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Harry N. Boone, Jr., Ph.D., Editor

Environmental Issues – Concentrated Animal Feeding Operations (CAFOs)

by David J.Workman, WVU Extension Service, Hardy County

Today's agricultural educator has more to teach than just how to produce a better product. Thanks to an additional governmental regulation, agricultural education instructors can now add a new module to the production agriculture curriculum. "AFO's, CAFO's and More" might be a suggested title for the new instructional segment.

In 1972 Congress enacted the Clean Water Act (CWA.) This act was set up to preserve and protect the surface and other waters of the United States for the benefit of its citizens. The Clean Water Act first targeted "Point Source" pollution. "Point Sources" are those that have an identifiable point from which all discharge from an identified source enters the waterways of the state or nation. Those industries that discharge used water through a pipe to a point source are required under the law to obtain a National Pollutant Discharge Elimination System (NPDES) permit. The CWA gave the Environmental Protection Agency (EPA) the authority to set effluent limits on an industry-wide (technology based) basis and on a water quality basis that would ensure the protection of the receiving water.

Under the provisions of the CWA, the EPA can and has elected to authorize the NPDES permit program to be delegated to the states to issue and enforce. In West Virginia the WV Department of Environmental Protection (WVDEP) and its Division of Water and Waste Management is the agency that oversees the NPDES permit system.

Until recently the management of non-point source pollutants were not addressed from a regulatory standpoint. However, many voluntary Best Management Practices (BMP's) have been successfully implimented for several years. Farmers who were applying various animal manures were considered potential non-point sources of pollution. The issue of stream fencing was directed at curbing the entry of manure into the surface waters of the state. Other regulations such as Anti Degradation Laws, TMDL regulations, etc., are all advancing the directives called for in the CWA. In 2003, EPA revised the CWA for Concentrated Animal Feeding Operations (CAFO) to include land application of manures, etc., under this permitting process. These operations were once included only in the non-point category.

WVDEP has identified about 30 farming operations that will come under the CAFO permitting guidelines (2004 data.) Fortunately, the WVDEP has opted to include all of these under one general permit. Most of these identified operations are poultry farms.

To back up for just a moment, an operation must be an Animal Feeding Operation (AFO) before it can become a CAFO. Your operation is considered an AFO if you confine animals for at least 45 days in a 12 month period and there is no grass or other vegetation in the confinement area during the normal growing season. However, not all AFO's are CAFO's but by definition all CAFO's are AFO's. As you can see these regulations are confusing and that is the reason that farmers need to be aware.

There are several factors that must be met to qualify an operation as a CAFO. The sheer numbers of animals present on a farm operation can immediately place a farm under the CAFO regulations. For example, a large CAFO has at least 125,000 chickens, 55,000 turkeys, 1,000 beef cattle, 82,000 laying hens, or 1,000 veal calves. Additional information is available on the Interent at http://cfpub.epa.gov/npdes/afo/cafofinalrule.cfm . There are size criteria for medium and small CAFO designations as well.

Any AFO may be designated a CAFO by the Director of WVDEP regardless of the number of confined animals or the size of the operation. If the Director or his/her designee inspects the AFO and finds that the operation is a "significant contributor of pollution to surface waters" the farm may be designated a CAFO and subject to all of the rules and regulations that apply. The power given to one individual, without the requirement of "scientific evidence" that an operation is a "significant contributor," means that **any** farm operation regardless of its size and scale may be designated a CAFO.

There are limitations placed on operations with regard to many facets of the farm managment. In the draft permit, production areas, land application of wastes, adequate manure storage capacity, the management of dead animals, clean water management (rain water on roof surfaces and runoff from adjacent lands), and direct contact of animals with

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North Central Region AAAE Recognizes Outstanding New Teacher Educator

by Stacy A. Gartin

Dr. Harry N. Boone, Jr., Assistant Professor of Agricultural and Environmental Education at West Virginia University, was selected as the Outstanding New Teacher Educator of the North Central Region of the American Association for Agriculture Education at the annual meeting in West Lafayette, IN. The North Central Region of AAAE includes the 24 states from North Dakota to Kansas across to the east coast. Upon review of Dr. Boone's credentials it is easy to understand why he was selected. He is truly one of the finest professionals in the profession and the country.

Recognitions:

- Recipient, Outstanding Teacher, Davis College of Agriculture, Forestry, and Consumer Sciences, 2004.
- Recipient, Outstanding Teacher, Division of Resource Management, Davis College, 2004.
- Recipient, Jr. Faculty Certificate of Merit, Gamma Sigma Delta, 2004.
- Recipient, Homorary American FFA Degree, 2002.
- Recipient, Outstanding New Teacher Educator, Eastern Region AAAE, 2002.
- Recipient, Outstanding Researcher, Eastern Region AAAE, 2002.
- Recipient, Outstanding Publication Award, Eastern Region AAAE, 2002.

National Level:

- American Association for Agriculture Education (AAAE)
- Member, AAAE Outstanding Young Member Selection Committee, 2003
- Adult Consultant, National FFA Nominating Committee, 2002 – 2004
- Chair, AAAE Research Committee, 2003
- Reviewer, Journal of Agricultural Education, 2000-03
- Member, AAAE Professional Ethics Committee, 2002-03
- Chair, NAERC Outstanding Presentation Selection Committee, 2002
- Chair, *Journal of Agricultural Education* Outstanding Article Selection Committee, 2002
- Vice-Chair, AAAE Research Committee, 2002
- Chair, *Journal of Agricultural Education* Editing Managing Board, 2001
- Secretary, *Journal of Agricultural Education* Editing Managing Board, 2000

Regional Level:

- Co-Coordinator, North Central AAAE Undergraduate Program, 2004
- Chair, North Central AAAE Research Committee, 2003
- Chair, North Central AAAE Outstanding Presentation Selection Committee, 2003
- Coordinator, Eastern Region AAAE Research Conference, 2001
- Member, 5 Star Consortium Student Teacher Retreat Planning Committee.
- Member, 5 Star Consortium Executive Committee, 2000-present

State & University Level:

- Editor, West Virginia Ag Ed News and Views, 2003
- Chair, West Virginia National FFA Officer Selection Committee, July 2003
- Member, WVU Electronic Thesis & Dissertation Task Force, 2003-04
- Member, Library Committee, Davis College, 2003-2004
- Treasurer, Gamma Sigma Delta, 2004
- Historian, Gamma Sigma Delta, 2003
- Member, Recruitment Advisory Committee, Davis College
- Member, Division of Res. Management Promotion and Tenure Committee – 2004
- Member, Division of Res. Management Promotion and Tenure Committee - 2003

- Member, Division Resource Management Technology Committee, 2001-03.

Dr. Harry N. Boone, Jr., serves as the graduate coordinator for the Program. He teaches Research Methods, Statistical Applications and is developing a new course in Research Design. These courses will serve as the foundation for graduate student education. Dr. Boone also teaches courses in Teaching Methods for Secondary Agriculture, Managing the Learning Environment, Reflective Learning, Graduate Research Seminar and supervises student teachers. He has also taught two sections of microcomputers each semester for the past three years. His research interests are based on the total program of agricultural education; classroom and laboratory instruction, supervised experience programs, youth leadership development and adult education. He also investigates various aspects of microcomputer knowledge and application. In addition, Dr. Boone advises undergraduate (28) and graduate students (15) in the Program.

The Agricultural and Environmental Education Program, the Division of Resource Management, the Davis College of Agriculture, Forestry and Consumer Sciences, West Virginia University and the agricultural education profession are proud to have Dr. Harry N. Boone representing us. Congratulation Dr. Boone!

Personals

Robert and Amanda Herrod are the proud parents of Isabella Mackenzie, born October 23, 2004. Isabella weighed 6.7 lbs.

Teaching Agriculture in Non-Traditional Venues

by Brian Sparks, WVU Extension Service, Fayette and Nicholas Counties

When the question is asked what does an Agricultural and Natural Resources Extension Agent do? An agent, at certain times, feels like answering, what do we not do? What does an Agricultural and Natural Resources agent do?

Historically, Extension started with the writing and passage of the Smith-Lever Act of 1914. The Smith-Lever Act of 1914 stated that cooperative agricultural extension work would consist of spreading the word of practical research knowledge and providing instruction and demonstrations of existing or improved practices or technologies in agriculture. The research and new information was to be developed in conjunction with the land-grant universities and localized to meet the needs of communities outside of the university setting.

Agricultural agents provided new information to farmers by conducting demonstrations, farm visits, and one-on-one teaching. Today agricultural agents focus on three areas, teaching, service, and research. We have probably moved away from our intent of mainly teaching new practices to providing service and local research. An agent will spend the majority of time planning and developing programs, informal teaching, facilitating meetings and organizing people to identify, understand and take action on public issues and problems.

My philosophy of an effective Agricultural agent is to take research based information from the university and provide it to the local communities via demonstrations, workshops, farm visits, and one-on-one instruction. In 2004, my hours devoted to teaching alone were 139.5. This does not include developing lesson plans, arranging facilities, or preparing equipment. The classes focused on horticulture, agricultural production and marketing programs, workshops, youth programs, pesticides, and a few topics that arose due to the season or interest of a non-traditional group.

In the horticulture area, a Master Gardener Program was completed. Providing information to an audience that is very demanding for knowledge is satisfying for an agent. As the Summersville Tailgate Market Association enhanced their marketing skills, I provided the training for members to be able to accept Senior Citizen coupons and WIC vouchers used for purchasing fruits and vegetables. Other presentations focused on cover crops, farmland preservation, horse selection, legislative day, forestry tax workshop, and health regulations dealing with agriculture.

The work in the agricultural production and marketing program consisted of a series of meetings falling under the statewide educational series where I hosted the meeting for the guest speaker and obtained funding to provide dinner for local producers. Work was also completed on the established calf pools. As a result of this work 283 farm fresh calves were sold from this area at a premium price.

I served on the steering committee for the Beef Quality Assurance program, by developing a PowerPoint presentation that was utilized statewide. The program was implemented in Braxton County with Nicholas and Fayette county producers attending.

One workshop was conducted to follow up on the 2003 workshop about no-till seed application. A group of producers attending a grassland field day were instructed on the subject of herbicide applications for weed wiping nuisance weeds in grasslands. Producers who obtained a pesticide license had the opportunity to receive continuing education credits. Two classes for the private pesticide applicators were held in order to provide an update on pesticides, noxious weeds, and provide recertification credits required for renewal of their license.

Programs were also offered to youth in the areas of safety, marketing, character counts, projects, agriculture in West Virginia and extension careers. Educational components were provided for two 4-H camps that allowed youth to take care of livestock animals for one week. I also conducted the Progressive Farmer Safety Day Camp, which is a national program geared toward educating youth about safety hazard, such as sun safety, pesticide safety, lawnmower safety, tractor and power take off safety, 4-wheeler safety, food safety, and 911 information.

In conjunction with the vocational students, I provided a two day Sheep- to-Shawl program that provided youth with an opportunity to observe shearing of sheep, apple butter making, honeybees, sawmills in operation, blacksmiths, and tasting lamb burger. I also serve as an advisor for an agricultural club, where youth are helped with projects and monthly educational meetings.

Mass media is a great tool used by the agent. Two newspapers print a monthly article I prepare. One column is shared between United States Department of Agriculture, West Virginia Division of Forestry, and West Virginia University Extension Service.

Listed above are just a few examples of the formal teaching activities. Other activities that are just as important are the everyday contacts and informal teaching that occurs. There were over 300 requests for information answered throughout the year between the Nicholas and Fayette County offices and over 275 soil test kits were distributed and evaluated. A lot of walk-in clients and telephone requests fall into this category, along with numerous farm visits to agricultural producers, which account for many teachable moments.

In agriculture, information has been disseminated through traditional methods such as lecture and demonstration to large groups, but the greatest impact comes from small group environments or one-to-one instruction (farm visits).

As one can see, sometimes it is hard to answer the question, what does an Agricultural and Natural Resources Extension Agent do?

Brian Sparks earned a Bachelor of Science (2000) degree in agricultural education from West Virginia University.

Dining With Diabetes…Food for Us All

by Barbara Loudin, WVU Extension Service, Upshur County

Who is at risk for diabetes? We all are. The disease is three times more common today than it was 40 years ago and the number of individuals diagnosed continues to rise. West Virginia is no exception; it has one of the highest numbers of diagnosed diabetics. Diabetes is the sixth leading cause of death in WV. About 18 million Americans have type 2 diabetes, the most common type and another 16 million eventually will get diabetes if they don't take the right steps now. The good news is type 2 diabetes can almost always be prevented and often even reversed if lifestyle changes are made.

Those who participate in the "Dining with Diabetes" program discover that there isn't such a thing as the dreaded diabetic diet. There is, however, a meal plan that includes food choices and portion sizes that make it possible for a diabetic to manage their blood glucose. It also means that if other family members eat the same meal pattern it may prevent them from being diagnosed with type 2 diabetes or having other health problems related to poor dietary choices.

A Harvard University study that followed more than 84,000 people for 16 years found that a healthy lifestyle that included exercise, a diet of healthful foods, and maintaining a healthy weight enabled those in the study to lower their risk of diabetes by 91 percent. The following are seven important diabetes prevention strategies.

- Get tested to determine your blood glucose level. Nearly everyone who has diabetes passes through the prediabetes stage first, when their blood glucose levels are elevated but not yet high enough to be considered diabetes. Prediabetes causes no outward symptoms but increases the risk of heart attack or stroke by 50 percent and greatly increases the risk of full-fledged diabetes.
- Lose 10 pounds. The increase in diabetes is directly related to obesity. The excess fat causes cells to become resistant to insulin, the hormone that carries glucose out of the bloodstream. A study indicates that a weight loss of 10 pounds reduces the risk of diabetes by 58%.
- Eat whole grain food. Everyone should switch from foods prepared from refined grains (white flour, white rice etc.) to whole grains such as brown rice, oatmeal and whole wheat.
- Fill half of your plate with produce. Fruits and vegetables are low in calories and high in fiber. They will fill you up so you're less likely to eat other higher calorie foods.
- Limit fat consumption. Fat has twice the calories of carbohydrates and protein.
- Avoid sugar. The average American eats about 150 pounds of sugar annually.
- Get moving. Exercise makes the body's cells more responsive to insulin and improves their ability to remove glucose from the blood. Exercise also lowers blood sugar by burning glucose for fuel.

The landmark Diabetes Prevention Program found that walking for 30 minutes a day at a moderate pace, along with weight loss and a healthful diet, reduces the risk of diabetes by more than 50 percent. In Upshur County local health care professionals have expressed their appreciation for the program and have indicated that they believe it has substantially improved participants' ability to manage these conditions. They make referrals and ask each semester if the program will continue.

As an Extension Agent in Upshur County there are many demands on my time, however the need is great and the support from community professionals makes this area of programming a priority. Health care professionals often do not have the time to explain the details of managing their blood sugar. It has been proven that support for managing an illness increases in a group setting.

The "Dining with Diabetes," program is free to the participants. The sponsors for the program include the West Virginia Diabetes Control Program, West Virginia Bureau for Public Health, West Virginia University Extension Service, local health care facilities, and Joslin Diabetes Center, a division of Harvard Medical School. The curriculum is taught in a series of four workshops. Each workshop is two hours in length. The first workshop includes an overview entitled "On The Road to Living Well With Diabetes" and each diabetic had the opportunity to have a free A1c test and their blood pressure taken. The blood tests and blood pressures are provided by two registered nurses that volunteer their time to the program. A registered dietician who is also a certified diabetic educator teaches the diabetic curriculum. The three workshops to follow focus on carbohydrates (identifying foods that contain carbohydrates), protein (meats and main dishes) and side dishes (vegetables and salads). The dietician provides the diabetic educational part of the workshop. Linda Schmidt, retired Extension Agent from Lewis County, and I teach food preparation and the food safety portion of the program. It is the Extension Agent's responsibility to perform the following tasks: recruit the health professionals, advertise the program in the community, arrange for dishes to be prepared ahead of time that will be used for tasting, arrange for the facility, set up the facility prior to the workshops, register participants, collect the data and send thank you letters after the event is completed. The difference this program makes to the quality of life of the participants makes it all worth while.

Three months after the series a reunion workshop is held. The A1c tests are repeated to determine if the blood glucose levels and blood pressures of participants have improved. The results from data collected statewide indicate that significant improvement has occurred in the blood glucose levels of those participating in the program. The responses on the pre and post tests have also revealed that support from both health educators and the other participants have enabled them to increase their knowledge of how foods are processed in the body and to make healthier lifestyle choices.

The "Dining with Diabetes" program provides information that is food for us all.

Sources for this article were:

Christopher Saudek, MD, Professor of Medicine at John's Hopkins University and Director of John's Hopkins Diabetes Center, Baltimore, Md

American Diabetes Association

Dining With Diabetes…A Program We Can Live With

by Georgette Plaugher, WVU Extension Service, Tucker County

America the Beautiful is becoming America the Bulky. A recent report from the National Center for Health Statistics showed that adults are roughly an inch taller than they were in the early 1960s, but nearly 25 pounds heavier. Average Body Mass Index (BMI), has also increased from about 25 to 28 (30+ is obese) over the 40-year span.

How did we get this way? Inactive lifestyles, fast food, and consuming larger portions have caused our "unregulated growth". Years ago, people worked harder to earn a living. Most jobs required back breaking work. Today, many jobs involve sitting or standing, resulting in fewer calories burned. Our hectic lives also leave little time to cook and eat healthy meals as a family. By overloading on convenience foods and burning fewer calories each day, American's have caused their waistlines to expand.

What does this mean? With an increase in obesity comes an increase in health related problems such as high blood pressure, heart disease, and Type II diabetes. All are life threatening and related to one another. While high blood pressure and heart disease have been in the spotlight for many years, the number of Americans with diabetes has more than doubled since 1980.

Diabetes is a group of diseases that affect the way your body uses blood sugar (glucose). It occurs when the pancreas makes little or no insulin (type 1 and 2) or the body can't use the insulin properly (type 2). Insulin is important for getting sugar from the foods we eat into our cells for energy. When little or no insulin is produced, glucose builds up in the blood instead of being used for energy. High levels of unused glucose cause damage to the heart, eyes, kidneys, blood vessels, nerves, gums and teeth, and feet and legs.

Now why should we care? Losing someone you love to complications from diabetes can be a real wake up call. Since the disease is also genetic, your own risk of developing diabetes increases if you have one or more closely related family members with the disease. Factor in a poor diet, excess body weight, and an inactive lifestyle and your risk can double. However, learning more about diabetes is as easy as talking to your doctor, surfing the internet, or attending a diabetes education program.

The WVU Extension Service's Family and Health Program Center has an excellent program called *"Dining With Diabetes"* (DWD) for individuals with Type II diabetes and their family members. The program, which was originally developed in 1998, focuses on providing information about the nutritional aspects of diabetes. Karen Newton, WVU Extension Program Specialist-Diabetes Education, Dr. Guen Brown, WVU Extension Specialist in Nutrition and Health, and other professionals have developed a comprehensive diabetes curriculum and handbook for the course.

The DWD curriculum is taught in a series of four, consecutive 2-hour sessions held over a 4-week period. A follow-up session is held three months later. The class format is informal and consists of diabetes nutrition instruction, cooking demonstrations, sampling approved diabetic recipes, and an exercise session. Topics taught during the educational sessions include: an introduction to diabetes; healthy eating covering carbohydrates and artificial sweetners, fats and sodium, vitamins, minerals, and fiber, and portion sizes; and health care for diabetics.

The key to a successful DWD program lies in finding a good instructor. You want to select someone who is knowledgeable about the subject matter and can really inspire the audience. I was fortunate to enlist Eloise Hollen, Dietician at Davis Memorial Hospital and experienced DWD educator to teach the course. Eloise really connected with the audience and made learning enjoyable.

I also got involved with teaching a portion of each session. My program assistant, April Miller, and I did the "fun" part of the class. Each week we conducted cooking demonstrations using approved diabetic recipes from the manual. Then everyone got to eat, however, not before we taught basic exercises for controlling weight and improving physical fitness. While not everyone chose to participate in the exercises, they all mustered up the courage to try our cooking.

Conducting a DWD program was no easy task, but the folks in Morgantown helped me every step of the way. It took me more than six months to get everything in order. The program required finding a certified instructor, determining an appropriate time and dates, securing a location, recruiting volunteer help, acquiring class materials, and learning the class format. Being new to the program required a lot of extra preparation and we had a few glitches. While things didn't always run smoothly, the program was still a success.

The only thing I regret was that I couldn't inspire some of the students to participate and attend more regularly. While this was discouraging, I was pleased that almost half the participants chose to stick with the program for three or more sessions. I feel that any knowledge they gained was better than nothing at all.

Would I do it again? Absolutely! Diabetes is a serious and growing problem in the U.S. and an estimated 17 million Americans have it. I can't think of a better way for teaching diabetes education and management than through the DWD program. It is very well organized, informative, and fun. Everything I, and the other participants learned, was valuable and worth the time we devoted to each class.

What does diabetes have to do with agriculture and agricultural education? Everything! Healthy food and a healthy lifestyle come from the farm. I can't think of a better way to promote healthy living than by encouraging people to eat fresh meats and produce grown by America's farmers. As I reflect on all the work it took to pull the DWD program off, I feel it was well worth the effort and look forward to organizing another one in the future. DWD is definitely a program we can live with.

Research Summary: Attitudes of Extension Agents Towards Involvement of Special Needs Populations

by C. L. Reed, D. A. Boone, H. N. Boone, S. A. Gartin & J. M. Woloshuk

The 4-H youth development education program creates a supportive environment for culturally diverse youth and adults to reach their fullest potential. In support of this mission, the local land-grant University provides formal and nonformal community focused experiential learning and skill development activities that benefit individuals throughout life. 4-H also fosters leadership and volunteerism in youth and adults, builds internal and external partnerships for programming and funding, strengthens families and communities and uses research based knowledge generated by the land-grant university system. According to the National 4-H Youth Annual Youth Development Enrollment Report (National 4-H Headquarters, 2003, p. E2) 6,772,817 youth in the United States were enrolled in 4-H as of January 1, 2002. The 4-H youth participants in West Virginia totaled 58,468 during the same period (National 4-H Headquarters, 2003, p. N1)

The Department of Education statistics for children three to twenty one years old served by federally supported programs for the disabled have increased from a total 3,694,000 in 1976-1977 to 6,292,930 in 2001-2002 in the United States (National Center for Education Statistics, 2002). In West Virginia 50,443 children were being served under the Individuals with Disabilities Education Act and Chapter 1 of the Education Consolidation and Improvement Act, State operated programs at the end of the 2001-2002 school year.

Special needs children refer to children who have been diagnosed as having one or more of the following conditions which in the opinion of the diagnosing physician is likely to continue indefinitely, interferes with daily routine, and requires extensive medical intervention and extensive family management. These conditions include genetic, congenital, or acquired disorders, birth defects; developmental disability as defined under G.S. 122C-3; mental or behavioral disorder; or chronic and complex illnesses (Social Services Act, 1998). There are several categories that can place almost anyone in the special needs class. For instance, attention deficit disorder (ADD), behavior disorder (BD), learning difficulties (LD), a gifted child, or hearing or visual impairment places a child in the special needs category. A visual impairment can range from a student needing a pair of glasses to severe cases where the student requires the assistance of computer programs to enhance the font size to clearly receive all the information around them. Not all special needs students have severe conditions, but under the law any child that has any problem that prevents them from retrieving and understanding all the information given to them is considered a special needs child.

Given the number of special needs students in public schools, one can assume that some of these students are also involved in the 4-H program. Since the Extension service is a federally funded program, it can not deny access to any individual and is legally obligated to provide for the needs of all youth. Since 1975, Congress has required that students with disabilities receive an education in the least restrictive environment determined on a case by case basis. If the assumption is correct that a portion of 4-H youth have special needs, there is a need to explore Extension agent's attitudes toward and involvement with special needs individuals involved in 4-H programs. The 4-H programs and activities are available to all persons without regard to race, color, sex, disability, religion, age, veteran status, political beliefs, sexual orientation, national origin, and marital or family status. Although these programs are available to all persons, it is important to determine agents and staff's attitudes toward these factors to insure that everyone is welcomed and encouraged to participate in the programs. Since the role of the Extension agent is to plan, implement and evaluate 4-H programs, it is important that they understand the special needs population.

CAFOs by David J.Workman (continued from page 1)

waters of the State are a few of the troublesome issues for WV farmers.

The CAFO process entails additional record keeping requirements. A frequently reviewed, site specific CAFO Management Plan (CMP) is like a nutrient management plan except more rigorous with regard to other parts of the operation. The CMP which must be maintained on the premises for 5 years, require total farm soil testing every 3 years. It must include information on yields; dates; weather conditions 24 hours before, at, and after the application of manures; and calculations, etc. Most large corporations employ one or more individuals just to keep track of the required records. Most producers are the president, CEO, CFO, labor force, etc., all rolled into one. There are annual reporting requirements and inspections that are likely to reveal confidential information or affect biosecurity measures on the farm.

There is also a CAFO site marker requirement. There is a description of height, width and posting of information on CAFO designated operations. These requirements advertize the CAFO operation making it a possible target for agri-terrorism or bio-terrorism. There are daily inspection provisions that are just not applicable to a farm operation.

There is a "duty to comply" that requires that the permittee must comply with all terms and conditions of the permit or face serious fines and penalties. Then there is the annual renewal and public hearing provision every 3 years. With every infraction there are penalties. Some of the dollar amounts are so high that one fine would put the farm out of business.

We are only at the beginning of the AFO and CAFO experience in West Virginia. All producers should become familiar with and informed about the regulations that are out there that may affect them regarding their right to farm. As agricultural educators we can all be influential in helping to educate the farm community regarding these and other important issues.

Research Summary ***(Continued)***

The purpose of this study was to determine if Extension agents and program assistants with 4-H program responsibilities in West Virginia were receptive to the special needs of the youth in their county, to determine if Extension agents felt they had sufficient training to work with special needs youth, and to determine if additional training is needed to prepare Extension professionals to work with the special needs youth.

The objectives of the study were reflected in the following research questions:

1. What were the attitudes of Extension agents and program assistants toward special needs youth?
2. What types of 4-H programs were provided for special needs youth?
3. What types of special needs youth were extension agents most willing to include in their 4-H programs?

This study was limited to the attitudes of Extension agents and program assistants in the West Virginia, employed during the winter of 2003-2004, who were responsible for 4-H programs at the county level. A total of 124 Extension professionals (97 agents and 27 program assistants) were included in the accessible population.

A descriptive research design was used to collect data from Extension agents and program assistants with 4-H responsibilities necessary to answer the research questions. The instrument used for this study was a two-part questionnaire adapted from questionnaires used in previous research by Jordan (1968) and Larrivee and Cook (1979). Part I consisted of twenty Likert scale attitude items relating to special needs populations' involvement in the 4-H program. Part II of the instrument requested demographic information and experience in working with the special needs population.

The findings of the study included: all of the respondents strongly agreed (57.1%) or agreed (42.9) that, "special needs persons can be productive members of society." Nearly ninety-five percent agreed (53.8%) or strongly agreed (41.0%) that, "including special needs youth as 4-H members would be a good experience for the other members. While nearly ninety percent of the respondents agreed (55.8%) or strongly agreed (33.8%) that, "regular 4-H club members would interact with special needs youth," 75% of the respondents disagreed (53.2%) or strongly disagreed (22.1%) with the statement, "special needs youth will be ignored by the other members of the 4-H club."

Over sixty percent of the respondents disagreed (35.9%) or strongly disagreed (25.6%) that, "the Extension agent and program assistant have adequate training to work with special needs youth." The majority of the respondents agreed (62.3%) or strongly agreed (19.5%) that "the challenge of being in a regular 4-H club will promote growth of the special needs child." Eighty-five percent of the respondents agreed (44.9%) or strongly agreed (41.0%) that "parents of special needs youth will be no greater problem for the 4-H leader than parents of non-handicapped youth."

An overwhelming majority of the respondents disagreed (50.6%) or strongly disagreed (35.1%) with the statement, "the behavior of special needs youth will set an undesirable example for the rest of the club members." Nearly two-thirds of the respondents disagreed (50.6%) or strongly disagreed (13.0%) that "special needs youth will not be able to adequately participate in most 4-H projects or activities." Sixty-five percent of the respondents disagreed (50.6%) or strongly disagreed (15.6%) that, "other members and leaders in the 4-H club will feel uncomfortable with a special needs person as a member of the group."

When asked, "Does your county have any 4-H programs for special needs individuals," nearly thirty percent (29.5%) said yes, while 61.5 percent replied they did not. Over sixty percent (66.7%) responded yes when asked, "Does your county have any special needs youth in your clubs? When asked, "would you be interested in becoming involved in a 4-H program for special needs youth," less than four percent (3.8%) indicated they would be interested, five percent (5.1%) replied no. The majority (91.0%) of those surveyed did not respond to the statement assessing their interest in becoming involved in a 4-H program for special needs youth.

When asked, "Have you had any experience with special needs youth in 4-H programs?" Over seventy percent (71.8%) replied yes they had some experience, while nearly a fourth (23.1%) indicated they had no experience with special needs youth in 4-H programs and four (5.1%) did not respond to the question.

The following conclusions are based on the interpretations of the data collected in this study. A majority of Extension agents and program assistants have special needs youth in their 4-H programs. Even though special needs youth are present in 4-H programs (66.7%), only a (3.8%) of Extension agents and program assistants would be interested in becoming involved in a 4-H program designed specifically for the special needs youth.

A majority of the Extension agents and program assistants have experience with special needs youth in 4-H programs. A substantial number (80%) of agents and program assistants agree that training should be offered to 4-H leaders about special needs youth prior to starting programs.

A majority of Extension agents and program assistants would be willing to accept special needs youth as 4-H members. Some types of special needs youth that were identified as being involved in 4-H programs were attention deficit hyper disorder (ADHD), autistic, attention deficit disorder (ADD), hearing impaired, physically impaired, cerebral palsy (CP), visually impaired, behavior disorder (BD), multiple sclerosis, down syndrome, and educable mentally retarded (EMR). This is contrary to Coleman's (1982) study that found leaders expressed concern about the responsibility of having handicapped youth as club members when indicating their willingness to accept them.

Some counties offer programs for special needs youth. Programs for the special needs youth include special lamb project as part of the livestock program. They are included in all 4-H activities, camp, community clubs, and special interest projects. Other 4-H clubs mainstream and integrate everyone into regular 4-H programs and activities. Slightly less than two-thirds of the counties (62%) did not have special programs for special needs youth.

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***West Virginia AG ED NEWS and VIEWS* —** November - December 2004

Important Dates

Jan 7-9	State FFA Officers' Winter Planning Meeting	Cedar Lakes
Jan 28-30	State Winter Leadership Conference	Cedar Lakes
Feb 3-6	National Agricultural Education Inservice	Indianapolis, IN
Mar 11-13	State Ham, Bacon, and Egg Show & Sale	Charleston
Apr 8	Stockman's Contest at WV Beef Expo	Jackson's Mill
Apr 15	State FFA Governing Body Meeting	Cedar Lakes
Apr 23	State FFA and 4-H Equine Judging Contest	Salem
Apr 28	WV Envirothon	Jackson's Mill

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