Planting Date and Seed Treatment Effects on Wheat Diseases and Insect Pests  
Bob Hunger, Extension Pathologist

Winter wheat is often used as a “dual - purpose” crop in Oklahoma because it is grazed by cattle in the fall and winter and then harvested for grain in the early summer. In a “grain - only” system, wheat is generally planted in October, but in a “grazing + grain” system wheat is planted in early to mid - September to maximize forage production. Planting wheat this early significantly increases the likelihood that diseases such as wheat streak mosaic virus, high plains virus, the aphid/barley yellow dwarf virus complex, and root and foot rots will be more prevalent and more severe.

**Wheat streak mosaic virus (WSMV) & the high plains virus (HPV)**

WSMV and HPV are transmitted by the wheat curl mite. Mites and these viruses survive in crops such as wheat and corn, as well as many grassy weeds and volunteer wheat. In the fall, mites spread to emerging seedling wheat, feed on that seedling wheat, and transmit the virus to the young wheat plants. Wheat infected with WSMV or HPV in the fall is either killed by the next spring or will be severely damaged. **No seed treatments are effective in controlling WSMV/HPV.** However, planting late in the fall (after October 1 in northern OK and after October 15 in southern OK) and controlling volunteer wheat are two practices that provide some control of WSMV and HPV. **It is critical to completely destroy volunteer wheat at least two weeks prior to emergence of seedling wheat** because wheat curl mites have a life span of 7 - 10 days. Thus, destroying volunteer wheat at least two weeks prior to emergence of seedling wheat should greatly reduce mite numbers in the fall. For more information on WSMV and HPV, see OSU Extension Facts 7636 (WSMV) or go to the Plant Disease & Insect Diagnostic Laboratory web page at:http://www.ento.okstate.edu/ddd/hosts/wheat.htm

**Aphid/barley yellow dwarf virus (BYDV) complex**

BYDV is transmitted by many cereal - feeding aphids. Fall infections by BYDV are the most severe because the virus has a longer time to damage the plant as compared to infections that occur in the spring. Several steps can be taken to help control BYDV:

1. First, a later planting date (after October 1 in northern OK, and after October 15 in southern OK) helps to reduce the opportunity for fall infections.
2. Second, some wheat varieties (e.g., Custer, 2174, and Ok102) seem to tolerate aphids and/or BYDV better than other varieties; however, be aware that no wheat variety has absolute resistance to the aphid/BYDV complex.
3. Third, control the aphids that transmit BYDV. This can be done by applying contact insecticides to kill aphids, or by treating seed before planting with a systemic insecticide. Unfortunately, by the time contact insecticides are applied, aphids frequently have already transmitted BYDV. Systemic seed - treatment insecticides can control aphids during the fall after planting, but in some years aphids are sparse in the fall and planting insecticide treated seed in a year with no or sparse aphids in the fall would not be as beneficial as in years when aphids are numerous. Be sure to thoroughly read the label before applying any chemical. For more information on the aphid/
barley yellow dwarf virus complex, go to the web page for the Plant Disease and Insect Diagnostic Laboratory at:

Root and foot rots
These include several diseases caused by fungi such as dryland (Fusarium) root rot, Rhizoctonia root rot (sharp eyespot), common root rot, take-all, and eyespot (strawbreaker). Controlling root and foot rots is difficult. There are no resistant varieties, and although fungicide seed treatments with activity toward the root and foot rots are available, there activity usually involves early season control or suppression rather than control at a consistently high level throughout the season. Often, there also are different “levels” of activity related to different treatment rates, so again, CAREFULLY read the label of any seed treatment to be sure activity against the diseases and/or insects of concern are indicated, and be certain that the seed treatment(s) is being used at the rate indicated on the label for activity against those diseases and/or insects. Late planting (after October 1 in northern OK, and after October 15 in southern OK) also can help reduce the incidence and severity of root rots, but planting late will not entirely eliminate the presence or effects of root rots. If you have a field with a history of severe root rot, consider planting that field as late as possible or plan to use it in a “graze-out” fashion if that is consistent with your overall plan. For some root rots, there are specific factors that contribute to disease incidence and severity. For example, a high soil pH (>6.5) greatly favors disease development of the root rot called take-all. Thus, when liming fields to correct for acid soils, be sure not to raise the pH above this level. Another practice that can help limit take-all and some of the other root rots is the elimination of residue. However, elimination of residue by tillage or burning does not seem to affect the incidence or severity of eyespot (strawbreaker). For more information on wheat root rots, take-all and eyespot (strawbreaker), see OSU Extension Facts F-7622 or go to the web page for the Plant Disease and Insect Diagnostic Laboratory at:

Test Corn for Aflatoxin Before Buying
Greg Highfill
NW Area Livestock Specialist

With area corn harvest in the early stages, elevators are reporting that several loads have tested positive for the presence of aflatoxin. Aflatoxin is a toxic chemical produced when the mold Aspergillus flavus attacks and grows on corn and other crops. Aflatoxin is usually a problem in years with extremely high temperatures, particularly when coupled with water deficiency and insect damage. Temperatures ranging from 80 to 100 degrees F and a relative humidity of 85 percent are optimum for Aspergillus flavus growth and aflatoxin production. On corn, in the field, Aspergillus flavus is evident as a greenish-yellow to yellowish-brown, felt like or powdery mold growth on or between the corn kernels. Mold growth is more likely to develop adjacent to or in insect damaged kernels on ears. Aspergillus flavus usually infects by airborne spores in the field during grain filling or during storage and handling.

Aflatoxin Problem Levels
The concern from aflatoxin contamination comes from the toxicity to animals and humans. The main effect of aflatoxin consumption is the resulting liver damage. On rare occasions, livestock can die from ingesting aflatoxin-contaminated feed. Most commonly, aflatoxin reduces the feed efficiency and reproductive rate of livestock. It can suppress the immune system of animals, leading to more frequent occurrence of infectious diseases. Young animals are usually more sensitive to aflatoxins than older ones.

The Food and Drug Administration (FDA) has established an “action level” of 20 parts per billion (ppb) for aflatoxins in corn for interstate commerce. At this level federal agencies may take action, including seizure of the corn or prohibition of its sale. Elevators do not accept corn with 20 ppb or more of aflatoxin unless they have a known alternative use. Blending aflatoxin-contaminated grain with clean grain is not legal except in advance of direct feeding operations. Blended grain may not be sold in general commerce. Once aflatoxin levels are known or suspected, it is the owner’s responsibility to isolate that corn from general commerce. The FDA guidelines for acceptable aflatoxin levels in corn are based on the intended feed use. The maximum allowable levels for
livestock include less than 20 ppb for young animals and dairy cattle, less than 100 ppb for breeding cattle, less than 200 ppb for finishing swine and less than 300 ppb for finishing cattle. Because human food has a zero tolerance level for aflatoxin, including milk, final rations for lactating dairy cattle should have no detectable aflatoxin present.

**Quality Control**

All marketing stations for corn will monitor the aflatoxin level of each load of corn in the normal course of business. Currently, two types of screening tests are available: blacklight tests and commercial test kits. The blacklight test is a visual inspection for the presence of a greenish-gold fluorescence under ultraviolet light. Commercial test kits with immunoassay or ELISA techniques are available for on-site tests for aflatoxin. Immunoassay analysis is based on the detection of specific proteins found in aflatoxins. For quantitative aflatoxin levels, samples should be sent to a certified laboratory for testing. Cattle producers that purchase or retain corn for on-farm use should follow the same quality control measures that feed companies follow including aflatoxin screening. Aflatoxin contamination varies widely within a field and buyers must be diligent in obtaining a representative sample to accurately appraise aflatoxin levels. The recommended procedure is to sample during loading or transfer of grain by passing a cup through a moving stream of grain at frequent intervals and combining the samples for a representative, composite sample. Probe sampling is acceptable if grain is not being moved or transferred. Take a number of probes and combine these into one sample of at least 10 pounds. This sample should be mixed thoroughly and then a subsample tested. Livestock producers should also monitor the aflatoxin levels in corn co-product feeds, such as distillers dried grains, because aflatoxin becomes more concentrated in the co-product feed following the starch removal process.

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**Fall Armyworms Have Moved in to Oklahoma**

Dr. Tom Royer, OCES Extension Entomologist

Tom Royer, extension entomologist at Oklahoma State University has received numerous reports of heavy fall armyworm infestations in sorghum fields throughout Oklahoma during the latter part of August. He recently received a report of fall armyworms attacking grass pastures in southern Oklahoma. Royer says these reports suggest that we could see a larger generation in early to mid September that could cause some serious problems for grass pastures, seedling wheat and some residential lawns. Fall armyworms are caterpillars that directly damage sorghum heads, fescue and bermudagrass pastures, seedling wheat, soybean and residential lawns. Since they do not overwinter in Oklahoma, fall armyworms tend to occur later in the summer as populations build up in Gulf States and adult moths migrate northward. Female fall armyworm moths lay up to 1000 eggs over several nights on grasses or other plants. Within a few days, the eggs hatch and the caterpillars begin feeding. Caterpillars will complete a generation in 18-28 days and molt six times. Newly hatched fall armyworms are white, yellow, or light green and darken as they mature. Mature fall armyworms measure 1½ inches long with a body color that ranges from green, to brown to black. They can be distinguished by the presence of a prominent inverted white "y" on their head. However, infestations need to be detected long before they become fully mature caterpillars. Small larvae do not eat through the leaf tissue, but instead, scrape off all of the green tissue and leave a clear membrane that gives the leaf a "window pane" appearance. After the larvae have molted four times, they can completely consume leaf tissue. It is at this stage that they cause most of the serious damage to a grass pasture or lawn.

An Auburn University entomologist developed an easy-to-use scouting aid for pasture that consists of bending a wire coat hanger into a hoop, placing it on the ground and counting fall armyworms in the hoop. Examine plants at several locations along the field margin as well as in the interior. Look for "window paned" leaves and count all sizes of larvae. The hoop covers about 2/3 of a square foot, so a threshold in pasture would be an average of two or three ½ inch-long larvae per hoop sample.
“Don’t take a chance on losing a grass crop,” Royer says; “this method is simple, effective, and can help a producer get a head start on managing a potentially devastating fall armyworm infestation.” Royer says that smaller caterpillars (1/2 inches long or less) should be targeted for control for two reasons. First, the caterpillars don’t cause severe damage until they reach one inch long, and secondly, smaller caterpillars are much more susceptible to insecticide control than larger caterpillars. Dr. Royer offers a final reminder; “our growers won’t escape the potential danger from fall armyworms until we get a good killing frost, so they should not let their guard down.” For control options, consult OSU Fact Sheet CR-7193; Management of Insect Pests in Rangeland and Pasture.

Charcoal Rot of Soybean
John Damicone, Extension Plant Pathologist

Several cases of charcoal rot of soybeans have been recently diagnosed this year. Charcoal rot is a root and lower stem disease caused by the fungus Macrophomina phaseolina which attacks a wide range of crops including corn, grain sorghum, beans, peanuts, and cucurbit vegetable crops. Charcoal rot along with nematode diseases are probably the most damaging diseases of soybeans in Oklahoma. Most plant diseases are favored by wet weather, but charcoal rot becomes apparent when hot and dry conditions prevail like we experienced this year in late July and early August. Symptoms appear after flowering, most often during the pod-fill stage of development and when plants are stressed by high temperatures and low soil moisture. The fungus is considered a weak plant parasite in that it probably infects plants earlier in the season and produces symptoms when plants are stressed. Irrigated soybeans and those that fill pods during periods of weather and soil moisture favorable for soybean growth rarely are affected. Symptoms of charcoal rot appear in patches of up to an acre or more in size where plants turn yellow and wilt with their leaves remaining attached. In some years plants on high spots of the field may be affected while in other years those in low spots and along terraces develop symptoms. A brownish discoloration is sometimes evident in the pith of wilted plants and microsclerotinia can be found by scraping away the surface bark of lower stems near the soil line. Plants are eventually killed and the disease is easiest to diagnose on dead plants that have dried down. A charcoal gray colored discoloration of the internal lower stem and tap root is visible after scraping off the surface bark or splitting the lower and tap roots. The gray discoloration is a result of the production of numerous microsclerotia imbedded in the woody stem and root. A hand-lens is useful for viewing the microsclerotia. The microsclerotia are the resistant survival structures (seeds) of the fungus which survive in the soil. Except where adequate irrigation is available to prevent moisture stress, management strategies are aimed at escaping the disease or lessening its impacts. Crop rotation is of limited value because the fungus reproduces on most summer crops grown in Oklahoma and survives for years in the soil as microsclerotia. Tillage practices appear to have little impact on the disease. Charcoal rot can often be minimized by planting full-season varieties adapted to the area (Maturity group 5 and 6’s) at the proper planting time so that pod set and pod fill periods escape stressful periods by occurring later in the season. Maintaining adequate but not excessive seeding rates and soil fertility levels are also recommended practices for reducing charcoal rot.

The Kay County Extension Office will be closed on Monday, September 1st and Monday, October 13th.

COW/CALF CORNER
Cattle Markets Influenced by Inventory and Timing
Derrell Peel, Extension Livestock Marketing Specialist

The most recent USDA Cattle on Feed report confirms that overall feedlot inventories remain below last year’s levels. The August 1 feedlot inventory of 9.689 million head is the lowest monthly feedlot total since August, 2004. The July marketing’s number was well anticipated in pre-report estimates at 102 percent of one year ago. However, the July placements number of 102 percent of a year earlier was below most analysts’ estimates and below the average estimate of 106 percent of last year. This likely is partly due to
continued shifts in seasonal cattle production patterns. The high cost of feedlot finishing and the resulting forage production incentives appear to be keeping more cattle in the country through the summer. It is one more sign that the industry is returning once again to a more yearling based production system and more dominated by the annual forage cycle. This might suggest a relatively large run of yearling feeders in the fall but there is also increased incentive for retained ownership of calves and likely smaller runs of calves in the traditional fall weaning period. In general it appears that the beef industry is adding 3 to 5 months of age to most cattle in order to utilize more forage in beef production. On August 19, USDA also issued the United States and Canadian Cattle report. The report pegs the all cattle and calves total for July 1 at 119,495 million head, down one percent from last year. This value is also the lowest July 1 total for the two countries in the last decade. The BSE-induced build of cattle inventories in Canada is just about liquidated and the more recent trend of larger imports of Canadian cattle to the U.S., resulting from exchange rate impacts and poor competitiveness of Canadian cattle feeding and packing, should also moderate as market flows of animals catch up with inventories. U.S. imports of Mexican cattle are down 35 percent this year from last year’s reduced levels as a result of limited inventories and strong beef demand in Mexico. All in all it appears that the fundamental cattle supply situation in North America will remain tight and supportive of prices for the next couple of years at least and likely longer.

Forage Testing- A Key Decision Aide in 2008
Glenn Selk, Extension Cattle Reproduction Specialist

Oklahoma producers find themselves out of their "comfort zone" as they go into the winter of 2008. Many have adequate forage supplies. However quality of the hay may be different than in the past. Because of low, or no fertilizer applications, and because custom hay crews were over-booked and later than usual, the grass hay quality likely is not as good as in previous years. In some spotty areas, the hay may have been soaked with a heavy rain while still on the field or in the windrow. Forage analysis can be a useful tool to remove some of the mystery concerning the hay that producers will feed this winter. The high cost of protein and energy supplements are further fuel to this advice. Testing the grass hays this year for protein and energy content will help the producer design winter supplementation programs most appropriate for the forage supply that is available. It is hard to think of any year when forage testing was more important. There are several good methods of sampling hay for forage analysis. Most nutritionists would prefer to use a mechanical coring probe made specifically for this purpose. The coring probe is usually a stainless steel tube with a serrated, cutting edge. It is 1 inch in diameter and is designed to fit on a 1/2 inch drill or brace. Cordless drills make these tools quite mobile so that the hay bales to be tested do not have to be hauled to be near an electrical outlet. The hay samples are placed in paper or plastic bags for transfer to a forage testing laboratory. Cores are taken from several bales at random to obtain a representative sample to be analyzed. Grab samples can also be obtained and tested. To receive the best information, grab several samples by hand from about 6 inches into the open side of the bale or the middle third of a small round bale. Place all of the sample in the bag. Do not discard weeds or stems, just because they look undesirable. They are still part of the hay that you are offering to the livestock. Be certain to label the forage samples accurately and immediately, in order for the laboratory analysis to be correctly assigned to the proper hay piles or bales. Obviously the more samples that are sent to the laboratory for analysis, the more information can be gained. Just as obvious is the fact that as the number of samples increase, the cost of forage testing increases. Any of the potential nitrate accumulating hays should be tested for nitrate concentration. Samples can be taken to the OSU County Extension office near you and then sent to the OSU Soil, Water, and Forage Testing laboratory in Agricultural Hall on the campus at Stillwater.

Private Applicators!
The private applicator testing packets are available in the extension office. Cost is $15 per packet. The current license expires the last day of December 2008. Look for a private applicator meeting this fall.
OK Steer Feedout Entries

The date has been set for the 2008-2009 Spring OK Steer Feedout. **Spring born** calves should be nominated by October 29, 2008 and delivered to Limestone Feedyard (previously Oklahoma Feeders) near Guthrie by 1:00 p.m. on November 5, 2008. The updated rules and regulations along with current entry forms are available at the extension office or call Ryan at 580-362-3194 to receive them by mail. The OK Steer Feedout program is designed to give cattlemen a look at where they are at by collecting information on the following:

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<td>Tenderness Score ($15, optional)</td>
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Kay County Master Gardener Calendar of Events

- **September 4**th 9:00 a.m.: Monthly Master Gardener Meeting at Cann Garden House
- **September 9-13**: Kay County Fair
- **September 30**th: Ponca City Garden Council 100th Birthday
- **October 2**nd: Field Trip Winfield, KS

The Latest on Carbon Credits

Jason Warren, Extension Soil and Water Conservation Specialist

Today most everyone is aware of the issues related to the impact of human activities on atmospheric CO$_2$. Globally, there are efforts being made to curb the increase of its concentration in the atmosphere. Efforts are also being made here in Oklahoma. Therefore, I thought I would share some of the recent activities related to CO$_2$. In 2001, the Oklahoma Legislature passed the Oklahoma Carbon Sequestration Enhancement Act. This act called for the Oklahoma Conservation Commission to identify existing or potential carbon sinks located in OK. They were also required to develop rules and uniform standards and criteria for the certification of these carbon sinks and the verification of carbon sequestered by the sinks. In July 2008 the OCC adopted rules for the Oklahoma carbon sequestration certification program. The program provides a state standard of certification and verification for those providing, aggregating, and verifying carbon offsets in Oklahoma. Alterations in agricultural land management can provide sinks for carbon sequestration; therefore this legislation impacts Oklahoma agriculture. Carbon stored by certain agricultural practices can be quantified and sold to entities such as electric companies to help them offset their emissions. Since the passing of the CSE Act, the potential for carbon sequestration through the adoption of four land management practices has been estimated for Oklahoma. This list of management practices does not include all practices that have the potential to sequester carbon. Nor does it include all future options for land owners interested. Attention is currently being given to the practices listed below because sequestration values are available and they also reduce non-point source pollution delivered to surface waters.

These land management practices include:

- No-till farming is estimated to sequester 0.4 metric tons of CO$_2$ per acre per year.
- Riparian reforestation is estimated to sequester 0.25 mt of CO$_2$ per acre per year.
- Improved rangeland management is estimated to sequester 0.52 to 0.20 mt of CO$_2$ per acre per year.
- Improved pastureland management is estimated to sequester 1.0 to 0.4 mt of CO$_2$ per acre per year.
Because these CO$_2$ sequestration values are modeled estimates there is a substantial degree of uncertainty as to their accuracy. However, these values can be reasonably substantiated and Oklahoma will likely use these values for the state wide carbon credit program, in which eligible producers may receive carbon credit payments to implement these management practices. In an effort to develop and test the framework for the state wide program, the Conservation Commission has entered into an agreement with the Western Farmers Electric Cooperative to conduct a “carbon credit pilot program.” Those producers in this program that implement the above mentioned management practices will receive a carbon credit payment of $3.50 per metric ton of CO$_2$. The success of this program will result in an additional source of revenue for producers across the state. The Plant and Soil Science Department is currently engaged in research to improve estimates of soil carbon sequestration. Look for more information as we learn more about this exciting program.

GARDEN TIPS FOR SEPTEMBER/OCTOBER
David Hillock

SEPTEMBER

Landscape
· Watch for fall specials at garden centers and nurseries since fall is a great time for planting many ornamentals.
· Choose spring flowering bulbs as soon as available.
· Plant cool season annuals like pansies, ornamental cabbage or kale, snapdragons and dusty miller when temperatures begin to cool.
· You have all of September to plant cool season vegetables like spinach, leaf lettuce, mustard and radishes, and until the middle of September to plant rutabagas, Swiss chard, garlic and turnips.
· Watch for and control any late infestations of tree webworms.
· Twig girdler insects should be controlled if large numbers of small branches of elms, pecans, or persimmons are uniformly girdled from the tree and fall to the ground.
· Begin to reduce the amount of light on outside tropical houseplants by placing them under shade trees before bringing them indoors for the winter.

Lawn
· Last nitrogen fertilizer application of the year on warm-season grasses should be applied no later than September 15.
· Winter broadleaf weeds like dandelion will begin to emerge in late September, which is also the best time to control them with a 2,4-D type herbicide.
· If pre-emergent control of winter-annual weeds (henbit, chickweed, annual bluegrass, etc.) is desired in lawns, the application should be completed by the 2nd week of September.

NOTE: Do not treat areas that will be seeded in the fall.
· Continue bermudagrass spray program with glyphosate products for areas being converted over to tall fescue this fall.
· Plan to seed bluegrass, fescue, or ryegrass as needed in shady areas in mid- to late-September. Fall is the best time to establish cool-season lawns.
· White grub damage can become visible this month. Apply appropriate soil insecticide if white grubs are a problem. Water product into soil.

OCTOBER

Turfgrass
· You can continue to replant or establish cool season lawns like fescue.
· The mowing height for fescue should be lowered to approximately 2 ½ inches for fall and winter cutting. Broadleaf weeds like dandelions can be easily controlled during October.
· Mow and neatly edge warm-season lawns before killing frost.
Ornamentals

- Plant cool-season annuals like pansies, ornamental cabbage or kale, snapdragons and dusty miller when temperatures begin to cool.
- Begin planting spring-flowering bulbs like tulips, hyacinths, crocus and daffodils.
- Good companion plants for bulbs are evergreen ground covers such as ajuga, vinca, English ivy, alyssum, potentilla, moneywort, thrift, phlox, oxalis and leadwort.
- Peonies, daylilies, and other spring-flowering perennials should be divided or planted now.
- Dig and store tender perennials like cannas, dahlias, and caladiums in a cool, dry location.
- Purchase trees from nurseries and garden centers at this time to select the fall color you prefer.
- Many perennials can be planted at this time and the selection is quite nice.
- Plant fall mums and asters and keep them watered during dry conditions. Don’t crowd since they take a couple of years to reach maturity.
- Plant container-grown trees and shrubs this month.
- Check and treat houseplants for insect pests before bringing them indoors and repot root bound plants.

Fruits & Vegetables

- Remove green fruit from tomato plants when frost threatens.
- Harvest Oriental persimmons and pawpaws as they begin to change color.
- There is still time to plant radishes and mustard in the fall garden.
- Use a cold frame device to plant spinach, lettuce and various other cool season crops for production most of the winter.
- Plant cool-season cover crops like Austrian winter peas, wheat, clover, and rye in otherwise fallow garden plots.
- Remove all debris from the garden to prevent overwintering of various garden pests.
- Start new planting bed preparations now with plenty of organic matter.

2008 Turfgrass & Landscape Field Day

The Horticulture and Landscape Architecture Department is making plans for a turfgrass field day to be held in Stillwater at the Oklahoma Botanical Gardens. This event will be held September 17, 2008. Registration forms are available at the extension office. Registration for the program will be from 7:45 a.m. to 8:30 a.m. with the program kicking off at 8:30 a.m. The program will consist of several educational tours on various subjects given by the state specialists and Horticulture and Landscape Department staff. Lunch will be served at noon to conclude the program. For more information and to register call the extension office at 580-362-3194.

Cattle/Goat Grazing Field Day

This is an interesting field day coming up on Saturday September 6th in Bartlesville, OK. This eastern Oklahoma field day will look at the economic impact multi species grazing system can provide. There will be several state specialists, area specialists, and county educators to present a wide variety of topics on cattle and goat grazing. A partial listing of those is economics of the enterprise, feed economics and using by-product feeds, and health considerations. Lunch will be sponsored by Farm Credit of East Central Oklahoma at noon. There will be a pasture tour following lunch to analyze the cattle and goat grazing system presented by Bob Woods, Northeast area agronomist. There is no cost to attend this field day. For more information call the extension office at 580-362-3194.
Grain Sorghum Field Tour

September 2, 2008
9 am
Bill and Louise Rigdon Farm
1/2 mile West of the intersection of R Street and Bender Road
Plot is on South Side of Road

The Kay County Oklahoma Cooperative Extension Center announces its annual Grain Sorghum Field Tour.

Program will include the following:

Grain Sorghum Production Information
Rick Kochenower, Area Research and Extension Agronomy Specialist

Grain Sorghum Insect Management
Dr. Tom Royer, State Extension Entomologist

Soil Fertility in Grain Sorghum
Roger Don Gribble, Area Extension Agronomy Specialist

There will also be several seed dealers present to discuss their varieties and answer questions.

Meeting Begins at 9:00 A.M.
Refreshments will be served
This newsletter is printed by the Kay County OSU Office Agriculture Programs. This is one way of communicating educational information. For subscriptions contact the local office. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement is implied. The Oklahoma Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, status as a veteran or disability in any of its policies, practices or procedures and is an Equal Opportunity Employer. USDA-Oklahoma State University and County Commissioners Cooperating. This information was produced at a cost of 1 cent per page for a total cost of 10 cents.

Editor, Ryan Sproul, Extension Educator, Agriculture/4-H, Kay County