The fall Advisory Committee meeting was conducted on Oct 9, 2009. Ben Weinheimer of the Texas Cattle Feeders Association succeeded Scott Averhoff (Texas Corn Producers Board representative) as the new chair and Mark Stehno of Land O’Lakes Purina was elected vice-chair. Joining the Advisory Committee in 2009 were Brad Johnson, Northeast TX Farmers Coop, Jimmy Roppolo, Farmers Co-op of El Campo, Brent Clark, Premier Ag and Shawn Griffin, Griffin Industries.

An overview of the Office’s Agricultural Analytical Service and Texas Feed and Fertilizer Control Service was presented prior to the business meeting.

Ricky Schroeder discussed the registration and compliance area of OTSC; bringing the current feed and fertilizer registration numbers to the group. They are as follows:

Feed Licenses - 3634, Total Products - 41,476, Guarantors Reporting Tonnage- 2079 (May report annual products also), Guarantors Reporting Annual Only - 361, Total Annual Products - 7439, Facility Only - 1555, Fertilizer Permits - 1057, Total Products - 12,346, Firms Reporting Tonnage - 989 (May report annual products also), Firms Reporting Annual Only -68, Total Annual Products - 771.

Ben Jones presented information on the Texas Feed and Fertilizer Control Service plan of work. The regulatory program is science-based and weights the analysis schedule based on risk. Feed and fertilizer hazards considered in the plan of work are mycotoxins, microbiological contaminants, heavy metals, medicated feed additives, and prohibited mammalian protein.

FY 2010 Annual Work Plan includes:

- 4050 feed samples including 980 mycotoxin samples, 500 microbiological samples for Salmonella and E. coli 0157:H7, 500 BSE samples for prohibited animal protein presence evaluated using microscopy and PCR, and 1750 fertilizer samples.

FY 2010 Mycotoxin Surveillance Plan Includes:

- 980 samples for aflatoxin (B1, B2, G1, and G2), furazolidone (B1) including animal sickness investigations and dairies that are “off-line.”

FY 2010 Microbiological Surveillance Plan Includes:

- Salmonella, E. coli 0157:H7 and other pathogens of concern.

The FY 2010 Inspections, Audits and Investigations using FDA Grants and Contracts:

- 300 BSE - FDA grant (transporters and on-farm), 175 BSE - FDA contract (feed manufacturers), 9 GMPs - FDA contract (feed manufacturers), Grain elevator audits for cause, Fertilizer BMPs for cause, Animal death/animal sickness for cause, dairies “off-line”

Roger Hoestenbach presented information on the Texas Feed and Fertilizer Control Service compliance activities. Since adoption of a risk-based approach to the plan-of-work, violations have increased since OTSC focuses resources on firms with higher violation levels.
State for Mycotoxin Occurrence (BMP’s)

Aflatoxin and fumonisin action levels are 20 ppb and 5 ppm, respectively. Grain that exceeds these levels is adulterated and becomes commercial feed as defined in the Texas Agriculture Code, Chapter 141. Commercial feed grain handlers distributing adulterated grain must be licensed with OTSC, label the grain, channel grain to the appropriate markets, report tonnage and pay inspection fees (19 cents/ton). Grain that exceeds 300 ppb aflatoxin may be blended and commercially distributed after submission and approval of a blending plan. Grain that exceeds 500 ppb aflatoxin has no commercial feed value and must be disposed of after submission and approval of a disposition plan. The 2009 corn crop possessed aflatoxin and fumonisin above the action levels throughout most of Texas.

The Office of the Texas State Chemist Advisory Committee recommended development of best management practices (BMP’s) for producers and grain handlers to help mitigate this problem and ensure compliance with the Feed Control Act.

Best Management Practices (BMP’s):
- Collect a 10 pound sample from incoming grain
- Grind the entire grain sample using a Romer or Viking mill before sample reduction
- Use testing methods approved by either USDA or AOACI
- Store grain over the action level separately (if possible)
- Test incoming unit trains
- Test incoming grain from farm storage
- Do not commingle grain exceeding the action level with grain below the action level during reclaim (This practice is not permitted by law)
- Correctly label grain exceeding the action level.

A Mycotoxin Working Group comprised of stakeholders, OTSC staff and Advisory Committee members and faculty identified research, education and regulatory priorities to mitigate mycotoxin occurrence in Texas. Significant progress has been made in high priority areas including atoxigenic fungi, sampling, surveillance and monitoring of commercial grain handlers and mitigation techniques.

During 2009, all commercial grain handling facilities were visited and the level of compliance assessed. The OTSC collected approximately 525 corn and sorghum samples during harvest to evaluate the incidence of aflatoxin and fumonisin. Samples, approximately 10 pounds in weight, are shipped to the OTSC laboratory in College Station, TX for analysis and those exceeding the action levels for aflatoxin or fumonisin are reported to the company where the sample was obtained and to the area investigator.

Progress of sample analysis and final results are available on the OTSC website (http://otscweb.tamu.edu/Default.aspx) using the Electronic Analytical Reporting System (EARS) found in Reports by typing in the sample identification number which can be found on the sample collection form provided to the company at the time of inspection. Blending plans for corn over 300 ppb aflatoxin and disposition plans for corn over 500 ppb are required.

Corn and cottonseed containing >300 to ≤500 ppb aflatoxin requires a blending permit issued by the Office of the Texas State Chemist. In crop year 2009, four elevators received grain >300 to ≤500 ppb aflatoxin, requiring a blending plan. To date, three blending plans have been approved.

Corn and cottonseed containing >500 ppb aflatoxin may not enter commerce and a record of disposition shall be submitted to the Office of the Texas State Chemist. In crop year 2009, eight elevators received grain >500 ppb aflatoxin, requiring a record of disposition. To date, three records of disposition have been approved.
Results of Eldorado Chemical Fire

On Thursday, July 30, 2009 a fire at the Eldorado Chemical Co. fertilizer plant in Bryan, TX made local, state and national news. The plant handled ammonium nitrate as one of their materials for blended fertilizers. The fire caused the evacuation of area homes and businesses. An Incident Command Post was set up on Highway 21 west of the fertilizer plant and local, state and federal agencies were involved with this emergency incident concerning public health and safety. Agencies present were Brazos County Sheriff, DPS, Bryan Fire Department, Brazos County Volunteer Fire Departments, Brazos County Constables, Office of the Texas State Chemist, TCEQ, EPA and CRT (Civilian Response Team). There were also some outside air and environmental experts and firms that were called in to provide additional expertise.

OTSC IT Update: Virtual Server

Server virtualization allows virtualized workloads to exist on a single physical server. It provides the ability to run applications in separate, isolated partitions (separate "virtual machines") within a single server. Widely used in enterprise and cloud computing datacenters, each virtual machine runs its own operating system and applications and can be moved or copied from one server to another for load balancing, to expand processing capability and to recover from hardware failure.

Two virtual servers are setup at the OTSC to handle the database servers, web and email server, applications servers, and a new Quality Assurance and Test system. Server virtualization provides many benefits. A virtual server saves physical space and power consumption because many virtual servers can run on one physical server. Virtualization allowed several old servers to be retired, or to be utilized for other server needs. Virtualization also allowed the creation of new servers without the cost of purchasing new server hardware. Other benefits include the ability to copy a virtual machine from one physical server to another. In the OTSC Virtual Server Configuration two virtual server system designs are detailed. The Virtual Production Server hosts all the virtual production servers utilized daily at the OTSC. The Virtual Backup and QA server has a copy of all the virtual systems that are on the Virtual Production Server. The copied systems are in a powered off state. If any failure occurs with one of the virtual production systems, that virtual system can be turned on and its backup on the virtual backup server can be turned on. This feature greatly decreases down time for a server failure.

The Quality Assurance and Test system is a complete replica of all the production systems. This allows the IT team to perform upgrades, installations, and configuration changes to the servers; and test to make sure all is working properly. This QA and Test process eliminates the risk of a production server failure and loss of OTSC staff productivity.

Server virtualization is one part of the IT teams’ efforts to provide better service, reduce costs, and increase staff productivity.
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OTSC Welcomes Dr. Robert Kaitho

Robert Kaitho joined the OTSC team in August 2009. He will be performing analytical work, assist in label reviews and work with the rapid response team project evaluating import data. Robert transferred from the department of Eco-System Science and Management at Texas A&M where he served as an Associate Research Scientist. He received a Bsc in Agriculture from University of Nairobi (Kenya), an Msc in Animal Science and PhD in Animal Nutrition both from Wageningen Agricultural University (Netherlands).

Robert began his work at the Kenya Agricultural Research Institute as a Research Scientist in a smallholder dairy system, developing feeding and management packages for 8 years. He then joined the International Livestock Research Institute as a Research Scientist in a intensive dairy system, developing a small holder zero grazing management and feeding system. In January 1998, he joined the TAMU team working on various programs in East Africa. One of the projects was funded by the Global Livestock Collaborative Research Support program where they developed a Livestock Early Warning System for monitoring nutrition and livestock health for food security of humans in pastoral areas.

Most recently, Robert designed and developed communication and information technology to create a livestock information network and knowledge system to support decision making at multiple scales from policy makers to pastoral communities within livestock market chains of Ethiopia, Kenya and Tanzania. This system provides near real time market information which is available on request via SMS text message system on cell phones, email and on the internet.

Robert enjoys jogging, playing tennis and fishing.

OTSC Implements New E-mailing System

OTSC has now implemented an automated e-mailing system. This system automatically e-mails a copy of the chemical analysis report of samples taken by investigators. The email will be sent at the same time the hard copy of the report is mailed. This enables firms to receive this information as timely as possible. If you would like to update your firm’s information by adding an e-mail address please contact the office at 979-845-1121 and anyone in the Registration and Labeling Department will be able to assist you.