Poultry Litter Applicators Learn Importance of Proper Spreader Calibration

Learning proper methods of calibrating application equipment is important for farmers utilizing animal waste as an alternative fertilizer. Calibration is required by DHEC under state regulations and calibration ensures against over application of plant nutrients. DHEC inspectors have indicated that poultry litter applicators have not been properly documenting their calibration procedures as required by animal waste management plans.

To address this issue Clemson Extension conducted two Spreader Calibration Clinics in York and Kershaw to educate farmers about proper calibration and how to meet DHEC requirements for documenting calibration procedures. The clinics were part of the Confined Animal Manure Managers (CAMM) Continuing Education Program.

Twenty-five farmers attended the clinics that included hands-on, practical methods of measuring the amount of poultry litter applied. Participants set up various collection methods, weighed and calculated application rates, and practiced documenting the procedures and calculations in a format that satisfies DHEC requirements. Participants indicated that the skills learned during the clinics will be very helpful in meeting the calibration documentation required in their waste management plans.

In addition to helping farmers comply with state regulation, proper spreader calibration protects the environment by preventing over application of plant nutrients and farmers are able to use a valuable fertilizer source to its maximum potential.
4-H Cooking Camp Provides Hands-on Learning

According to the U.S. Department of Health and Human Services and U.S. Department of Agriculture, “healthy eating contributes to overall healthy growth and development, including healthy bones, skin, and energy levels”. “South Carolina is one of the unhealthiest states in the nation – ranking 46th in the country.” (US Health and Human Services Agency Study – 2004; http://www.healthysc.gov/)

The Lancaster 4-H Youth Development Agent worked with the Food and Nutrition Agent to offer a summer camping opportunity for youth focusing on healthy eating habits and exercise. During the camp, youth were able to enhance their knowledge of MyPyramid and learn how different food groups were important to eating a healthy diet. They also participated in hands-on cooking experiences using alternate food choices that provided a more nutritious diet. Youth were able to take home samples of the food they prepared along with recipes to share with their family at home.

70% of the youth participants reported they enjoyed eating the foods they prepared. 85% of the youth reported an increased awareness of eating a healthy diet.

4-H Embryology in the Classroom

According to the National FFA Association, one of the greatest challenges facing agricultural education is the lack of qualified agriculture teachers. Currently, the SC Science Standards for 2nd Grade students includes illustrating the various life cycles of animals (including birth and the stages of development) [See SC Standard 2-2.5]. In order to meet this education standard, teachers are in need of resources and support to provide hands-on opportunities for students.

The Lancaster 4-H Youth Development Agent worked with eleven local elementary school teachers in three separate schools to bring the 4-H Embryology in the Classroom program to over three hundred students. Participants learned the difference in a fertile vs. non-fertile egg, and how the chick develops inside the egg. Students were given a hands-on experience of caring for a living being.

85% of program participants reported an increased knowledge of the life cycle of chickens. They learned how to relate this knowledge to other species of animals. “This was my second time doing this project and I hope to do it again!” said Mrs. Robinson, Buford Elementary 2nd Grade Teacher, “the students gain so much understanding by doing this project.”

Changing Habits Isn't Easy, But It Is Possible

Add a dash of oregano, a pinch of garlic and your recipe now has an extraordinary taste that not only delights your family but helps you cut down your sodium intake. That approach is used by Nutrition Educator Assistant Josephine Alexander in weekly adult group meetings to encourage participants to reduce their use of salt as the only seasoning for foods.

In addition to low-sodium intake, the overall emphasis focus on the importance of planning meals in advance and using a shopping lists when shopping for food.

While the lessons of this program prove to be somewhat challenging, the result were rewarding as participants shared responses from their family members on how their food tasted so much better with less salt and more herbs and spices.

Another significant moment came as one participant shared with the group her meal planner worksheet which helps her plan meals in advance, thus saving food dollars.

Initiating a change of habit can be a daunting task, but after the hands-on opportunities to make and taste new recipes, this group not only has a greater appreciation for herbs and spices, but recognizes the value of advance planning.
The Food Safety and Nutrition Program works closely with youth, seniors, coalitions, and community groups. Successful youth activities include partnering with 4-H to provide summer nutrition/cooking day camps, healthy cooking clubs and the summer parks program. Partnerships are key to success for the Food Safety and Nutrition Program and include 9 ½ years of cooking T.V. shows with a local school, teaching cooking, safe food handling and kitchen safety. Other partnerships include municipalities (cities and counties), Carolina Community Actions, Catawba Indian Nation, and school districts. Nutrition education for individual groups is also provided. Seniors in congregate meal sites have benefited from ongoing monthly nutrition/food safety programs for several years. Two congregate meal sites participated in a research project and received weekly lessons on food safety and nutrition. Pre- and Post-tests were administered and classes taught between the tests. Its tests and anthropometric data will determine if participants learned and changed their nutritional habits. Groups average twenty to twenty-five people.

Family and Community Leaders (FCL) is a community group including eight clubs, with about 80 members. Extension provides leadership, guidance, and technical assistance to FCL, and health-related education to clubs which meet monthly.

Feral Hogs have been a problem in South Carolina for a long time. Each year the population seems to be growing and expanding its range. Feral hogs cause millions of dollars in losses to the agriculture community each year and carry very dangerous diseases. These diseases are transferable to livestock and humans. In addition to agricultural losses, golf courses, and subdivisions experience devastation to their lawns and turf. Feral hogs also destroy valuable wildlife habitats throughout the southeast.

The area Agriculture and Natural Resources Agent developed a program to teach land owners what they need to know to successfully begin reducing feral hog numbers on their property. This new program has been presented to several local associations during the past year. Area farmers and cattleman have indicated that feral hog numbers were increasing in their area, and that damage caused to their pasture, hay fields, and row crops was increasing. The program has now been presented to three area Cattlemen’s Associations and two Young Farmers Associations. Approximately 125 individuals have participated in the program.

This program has the potential to save South Carolina farmers and landowners millions of dollars in property and crop damage. The program will be offered around the state to any group that is interested.

Agriculture and Natural Resources Program Highlights

- Master Wildlife
- Master Tree Farmer
- Master Naturalist
- Master Cattlemen
- Regional Beef Cattle Marketing Seminars
- Pond Management 101
- Feral Hog Management
- Coyote and Beaver Management
- Backyard Wildlife Habitat Management
- Pesticide Licensing and Continuing Education
- Confined Animal Waste Management Continuing Education
- Agronomic Production Demonstrations and Evaluations
- Certified Crop Advisor Services
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Plant Identification Training and Commercial Ornamental and Turfgrass Short Course (COTS)

Certified Nursery Professional (CNP) is a voluntary certification program for the commercial horticulture industry through the South Carolina Nursery and Landscape Association. The certification is obtained through making a passing score on a two-part exam. The first part is a written examination dealing with soils, fertilizers, landscape installation and maintenance, plant anatomy and physiology, marketing, greenhouse and nursery production, etc. The second part is a plant identification exam where they have to identify 120 landscape plant specimens by their botanical name. A 12 week (one night per week) plant identification class was taught at Bartlett Tree Laboratories arboretum during the spring and summer. In January of 2010, a short course was taught which covered the written exam material. This consisted of four, three and a half hour classes which covered the majority of the subject matter. The plant identification class had an initial enrollment of 23 individuals. Out of these, 16 individuals completed the class. Five of these individuals took the plant identification exam and four passed. The COTS program had an enrollment of nine, and all completed the training. All four of the individuals who took the written exam passed and received their CNP designation for passing both parts of the exam. The average passing rate for walk-ins on the plant identification exam is approximately 45%. The average passing rate for walk-ins on the written part of the exam is approximately 55%. The certification process is a proof of a certain level of competency, and certification can be used by companies to promote their professionalism over their competition.