presentation entitled, “Designing and Conducting Research to Answer Questions on Cover Crop Profitability.” In the research field, everyone agrees that cover crops are essential for erosion control. Research is being conducted to determine cover crop effects on water quality, especially nitrogen loss. While government programs are stimulating interest in cover crops, it may be more important to look at the hypoxic zone. Over 70 percent of the nitrate loading in the hypoxic zone is contributed to agriculture and tile drainage. Agriculture needs to determine what is going to be done about this. Following the presentations, a panel discussion was held. Panelists included Bruce Kirksey, AgriCenter International; Dan Prevost, Delta F.A.R.M.; Chuck Danehower, Agriculture Economist, University of Tennessee; Charlie Martin, Equipment Innovator of Planting Green Planter; Justin Ogle, Farmer, Nevada, Missouri; and Les Yoder, Forage and Grazing Specialist, CCS. The field day began with an “Overview of the AgriCenter and Cover Crop Research Plots” by Bruce Kirksey. This was followed by a presentation entitled, “Making Cover Crops Pay” by Dr. Tracy Blackmer, CCS.</td>
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In small groups, attendees rotated through four indoor presentations, each lasting 30 minutes. The presentations included: “Cover Crop Rooting Differences”, “Soil Health”, “Planting Green”, and “Cover Crop Types and Resources”. Following the presentations, attendees had an opportunity to ask questions.

After lunch, there was a cover crop field tour. Attendees visited four stations outside in the cover crop research fields. Each presentation was about 30 minutes in length. The stations were “Cover Crop Types and Mixes”, “Cover Crop Root Pit”, “Cover Crop Planting Methods and Timing”, and “Cover Crops for Livestock and Food Plots”. The field day concluded with a Planting Green equipment demonstration and a question and answer session.

- On November 26, 2014, a webinar was held for the Water Management Work Group. The purpose of the webinar was to determine the learning outcomes for the proposed drainage water management videos.

Educators continue to develop farmer-led watershed groups and local farmer peer groups.

- On November 13, 2014, the Cover Crops in a Corn/Soybean Rotation Field Day was held. The field day began with registration at 9:30 am at the American Legion in Okabena.

Attendees had the opportunity to hear from National Soil Health Spokesperson for the USDA-NRCS, Ray Archuleta. Ray, also known as “Ray the Soils Guy”, spoke about soil health and agroecology throughout the country. His presentation focused on integrating cover crops into a corn/soybean rotation.

The speaker lineup also included Dr. Michael Lehman, Research Microbiologist with the USDA/ARS in Brookings, South Dakota. He explained the potential benefits of using a cover crop from a soil microorganism perspective and attendees had the opportunity to view soil biological activity through use of the Prairie Ecology Bus. Dr. M. Scott Wells, University of Minnesota (UM) Cropping Systems Agronomist, also explained the latest in UM cover crop research.

Local farmers Jerry Ackermann, Jerry Perkins, and Dave Christoffer described their experiences with various cover crop seeding methods, timings, and mixes. Liz Stahl, Extension Educator in Crops, presented results from cover crop demonstration trials conducted in corn in southwest Minnesota. There were 180 people in attendance.

Active farmer groups use performance-based environmental management tools to collect data on water, carbon and nitrogen in their watershed and apply experiments similar to Objective 2 field trials.

Selected farmer leaders attend year 4 annual convening to increase farmer-scientist exchanges.

Educators work with producers in their respective state with various web tools.

Data gathered from tools are aggregated and shared with individuals and farmer groups.

Reporting

A report will be required by May 30, August 31, November 30, 2014 and February 28, 2015. The report should be emailed to Dr Jeff Strock at jstrock@umn.edu and carbon copied to Molly Werner at werne022@umn.edu.
Payment Terms
Total payment of $15,585.00 from 3/1/14 to 2/28/15. Please include an invoice with each report. The amount of each quarterly invoice should be $3,896.25.