

CORNELL NWNY PROGRAM HIGHLIGHTS JANUARY – MARCH 2015

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Manure Gas Education: Keeping Farmers Safe

There have been injuries and deaths in surrounding states and ‘close calls’ regionally from hydrogen sulfide gas being released during manure storage agitation. This is a major concern for the safety and wellbeing of farmers and their families. The immediate risk is within a relatively small radius of the storage, generally 50 feet or less.

The NWNY Team along with Yates County Soil & Water Conservation District (YC SWCD) received a farm safety grant from Agricultural Safety and Health Council of America (ASHCA). This project was one of 11 funded across the country. The purpose of the program was to educate farmers, manure haulers, and local fire departments about the hazardous gases that form in the storages, specifically hydrogen sulfide. This gas is a by-product of the anaerobic digestion process and is exacerbated with the addition of gypsum, a material high in sulfur. This project also provided education and cost-share for personal monitors for farmers and multiple gas meters for fire departments.



One of the two meetings discussing manure gas safety.

Two educational meetings were held in late March for farmers and volunteer firefighters. Fifty participants learned from Cornell PRO-DAIRY staff about manure gas basics, how gases form, and why gypsum bedding usage increases gas production. YC SWCD and NWNY Team presented on how to identify manure gas hot-spots around the farmstead. Tom Eskildsen, with YC SWCD, reviewed the gas readings he and local fire departments have measured on farms during agitation prior to spreading over the past 1½ years. The equipment company demonstrated how to operate the monitors and interpret gas levels recorded.

The next step of the project will be for farmers and custom manure haulers to purchase gas monitors to use on the farm. The grant will provide funding to offset the cost of 100 monitors. Monitors have data loggers so readings will be downloaded regularly to mitigate safety concerns and used to further investigate the potential hazards from manure storages.

Young Managers Trip to PA Encourages Thought

There has been a discussion group for young dairy managers in Ontario County for many years, but a recent trip to visit dairies in Pennsylvania served to further strengthen the group. Ten young farmers traveled with the team’s two dairy specialists in March to visit dairy farms and other agricultural businesses. Even though PA is not far away, the group members were exposed to some very different dairy facilities and management strategies. Some on-farm examples included using flush lanes to clean manure from barns and posting goals for milk production. Quality and efficiency are both important for all farm employees to monitor. The group was also impressed with the Turkey Hill Experience. An attraction that does an outstanding job of teaching visitors about dairy farming and processing.

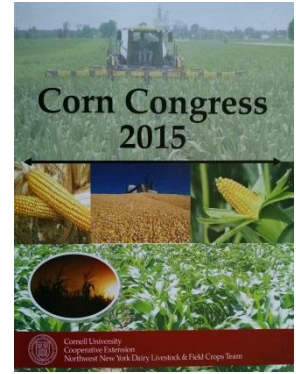


The whole group in front of the Turkey Hill cow.

While the participants haven’t implemented any big changes on their farms as a result of the trip, many of them are currently employees on dairy farms and thus not at the point in their careers where they can make large management decisions. This type of learning experience will help them to build a broad base of knowledge for future management opportunities.

Corn Congresses Hit the Mark with Producers in 2015

The Western NY and Finger Lakes Corn Congresses attracted almost 600 producers and agri-business representatives to the two-day event in Batavia and Waterloo. Forty-five exhibitors participated in our trade shows to update growers on the latest technologies and management tools. The congresses featured a wide range of corn production topics including: grain hybrid variety trials, GMO grower education, nitrogen sensing technologies, herbicide resistant weed management, western bean cutworm update, interseeding cover crops into standing corn, and unmanned aerial vehicles in NWNy. Due to popular demand, all of the presentations were bound into a booklet for attendees to follow and write notes for later reference. One of the most popular presentations was, “What’s your 30 Second Elevator Speech on GMO’s”, by Margaret Smith, Cornell University corn breeder. Her presentation was aimed at educating growers on the science behind GMO corn and soybeans that they produce so that they can accurately and intelligently respond to questions from their non-farming neighbors and the general public. One producer wrote me, “Margaret Smith’s talk on GMO education was the best idea for an agenda item in years. I thought that was extremely valuable. I would think about doing that again next year.”



Economics of Intensive Wheat Management Revisited -- 2014

An estimated 100,000 acres of soft winter wheat are grown each year in New York. Eighty percent of those acres are grown in the ten counties covered by the NWNy Dairy, Livestock, & Field Crops Program. The most recently available data, 2011 through 2013, indicate that the value of production averaged about \$44 million annually. Many wheat producers continuously seek information about changes in practices that possess the potential for improved economic viability. To achieve optimal profitability given prices and expected conditions, winter wheat producers need to manage their crop as a true grain crop, not just a rotational crop, and manage the crop more intensively.



Team members collaborated with a wheat producer from the region that has considerable experience implementing intensive wheat management systems to develop economic analyses based upon 2014 experiences. Analysts estimated the change in profit attributed to the switch to an intensive system from a base, standard system, including sensitivity analyses examining the effects of wheat price, yield and others. Project members disseminated information from the analysis to attendees at the Soybean/Small Grains Congresses, and via the program’s newsletter and website.

Approximately, 360 Soybean/Small Grains Congress attendees learned the following. Estimates suggest that an intensive wheat management program outperformed a base, standard program – expected change in profit per acre attributed to an intensive system compared to a base, standard system was estimated at about \$52 per acre, given 2014 prices and conditions. Estimates suggest that intensive wheat management adopters spend about \$160 per acre more on nutrients, pest management and other operating inputs compared to base, standard cultural practices to realize the above increase in profit. Attendees learned that results would be sensitive to wheat price, change in wheat yield, and others factors. Research studies show that producers that apply profitability analysis during decision making achieve greater profit compared to producers that do not apply profitability analysis.

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