## **5th Grade Conservation Field Day**

On April 21, 2010, the conservation district held a Conservation Field Day for the 5th Graders of Barber County. The day started with 35 students from both North Barber and South Barber watching as Supervisory District Conservationist Jarred Kneisel and Soil Conservation Technician Carl Jarboe demonstrated the effects of a rainfall simulator.

After dividing the students into three groups, we were ready for some small group rotations. One rotation was Jerry McNamar demonstrating a groundwater flow model. Jerry showed the students the effects of ground spills and how they can end up in your drinking water. Harold Kline demonstrated a stream flow trailer at a second rotation. Harold demonstrated before a rapt audience how changing a stream bank and adding things like logs to the river can change its course and cause destruction down river. The kids liked getting their hands in the "sand" and seeing what their ideas did to the stream. The third rotation was Sunflower RC&D coordinator Roger Masenthin and his recycling display. Roger's presentation on recycling included music and a game that kept the kids on their toes.

After a delicious sloppy joe lunch, sponsored in part by White's Foodliner, everyone gathered in one group again for the after-noon. Charlie Swank with Kansas Department of Wildlife and Parks (KDWP) started the afternoon out by bringing out snakes for the kids to see and feel. They even got to see one snake snack on a mouse. Chris Berens with KDWP followed with furs for the kids to identify and feel. The day concluded with Edible Soil as the final rotation. The kids all enjoyed their soil layers (Oreo's and pudding) before loading up and going back to the school.

The day was a great success and we are already looking forward to next year's field day!

### ACHIEVING A BETTER GRASS STAND, WITH PROPER COVER CROPS

United States Department of Agriculture • Natural Resources Conservation Service •9 W. 28th Ave Hutchinson, Kansas 67502 • Phone: (620) 663-3501 • FAX (620) 663-3866 Web: <u>http://www.ks.nrcs.usda.gov</u> Contact: Loren H. Frees, Resource Conservationist email: loren.frees@ks.usda.gov

With CRP applications in the process of being approved, it's time to start to think about establishing native grass stands. The best way to achieve a successful native grass stand starts with a good cover crop. There are several types of cover crops that can be used – Sorghum-Sudangrass, Wheat, Barley, Oats, Annual Rye or Buckwheat. Considering all of the types of cover crops, the tried and true best cover crop in this portion of Kansas is Sorghum-Sudangrass. The standing sudangrass needs to be between 8,000 - 10,000 pounds of dry matter when a killing frost comes in. To achieve the type of dry matter we are talking about, plant the cover crop the same time you would plant the sudangrass for hay production.

All of the cover crops listed above will work in Kansas, but there is big difference between the eastern, central, and western parts of Kansas. All of the cover crops will work east of 81 Highway or Interstate I-135. As we go west of this line, we need to start looking at which one will work the best. West of the highways listed above receive less rainfall and some areas receive quite a bit less. All of the cover crops, besides the sorghum-sudangrass, use quite a bit of moisture in the fall, thus taking away valuable moisture from the ground to establish the native grass.

With less moisture and less cover helping to establish the grass during seeding time (December I and May 15), annual weeds will start to grow when the spring rains come. Sunlight is an additional need for establishing a native grass stand, along with soil moisture, and although it can be expected to have some weeds present, it is important to manage them. The only options available to control the weeds are mowing, tillage or chemical weed control. As we know, tillage is out of the question, unless you want to start all over again. Chemical weed control can be used, unless you have planted forbs and legumes, thus making this option also out of the question, as the chemicals used would most likely eliminate those that are desirable as well as the undesirable kind. This leaves only mowing as an option to control the weeds when establishing your CRP grass stand. Mowing should be done prior to seed development in the weeds. Different weeds mature at different times, but most generally, when the weeds get greater then twelve (12) inches in height you need to start looking into what types of weeds are present in the field. If weeds like Kochia and Russian thistles are present, which are thick and dense, the field will need to be mowed. It will also be important to set your mower tall enough so that you are not cutting off your new native grasses. When the weeds in the field achieve a 24 inch height, mowing really comes into play and should be mowed back to the twelve (12) height. If you do not know what would be your best option and would like help, please contact the local NRCS field office or your county extension agent for assistance.

There are quite a few things to consider when establishing a native grass stand. Just planting and leaving it alone, most likely will be a failure, and will result in having to replant. Replanting is very costly, so we need to look into options that will give us the best results, an excellent grass, along with forbs/legumes in the CRP native grass stand. If you have any other questions beside the best cover crop, contact your local NRCS field office or your local County Agent.

While most folks recognize the benefits of burning their pastures, issues regarding liability, hazardous situations, and uncooperative weather conditions create an uneasiness about lighting that match. Keeping in mind that prescribed burning is part of the conservation plan for many EQIP and CRP contracts, the Conservation District sees education on burning issues as paramount to the safety and success of a prescribed burn.

The Conservation District will be hosting a Prescribed Burning Workshop on February 17, 2011 (time and location to be determined). The workshop will cover reasons for burning, burning techniques, burning conditions, burn planning, weather, and may other topics. There will also be discussion of the Kansas Smoke Management Plan and how it will impact producers.

The workshop is a collaboration of presenters from state agencies and local agency staff. Agencies involved in presenting the workshop will include Kansas Department of Wildlife and Parks, National Weather Service, Kansas Forest Service, NRCS, FSA, Barber County Conservation District, local fire departments and emergency management staff, and Kansas State University.

Posted in part by: Carol Blocksome, Ph.D Dept. of Agronomy Kansas State University

#### Caleb Papenhausen's "Consider This"

Consider this...Since the last general Conservation Reserve Program (CRP) sign-up, there has been over 12 million acres that has come out of the program. Sure, we just ended a new sign-up last month, but only 4.5 million acres is going back in, and we have no idea whether there will ever be another sign-up or not. That's a lot of lost habitat folks!

I may be preaching to the choir here, but I know there are a few of you who have expiring CRP or fields that are hard to turn a profit on, and yet you didn't sign-up. It's OK, really! You can always give Continuous CRP a go. What's not to like? It's the generous annual rental payments, isn't it? Or perhaps the cost-share for managing the CRP?, or maybe and it's just the up-front incentive payment you get for establishing new continuous CRP grass stands?

Well, if monetary incentives and loss of acres don't tug your heart strings at all, then maybe this will...

- Researchers found that, in prime pheasant habitat, a 4 percent increase in CRP herbaceous vegetation was associated with a 22 percent increase in pheasant counts. (Western EcoSystems Technology, Inc., study)

- The combined size of new wildlife habitats established by the CRP is twice as large as the National Wildlife Refuge System and all State-administered wildlife areas in the contiguous 48 States combined (The University of Florida extension service)

- Northern bobwhite was positively related to the density (# patches / km<sup>2</sup>) of grass CRP  $\leq$  4 year old. Thus, bobwhite would benefit from increasing the density of grass CRP patches in the landscape and from mid-contract management on existing contracts in this region (i.e., Kansas, Nebraska, Missouri). (FSA CRP study "Estimating Wildlife Response to the Conservation Reserve Program: Bobwhite and Grassland Birds")

True, CRP isn't perfect, but it's still a tremendous tool for improving wildlife and with the new rules, that has never been more true. The NRCS and FSA have come a long ways in improving the program from a conservation stand point and they should be applauded for that. Monoculture grass stands were once the norm, and today native grass mixtures are used. In the most recent sign-up, there were even additional incentives provided to plant more diverse mixtures and pollinator habitat! For those of you unfamiliar with "pollinator habitat," it should probably just as well be called "Upland Bird" habitat. Essentially, pollinator habitat is a diverse forb stand of at least a half acre, which you all know, attract those all important insect populations for the young pheasant, quail, and prairie chickens.

I'll keep this short, but in conclusion, I'd like you to consider this... CRP is very important to wildlife conservation and we need to do what we can as wildlife advocates to spread the word, utilize the program, and keep pushing for improvements in how it is implemented. Until next time, I'll leave you with this. "We shall never achieve harmony with land, any more than we shall achieve absolute justice or liberty for people. In these higher aspirations, the important thing is not to achieve but to strive." (Aldo Leopold).

Caleb Papenhausen Farm Bill Wildlife Biologist Pheasants Forever/Quail Forever cpapenhausen@pheasantsforever.org

## Equipment Available for Use

12' Horizon Grass Drill \$5/acre \$250 Deposit 15' Great Plains Drill \$9/acre \$500 Deposit Drip Torch \$5/day Water Backpack \$5/day Tree Spade \$100/day \$250 Deposit 1-2 trees \$50

Survival rate for transplanted trees is best when trees are moved in any month with the letter "r" in it (fall is better than spring). Trees measuring 4" in diameter, a foot off the ground do very well. The tree spade is self contained, digging a hole 44" across and 36" deep. Best pulled with a 3/4 ton pickup, then use a small tractor to maneuver around the tree.

#### CALL DIG SAFE!!!

E-Waste Collection a Success!!

On June 21, the first ever county-wide, two location ewaste collection was held in Barber County. The one day event netted 18 pallets of ewaste materials – everything from cell phones to console TVs – with a force of 28 volunteers assisting with organizing the event, unloading, palletizing, shrink wrapping, cataloging, serving meals, snacks, drinks...the list goes on. Thanks to all volunteers and participants!

An enclosed trailer is available at the Conservation Office parking lot to receive e-waste overflow. The collection trailer will still be available after that date, but TVs and monitors

AUDIO EQUIPMENT - STEREO, RADIO, NP3, IPod, ZUNE, WALKMAN, SPEAK	ERS
BATTERIES - UPS, BATTERY BACK-UP, CELL PHONE, AC ADAPTERS, NI-CAD	LEAD ACID
CAMERA - DIGITAL, FILM, VIDEO	
CELL PHONE - BLACKBERRY, IPHONE, NEXTEL (TWO-WAY)	
COMPUTER - DESKTOP, TOWER, SMALL FORM FACTOR	
COPIER - COMMERICIAL	
CRT MONITOR - ALL SIZES	
CRT TELEVISION - ALL SIZES	
ELECTRONIC MEDIA - HARD DRIVES, TAPE MEDIA, FLASH CARDS, SIM CAR	IDS, MEMORY STICKS
FAX MACHINE - MULTI-FUNCTION MACHINES, ANSWERING MACHINE	THE WAR WAR AND A MARK
GAMING SYSTEMS - PLAYSTATION, GAMEBOY, NINTENDO	
HARD DRIVES - LOOSE	
INK OR TONER CARTRIDGE - PRINT CARTRIDGES, INK OR TONER	and the second second
LAPTOP - STANDARD, SLIM, TOUGHBOOK	
LCD - MONITOR, TELEVISION	
MEDIA PLAYER - CD, DVD, VCR, DVR, IPOD	
MEDICAL EQUIPMENT (NON-BIOHAZARD)	
MISC. ACCESSORIES - KEYBOARD, MOUSE, POWER STRIPS, SURGE PROTEC	TORS, CABLES. HEAD PHONES
NETWORKING EQUIPMENT - SWITCHES, ROUTERS, HUBS	
PLASMA TELEVISION	
PRINTERS - SMALL, MEDIUM, LARGE AND PLOTTERS	
PROJECTORS	
SECURITY & SURVEILLANCE EQUIPMENT	
SERVER CABINETS - RACKS, TELEPHONE CABINETS	
SERVERS - MAINFRAME, TOWER, RACK MOUNT, 1U-3U	
STORAGE DEVICES - TAPE LIBRARY, STORAGE SYSTEMS	
TELEPHONE SYSTEMS - MISC. TELEPHONE EQUIPMENT	
TELECOMMUNICATION EQUIPMENT	
TONER CARTRIDGE	
WIRELESS COMMUNICATION - PAGERS, BLACK BERRY, 2-WAY RADIO, CEL	L PHONE, PALM PILOTS
MICROWAVE OVENS	to transfer themestal town

will be accepted for collection for a \$5 disposal fee. Collections will be accepted only during business hours, 8 AM - 5 PM, Monday through Friday.

#### **Food Plots Done Right**

Food plots are always a contentious issue among wildlife managers. At the end of the day they really aren't necessary. If other habitat components are missing from your land you should focus on improving those first. However, food plots can have their place when done correctly, and although they have a limited ability to improve survival rates of a given species, they can be used to make your property more attractive to wildlife. Food plots can also be supplemental winter cover if it's lacking on your land or if the winter is unusually tough. Below are some tips and a reference to guide you towards better food plots.

First, ask yourself what you are trying to accomplish and what species you are trying to attract. Although food plots can be planted to attract many wildlife species simultaneously, you still have to consider that different game animals prefer different species of plants. Also, think about plant structure. As an example...planting a strictly forb mix is going to provide little in the way of cover/shelter in the winter. And don't forget the seasons! Some plants are warm-season and others cool-season. That doesn't mean those plants will only provide benefits during those times of the year, but if you intend to plant your acres to a food plot, then why not have it be beneficial year round?

Second, decide what and when to plant. As many of you know, PF provides seed mixes for different situations and those mixes provide a good option for those who don't want to put as much thought into what they are planting. Alternatively, an extensive list to create your own mix from can be found starting on page 30 of <a href="http://www.utextension.utk.edu/publications/pbfiles/pb1743.pdf">http://www.utextension.utk.edu/publications/pbfiles/pb1743.pdf</a> . Be careful with seeding dates and rates as they vary by location. Experimentation is encouraged and for advice on your specific situation contact a PF biologist.

Third, get a soil test done if you haven't done so in the last three years or so. This will help you determine what you need to add to the soil. Sure, it's "just a food plot" and you don't really care about yields, but it is still a crop and if you intend to be successful on the first try or if you have had issues in the past with establishing your plot, then here's a good place to start your investigation.

Fourth, think about where you intend to plant the plot. Location should take into account soil moisture, slope of the land, and proximity to other habitat requirements of the target species. Don't forget that your neighbor's property counts in this assessment as animals don't recognize property lines. As an example, placing a wheat based food plot right against your neighbors wheat field doesn't give the animal any incentive to come onto your property. In that scenario, if that's the only place you feel a food plot will work, plant it to something else.

Fifth, consider how big you intend to go. You don't want to take up more than 5% of your land with food plots, so on a 100 acre plot, 5 acres is more than enough. If Quail is your target species, several smaller plots are better than a single big one. In the example above, you could then have 4, 1.25 acre plots or 2, 2.5 acre plots. Smaller spread out plots will be able to clip more home ranges of more animals, thus providing benefit to more animals. Also, smaller plots provide more edge habitat for quail which have very small home ranges and need all of their habitat components in close proximity. However, if your target species is something other than quail or you think winter cover is a limiting factor, then single larger plots are better (one 5 acre plot). This is because deer and turkey in even modest population densities can completely wipe out small food plots before winter is through.

If you have further questions feel free to give your local PF biologist a holler. Good luck and happy hunting!

Caleb Papenhausen Farm Bill Wildlife Biologist Pheasants Forever/Quail Forever

## Get Paid To Make Your Grazing Land More Productive!

We all know that there are both federal and state programs out there that provide different forms of financial incentives to improve your land and perhaps even that there's one specifically for removing trees from your property, but what you may not know is that you can actually profit from this too. How great is that? You can increase your grazing acres, improve wildlife habitat, and increase ground water availability all while getting paid to do it through a brush management practice within the Fed-eral WHIP/EQIP programs or through the state LIP program.

Wait a second...How does removing trees from my land improve the things you mentioned?

-Increased grazing acres...It's simple, removing trees from the landscape will allow that land to come back into grass for your cattle to graze, what's not to like about that? I've seen many acres of land with 50% or more canopy covered by cedars, meaning essentially half that acre cannot be grazed at the level it could be otherwise. On that piece of land it would take only 30 acres of cedar clearing to have an additional cow/calf pair on your land (at a 15acre/cow-calf stocking rate).

-Improved wildlife habitat...trees take away native grasses which are preferred habitat for upland bird brood rearing and nesting. Additionally, trees provide places for hawks to perch to hunt the grass around it, this further decreases upland bird chances for survival because their primary source of mortality is predation, not winter kill (by far).

-Increased ground water availability...did you know that an acre of cedar trees absorbs 55,000 gallons of water a year! We all know water is at a premium here in south central Kansas, making this fact all the more important.

OK, so I see why someone would want to enroll in the brush management practice, but can I really profit from it? Well, that's up to how you use the money the programs provide for it. The federal WHIP and EQIP brush management practices offer \$238/acre for heavy infestation and if you can do it for less than that, the rest is yours. Keep in mind you'll be gaining additional grazing acres and you can also pair this practice with prescribed burning and/or prescribed grazing incentive practices for additional assistance and to keep the trees from coming back after removal.

If you have any interest in applying these practices to your land or any of the other conservation practices, please contact your local NRCS office or me directly.

Caleb Papenhausen,

Pheasants Forever Biologist Barber County NRCS Office CPAPENHAUSEN@PHEASANTSFOREVER.ORG

## If You Build It, They Will Come

How good is your habitat? Unfortunately, many assess the answer to this question with the wrong assumptions. It's easy for one to draw the conclusion that certain cover types are good habitat if a successful hunt occurs on that cover type, but you'd be mistaken...kind of. The truth of the matter is, upland birds require many habitat components, not just the ones you see them in during the hunting season. Perhaps many of you feel like you have a firm grasp on what to look for, but I'd like to introduce you to a more structured methodology for assessing habitat quality, so that you can take the guessing game out of the equation on your land. Since this could get long quickly, I am going to focus on Quail today.

Here is a publication put out by Oklahoma State University for identifying the limiting habitat factors on your land (<u>http://www.wildlifedepartment.com/landowner/E904web.pdf</u>), the assessment is on PDF pages 19-24 or if you print it out, pages 13-18. If this seems a little daunting to you, feel free to contact a farm bill biologist in your area to do the assessment for you, or just keep in mind that all of the following habitat components are essential for Quail to be successful. Picture the components being interspersed in a mosaic, rather than dedicating certain acres to certain habitat components, as Quail have small home ranges (15-80 acres) and need the components to all be in close proximity to one another.

**Nesting Cover**: Warm season native bunch grasses (big and little bluestem, Indian, switch, side oats etc...) that are greater than 8 inches in height and 12 inches in diameter during nesting season, which is April 1 to September 30. This grass should contain a year or two of dead grass or thatch used for nesting material. Ideally, this should comprise 30-40% of the habitat.

**Brood Rearing Cover**: New growth consisting of native grasses with a strong forb component (greater than 50%, the more the better) or cultivated crops, preferably with a healthy dose of weeds/forbs. The question here is, does it attract insects and is there room at ground level for foraging quail to move about during June 30 to October 15 brood rearing season. Brood cover should comprise roughly 35-45% of the habitat.

**Protective Cover**: Dense woody plants that provide canopy and thermal protection. Keep in mind that it must also be open at ground level to allow quail to move and be greater than 10-15 feet in diameter. Trees, unless recently fallen, do not make good protective cover because they provide little thermal protection and perches for predators. Shrubs are highly preferred here, but in the absence of shrubs, clearing the grass below an undesirable tree species and then felling it onto the burned or cut grass, provides both quail protective cover and the loss of an invasive/undesirable tree species. Protective cover should comprise around 10-25% of the habitat.

Again, you want an interspersed mosaic pattern, not 30 acres of nesting cover over here, and 20 acres of brood habitat **disconnected** over there. If you have any questions, feel free to contact me, my information is below.

Caleb Papenhausen Farm Bill Wildlife Biologist Pheasants Forever/Quail Forever cpapenhausen@pheasantsforever.org Is CSP Right For Me? Signup Deadline January 7, 2011

Many landowners and producers ask 'Is CSP Right for Me? The current Conservation Stewardship Program (CSP) **signup deadline is January 21, 2011**.

Landowners and producers can play a large role in determining whether or not the CSP is right for them by answering a few questions. First, can they answer "yes" to the following three questions?

- 1. Are you willing to commit time to inventory and document your conservation activities and production system to determine eligibility and ranking?
- Do you have records of your farming activities and are you willing to continue maintaining records to document your conservation activities? (Records will be used during the NRCS field visits to verify the accuracy of application information before contracts are approved.)
- 3. Are you ready to enter into a five-year contract requiring you to apply additional conservation activities and to improve, maintain, and manage existing conservation activities?

Second, if they can answer "yes," then they need to complete the CSP Self-Screening Checklist which is available on the Internet at

<u>http://www.nrcs.usda.gov/programs/new\_csp/2010/ranking\_period\_two/jobsheet\_pdfs/special/CSP\_Prod</u> <u>ucer\_Self-Screening\_Checklist.pdf</u> The CSP Self-Screening Checklist can be downloaded or can be requested at the Barber County NRCS office. The checklist doesn't have to be turned in to the NRCS but is intended to help landowners and producers determine if the CSP is right for them."

The CSP is a voluntary program that encourages land stewards to improve their conservation performance by installing and adopting additional activities; and improving, maintaining, and managing existing activities on agricultural land and nonindustrial private forest land.

If you have questions regarding the checklist and the CSP or other conservation programs, please contact your local NRCS staff in the U.S. Department of Agriculture Service Center in Medicine Lodge and visit with them. USDA is an equal opportunity provider and employer.

## JOHN FARNEY MEMORIAL SCHOLARSHIP

The John Farney Memorial Scholarship is a \$1000 scholarship sponsored by the Barber County Conservation District. The scholarship is awarded annually to a student who is entering at least his/her second year of college. Applicants must be pursuing a college degree in a conservation-related field. The applicant must also be a resident of Barber County. The deadline for applications will be March 15, 2011. Applications are available at the conservation office, 800 W. 3<sup>rd</sup> Avenue, Medicine Lodge, Kansas. You may also call (620) 886-5311 for more information.

#### Kansas Forest Resource Assessment and Strategy

By Bob Atchison, Kansas Forest Service Manhattan, KS 66502

MANHATTAN, KS - Kansas rural and community/urban forest, woodlands, and tree resources make up 10 percent of the state's land area, a little over 5.2 million acres. Though forest resources represent a small percentage of the total land area, they are woven throughout the state in the form of riparian forests, windbreaks, and isolated areas in 631 Kansas communities. Increased pressures upon the health of forest resources from pests, diseases, and non-native species, as well as a rapid increase in the conversion of forest and agroforestry lands to nonforest uses, has required a new approach for identifying forest areas at risk. This approach is embodied in the Kansas Forest Resource Assessment and Strategy. The assessment and strategy will help target funds and resources to produce the highest returns of ecological, social, and economic benefits derived from Kansas forest and agroforestry resources.

To achieve this goal, Kansas has analyzed the conditions and trends of its forest resources, identifying priority areas and developing strategies for wise financial investment of funds to address top issues identified by national, regional, and local stakeholders. The Kansas Forest Resource Assessment and Strategy will direct the Kansas Forest Service's (KFS) annual planning, operations, and grant applications for program funding received through the Cooperative Forestry Assistance Act and other sources.

Incorporated into the assessment are areas identified for Forest Legacy Program participation. The Forest Legacy Program is a voluntary federal program administered by the USDA Forest Service that protects private forestland by purchasing development rights through conservation easements.

The Kansas Forest Resource Assessment and Strategy can be reviewed on the Web at http://www.kansasforests.org/ or a paper copy can be provided by contacting the KFS at 785-532-3310 or by e-mail at <u>atchison@ksu.edu</u>.

Release by February 2011

## Grazing Coalition Active in Western Web: www.kglc.org

# **FEATURE** Kansas Grazing Lands Coalition

2703 Derenda Drive, Hutchinson, KS 67502 Phone: (620) 241-3636 Email: tdchristian@cox.net

The Kansas Grazing Lands Coalition (KGLC) and its affiliated regional grazing groups (RGGs) have partnered with a variety of agencies and organizations to promote rangeland health and enhance wildlife habitat in the western half of Kansas. The KGLC, a Kansas non-profit organization, has a membership including individuals, groups, other non-profit organizations, and state and federal agencies. The vision of the KGLC is, "regenerating Kansas grazing lands." Its mission is, "To regenerate Kansas grazing land resources through cooperative management, economics, ecology, production, education, and technical assistance programs."

In early 2010, the KGLC met with representatives of the Natural Resources Conservation Service (NRCS) and the U.S. Fish and Wildlife Service (USFWS) to discuss organizing a northwest Kansas regional grazing group to help promote technical assistance and programs that these two federal agencies offer to private landowners. Additionally, there will be assistance promoting grazing management and enhancing wildlife habitat on private lands. KGLC anticipates organizing this rancher-group during the winter 2011.

The KGLC met with landowners in Finney and Kearny Counties in March 2010 to discuss the formation of an "Upper Ark River" regional grazing group. These landowners were especially interested in re-establishing native grasses on irrigated cropland for grazing purposes and to provide habitat for lesser prairie-chicken. Through the Lesser Prairie-Chicken Initiative, it is hoped that a partnership can be developed between these private landowners, the KGLC, NRCS, USFWS, the Kansas Department of Wildlife and Parks (KDWP), the Playa Lakes Joint Venture (PLJV), Fort Hays State University Biology Department (FHSU), and other interested parties. This group plans to hold an organizational meeting this winter.

Also, last March the KGLC was invited to participate in a joint Meade-Clark Counties day-long "drought management" informational meeting. The meeting was hosted by the Meade and Clark County Conservation Districts, along with the NRCS and KGLC. The formation of a Meade-Clark Counties regional grazing group was discussed and determined to be feasible, and like the Upper Ark River group, plans are to organize officially this winter.

A major activity for KGLC and its partners was to host a Mid/Short-Grass Prairie Adult Range School on the grounds of Camp Lakeside adjacent to Scott County State Lake. The school was held July 6–8. There were fifteen participants including area ranchers and resource agency personnel. The school is a partnership effort including the PLJV, NRCS, USFWS, Kansas State University (KSU) Research and Extension, FHSU, Kansas Section Society for Range Management, and the Kansas Native Plant Society (KNPS). This year The Nature Conservancy (TNC)–Smoky Valley Ranch staff helped host and participate in the rangeland training program. NRCS and KSU Research and Extension personnel provided the bulk of the instruction along with the PLJV, TNC, KNPS, and FHSU Biology Department. The USFWS provided each participant with a copy of a Kansas wildflowers and grasses plant identification book, funded through their Partners for Fish and Wildlife program. Native rangeland plant identification (grasses and wildflowers), grazing management strategies, wildlife habitat enhancement, inventory and monitoring of rangeland annual production, along with livestock husbandry were major topics of instruction for the three-day school.

Late this past summer 2010, the KGLC partnered with the PLJV and the Kansas Prescribed Fire Council on a grant application to the National Wild Turkey Federation to provide prescribed burn equipment for local prescribed burn associations being organized in western Kansas counties. Some of these prescribed burn associations are in the Smoky Hills Graziers Association area, a KGLC regional grazing group, covering the counties of Russell, Jewell, Cloud, and Republic; others are still forming in the southwest and west central areas.

In south-central Kansas, the KGLC continues to provide assistance to the Comanche Pool Prairie Research Foundation and the Red Hills Prescribed Burn Association, both 501(c)(3) non-profits, and the Coalition looks to Ted Alexander and his son Brian who provide leadership to both the KGLC and their local organizations just mentioned. Ted just completed several terms as the chairman of the KGLC and was an original organizing member in the early 1990s. Brian just finished up a term as the chairman of the Kansas Prescribed Fire Council's steering committee. The Comanche Pool is a strong regional grazing group and works closely with a number of organizations and agencies including the NRCS, USFWS, KDWP, PLJV, and others to benefit ranchers and the grazing lands in the Red Hills area of Kansas and Oklahoma. KGLC helped place a Pheasants Forever Farm Bill biologist in the Red Hills through a ConocoPhillips grant from the PLJV.

Major areas of interest this coming year for the regional grazing groups in the western half of Kansas will focus on drought management, the lesser prairie-chicken initiative, prescribed burning, invasive woody species (eastern red cedar in the uplands and salt cedar in riparian areas), and grazing management strategies.

In 2011, KGLC looks forward to assisting and providing help to strengthen the existing regional grazing groups as mentioned, and to possibly establishing another grazing group in extreme southwest Kansas.

Persons interested in grassland management or in organizing a regional grazing group are invited to contact the KGLC via our Web site, <u>www.kglc.org</u>, or contact Tim Christian, Coordinator, at 620-241-3636.

Jana Lindley P.O. Box 379, Wamego, KS 66547 (888) 330-5142 jana.lindley@notill.org For Immediate Release

## MAKE THE CONNECTION AT THE NO-TILL ON THE PLAINS WINTER CONFERENCE

The premier crop production conference in the Midwest comes to the Bicentennial Center in Salina, Kansas January 25 – 26. The 15th annual No-till on the Plains Winter Conference has evolved into the most respected "continuous no-till" conference and trade show of its type in North America. Take advantage of the early discount of \$150 (\$200 after Jan. 12) to reserve your spot at the 2011 Winter Conference, where you will have the opportunity to visit with other no-tillers from various regions. The theme at this year's conference is "Make the Connection," and several producer speakers – each in a different stage of continuous no-till (CNT) with a variety of unique conditions – will offer presentations. In addition, several national and international no-tillage scientists will engage the crowd. These experts are extremely knowledgeable, and growers will have the opportunity to ask questions, share trade secrets and interact with other attendees, participants and presenters.

Regardless of experience level, the 2011 Winter Conference will meet your needs. Courses are available for all experience levels, allowing you to customize your learning. Topics include Producers' Real Life Experiences, Fertility and Soil Health, Cover Crops and Alternative Crops, Grazing Systems & Livestock, Weed/Crop Interaction, Water Management and Utilizing No-till Under Irrigation, New Technologies, Economics, Rainfall Simulator & Soil Demonstrations, Managing Residue, plus many more. No-till on the Plains promotes solely **continuous no-tillage** because all data points to this practice as the most profitable cropping system in production agriculture. Continuous no-tillage is a system that includes whole farm and ranch management together with the use of diverse rotations and cover crops, where soil disturbance is kept to an absolute minimum. Using this system ensures agronomic, economic and environmental benefits. One of the most important points that No-till on the Plains stresses to attendees is to take what they hear at the Winter Conference and apply it in their own ways on their own farms. Attendees must work within their management skills, their equipment, and their environment.

Brian Lindley, Executive Director of No-till on the Plains, comments, "We've overhauled the Winter Conference experience this year, and we've got some exciting updates for our crowd! Again we are proud to feature many new faces in our speaking lineup this year. As always, if you are a producer looking for an agronomic advantage and a way to improve your management, our Winter Conference is the place to be. The motivation, vision, and experience of the speakers offered at this event is absolutely of the highest quality. Regardless of your experience with no-tillage, we have sessions that you can utilize immediately. Additionally, the producer networking opportunity is unmatched. Come ready to learn and make the connection!"

New this year -- conference attendees are encouraged to come in Tuesday morning from 9:00 - 11:30 a.m. for our "Industry Morning Marketplace." These informational product presentations and schools offered by our conference sponsors and exhibitors will be a great opportunity to find out the latest in the industry.

Another addition for 2011 is a special evening of entertainment planned for Tuesday, Jan. 25 at The Stiefel Theatre in downtown Salina. Comedian Etta May – the reigning Queen of Southern Sass – will share her hilarious show. Winter Conference attendees are encouraged to purchase discount tickets for an evening of fun with their spouses and friends. No-till on the Plains is once again offering the exclusive Agriculture's Innovation Minds (AIM) Symposium on Thursday, January 27,

2011 at the Bicentennial Center. The AIM Symposium is held in conjunction with the Winter Conference but is a separate meeting. The topic of this year's meeting will be "Tapping into Biological Horsepower." Featured will be Holistic Management Certified Educator Josh Dukart and integrated crop and livestock producer Gabe Brown of Bismarck, North Dakota.

For those wishing to continue their no-tillage education, a tour of Brazil is being offered on March 10-27, 2011. No-till on the Plains has also been busy developing its online No-till University, and the first FREE webinar featuring Dr. Rolf Derpsch is scheduled for January 12 at 10:00 a.m. CST. For more information or to register for the Winter Conference or the AIM Symposium, contact the office at (888) 330-5142 or visit the website at www.notill.org. ####

## MAKING COVER CROPS WORK FOR YOU

On the whole, Kansas Ag producers are to be commended for their progressive attitude towards conserving our natural resources, and being good stewards of the ground. Although there are always some exceptions, when a problem is identified, Kansas farmers and ranchers are ready to step up and use the best and most suited conservation practice to address the issue. A conservation practice that is starting to gain some momentum here in south-central Kansas, and one that I see tremendous opportunity for, is the implementation of cover-crops into crop rotations.

The benefits that can be realized by using cover crops are numerous. Moisture conservation, weed suppression, pest control, enhanced nutrient production and nutrient recycling, and overall improved soil health, are a few of the positives that cover crops offer. Of course, there are some other factors to weigh these positives against as well, including: seed cost, added labor, and the water usage of the growing cover.

One of the hardest selling points to cover crops in this portion of Kansas is the moisture conservation argument. Although there's no denying that cover crops do utilize soil moisture to support their growth, there is still a net overall increase in soil moisture in systems that utilize cover crops versus those that do not. First of all, the mulching effect that cover crops provide greatly cuts down on the evaporative losses of moisture from cropland. Think back to the long stretch of summer this year with numerous 95-plus degree windy days, and what that was doing to those fields that had no cover on them (think convection oven). The evaporation losses during that time alone certainly would have equaled what the plants were using. In addition, having a cover allows for better infiltration when the rains or snows do come. Time and time again we've seen how after a rain event, considerably more runoff leaves a clean-tilled field as opposed to a neighboring field that has cover. In an area where precipitation is a limiting factor in crop production, we cannot afford to not capture and utilize all of the moisture that we possibly can. Cover crops will reduce the impact that a raindrop has on the soil's surface, cutting down on the "crusting" effect which seals off the surface of the soil and prevents infiltration. Also, runoff is slowed down because of the cover, giving the soil even more time to allow the water to infiltrate before it leaves your fields. Finally, once in the practice of using cover crops, over time the soil structure is improved, and organic matter is increased, both of which allow for an increased capacity for your soil to capture and store more water than before.

Cover crops can also benefit the nutrient cycle in your rotation, and can reduce, supplement, or even eliminate the need for commercial fertilizers. Most commonly, legumes are thought of for their ability to "fix" their own nitrogen, the macro-nutrient that is generally of highest demand for crop production. Some legumes suitable for this area are capable of producing anywhere from 25 to 150 pounds of N per acre or more, which would then become available for the subsequent crop. On the flip-side, maybe your soil tests show an adequate amount of nitrogen, possibly even a high level down deeper in the soil profile. Because of nitrogen's high mobility, you are in danger of that valuable nutrient

leaching down through the soil and not being utilized by your crops. This is where a cover crop can be utilized; to go down and "scavenge" nutrients like nitrogen, bring them back up higher in the soil profile, and be ready to be captured by the next crop.

You can also achieve very good weed control by planting cover crops. Mother Nature usually sees to it that something is growing wherever and whenever possible, preventing erosion and capturing rainfall, until we step in with chemicals or with tillage to dictate what grows or not. As an alternative to these methods, a properly managed cover crop can achieve 100% weed control, in addition to providing the benefits mentioned previously. Selecting the right cover crop for the climate and season, using a high-quality seed, following proper seeding rates, dates, and depths, and timing the cover crop to achieve its function before frost sets in, or it gets too hot, is just as important as it is for a traditional crop.

When it comes to selecting the type of cover crop that would be the "best" for you and your operation, just realize that there is a large variety, and it may take some experimentation to find the right fit. Some are higher moisture users than others, but offer benefits elsewhere. Triticale and rye, for example, are high-users of moisture, but do very well in saline soils, and can scavenge for nutrients. Turnips are another higher-moisture user, but provide an additional source of forage while also scavenging for nutrients. A couple examples of low-moisture users are cowpeas and chickpeas (legumes), or pearl/foxtail millet (warm-season grasses). Some provide a higher amount of top-growth to out-compete weeds than others. For those who are utilizing alfalfa in your crop rotation, you are technically already using a cover crop, and realizing the benefits from doing so additional nitrogen, improved soil health, source of forage, and a break-up in the pest/weed cycle. Again, there are many options available when selecting a cover crop. Perhaps the most prudent choice when considering what to plant is to try a combination or mixture of several types that would be suited to the season and climate. In the natural environment, there are few instances where a monoculture of a single type of grass/plant exists. This happens for a reason, and should probably be the approach to ensure a wide range of benefits is achieved when using a cover crop as well.

There is a lot of information available to those who are interested in how to utilize cover crops. We are starting to see them used more and more in the area, and I would encourage you to talk to your neighbor who is using them, stop by your local NRCS or County Extension offices, or visit with any of the area seed dealers to see how you can make cover crops work for you.

## New Employee - Caleb Papenhausen

A new employee has begun work at the NRCS office in Medicine Lodge. Caleb Papenhausen, Farm Bill Wildlife Biologist, is originally from Minneapolis, Minnesota, where he spent the first 23 years of his life. His time spent at the family lake homes in Northern Minnesota and Northwestern Wisconsin sparked his interest in natural resources and especially wildlife. Upon graduating high school he knew exactly what career path he wanted to take, and started by attending the University of Minnesota's college of Natural Resources, which has since become the college of Food, Agriculture, and Natural Resource Sciences, or CFANS for short. After four years of study he walked away with a Bachelor of Science in Wildlife Biology.

Shortly following graduation Caleb found work with the Minnesota Conservation Corps doing hands-on habitat restoration work on state, federal, and private lands alike. Before landing his current job with Pheasants Forever he also worked on research projects for the Minnesota Department of Natural Resources assessing the presence or absence of Chronic Wasting disease and with the Missouri Department of



Conservation assessing how reptile and amphibian population changes are affected by forest harvest management practices.

Caleb is very excited about his new job and looks forward to meeting landowners in Barber County and the surrounding communities. If you have interest in any of the conservation programs within the Farm Bill or would just like some technical assistance installing your own wildlife habitat, please do not hesitate to contact him at caleb.papenhausen@ks.usda.gov, or by calling 620-886-5311, ext 3. Feel free to drop by and welcome Caleb to the area!

#### Noxious Plants and Their Impact on Wildlife by Caleb Papenhausen

In the last couple of weeks I've ran into some backlash from producers who view the noxious weed issue as well...not a problem. Let me assure you it is!

I don't want to patronize you folks, so I'm not going to preach to the choir on the fact that nipping noxious weeds in the "you know where" before they get out of control is a must. I am going to try however to link a few of the complications they can cause to wildlife because although noxious weeds are often talked about as a "problem," it's not often expressed as to why they are (beyond the obvious) and especially not how those complications directly affect wildlife.

Instead of noxious weed problem generalities, I'm going to give you specific examples of problems in Kansas.

- Cedar tree infestations reduce grazing acres, soak up tons of water, provide aerial predator perches in upland areas (perches in prairies should be secluded to wet areas and draws unless you are in eastern Kansas), and supplant other more viable prairie woody species (plums) and native bunch grasses that are better at providing thermal cover and food sources.
- Sericea Lespedeza is pretty much the king of noxious plants. It's unpalatable (for the most part) has high seed concentrations (even for lespedeza's), has few natural predators (from china) and is allopathic (releases a chemical that prevents nearby plants from growing). Not only that, its growth form makes it pretty much useless for upland birds. It grows in thick clumps that in my description of it, is almost shrub like except that it provides no open ground below it.
- Musk Thistle can be beneficial to wildlife because it still provides bare ground, overhead cover and a seed source, however it's lack of natural predators (from western Europe), high seed production, and the fact that it is unpalatable to livestock allow it to completely take over. This takeover reduces insect abundance and diversity in the areas affected as many insects are species specific feeders.

Even with management, once established, these plants are there to stay unless you go out of your way to use herbicides (thistle and sericea) or mechanically remove them (cedars) on a continual basis. In fact, some management practices can actually increase their presence (disking thistle as an example) So, it's important to educate yourself on what you have on your property, start management as soon as they are noticed, and stick with it until they are gone because the longer you wait the more problematic they become and the more expensive it will get to eradicate them.

#### Cheatgrass?

By Jim Wright, Grazingland Management Specialist Natural Resources Conservation Service Greensburg, Kansas

Heavy stands of cheatgrass can be efficient and effective livestock forage. In early spring the protein values of cheatgrass can be over 18 percent, and it tends to grow (and re-grow after grazing) rapidly.

Cheatgrass (*Bromus tectorum*) is an annual introduced grass species that generally germinates in the late fall, winters as a seedling, and grows profusely when conditions are right in the spring. After growing rapidly in the spring, it will set seed while depleting upper level soil moisture. The seed is mature in a very short period of time and capable of germination if conditions are right. Each seed has an awn that protrudes 1/2-3/4 inch in length and can cause mechanical damage to livestock if grazed late.

For utilization of the benefits of grazing cheatgrass and/or to aid in its control, livestock should be put on pastures in the early spring in higher than normal numbers; moved through several smaller pastures at a rate where they will be back in the starting pasture in three weeks to start moving again; and taken off the pastures when the warm season grasses start to grow rapidly to allow them a chance to recover. If this process is completed two or more consecutive years, cheatgrass can be reduced and controlled to the point that native species can better compete. Livestock will do well on this type of control because of the nutritive value of cheatgrass as long as they are removed before the plants change color (reddish purple) or set seed.

Visit your local NRCS office to learn more about natural resources conservation. The office is located at your local U.S. Department of Agriculture (USDA) Service Center (listed in the telephone book under United States Government or on the internet at <u>offices.usda.gov</u>). More information is also available on the Kansas Web site at <u>www.ks.nrcs.usda.gov</u>. USDA is an equal opportunity provider and employer.

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#### **Partnership Creates Funding Opportunities**

By Bob Atchison, Kansas Forest Service Manhattan, KS 66502

MANHATTAN, KS - The 2010 Kansas Forest Resource Assessment and Strategy has identified 1) sustaining and protecting forest and agroforestry ecosystems and 2) water quality and quantity as two of the most important forest-related natural resource concerns in Kansas. This is supported by natural resource inventories that suggest nearly half our 43,436 miles of windbreaks are in poor condition; 46 percent of Kansas woodlands and forests are classified as "cull" having no merchantable value; and sedimentation from streambank erosion and other sources has reduced the storage capacity and life span of many reservoirs by 50 to 100 years creating potential water supply shortages.

Fortunately a new and unique partnership has been created between the Natural Resources Conservation Service (NRCS) and state forestry agencies in Kansas, Nebraska, and the Dakotas through a grant from the **Cooperative Conservation Partnership Initiative (CCPI)** to address these resource concerns. An initiative of the 2008 USDA Farm Bill, CCPI has the potential to bring an additional \$800,000 to Kansas for **riparian tree planting**, **windbreak renovation**, and **forest stand improvement** projects in the next four years. CCPI works through the **Environmental Quality Incentives Program (EQIP)** providing for forest and agroforestry projects.

Forest, woodlands, windbreaks, cropland, and grassland all have the potential to qualify for the program if a "resource concern" is identified. Primary resource concerns for the program are the health and condition of trees in windbreaks, woodlands and forests; soil erosion of streambanks; and water quality issues associated with excessive sediment. Specific examples might include old windbreaks with gaps and dead trees or shrubs; streambank erosion where additional tree planting can provide long-term reduction in soil loss; and forests or woodlands that are either over crowded (need thinning) or would benefit from additional tree planting, or contain a high percentage of invasive or undesirable trees.

Private landowners statewide are eligible to sign up for the program if they meet the agricultural producer requirements for EQIP. Forestry and windbreak applicants are exempt from the requirement that a minimum of \$1,000 of agricultural products must be produced or sold annually by applicants.

Applications for EQIP are accepted continuously at county NRCS offices located in USDA Service Centers. Applications are batched after a set cutoff date for funding. Locations and contact information for USDA Service Centers may be found at <u>www.ks.nrcs.usda.gov</u>. Also available at the Web site is an EQIP Self-Assessment Worksheet for Forestland Health. Completing the worksheet prior to applying may improve chances for funding. Payment rates are available at the Web site.

NRCS will refer EQIP applicants to a Kansas Forest Service district forester who will schedule a site visit with the applicant and develop a management plan to guide the project. NRCS will then rank and prioritize the application based on criteria developed for Forestland Health.

#### **Diversion vs. Terraces**

#### By John E. Vavroch, Civil Engineering Technician Natural Resources Conservation Service Colby, Kansas

Sometimes it rains. Sometimes it doesn't. Usually, when you need it most, it doesn't. When it does rain, it often comes too quickly and in too much volume. The result is erosion—the loss of precious top soil. Even with the high residue amounts in our fields today, it is necessary to have structural practices in some fields to control the loss of soil.

When the decision is made to install structural practices, this question often comes up: "Should I terrace the field or could I install a diversion?" Every field is different, but all fields need the foreign drainage controlled and work must begin at the top of the field.

Terraces are designed to handle the runoff only from the terrace above. Usually, 1.5 feet—1.7 feet terrace height is adequate. Diversions are designed to handle the total drainage acres above the diversion. Like a terrace, a diversion can be level which stores water, or gradient which runs water to a suitable outlet. Storage is the critical factor in level diversions. The storage area can be long and shallow or short and deep.

Cost is another factor. Diversions are paid by the cubic yard while terraces are paid by the linear foot. Huge diversions quickly become expensive and are not cost effective.

Diversions should not be installed in lieu of terraces. If a diversion is installed too far down the slope in the field, it may become overloaded with silt causing a maintenance problem. A good rule of thumb–if the diversion channel has any gullies or evidence of concentrated flow above it, it is too far down the slope.

For more information about diversions and terraces, please contact your local Natural Resources Conservation Service (NRCS) office or conservation district office located at your local county USDA Service Center. To learn more about NRCS, visit the Kansas NRCS Web site at <u>www.ks.nrcs.usda.gov</u>.

## OKLAHOMA AWARDS STATE CIG GRANT TO INCREASE SUSTAINABLE AGRICULTURE REPRINTED FROM

HTTP://WWW.NOTILL.ORG/NOTILL\_UNIVERSITY.HTM

**Wamego, Kan.** - No-till on the Plains, Inc. has received the first ever state Conservation Innovation Grant for Oklahoma that will fund the proposed No-till University. The grant amount awarded was almost \$74,000. The primary focus of No-till University is to enhance the overall soil health of cropland and deteriorated rangeland through continuous no-till practices, or CNT. The curriculum and technological aspects for the courses will be developed up through spring 2011, when the program will be tested with 20 EQIP-eligible, no-till producers. Training and implementation for the general public will be available by December 2011. The curriculum is based on the systems approach to CNT, providing an educational resource that allows the ever growing community of no-tillers to share knowledge of current and effective practices. No-till on the Plains is collaborating with the GeoAgro company who is a provider of information services for agriculture.

No-till University provides a virtual learning environment based on Moodle (www.moodle.org), a leading technology with more than 30 million registered users in 210 countries, and a collaborative knowledge base. The University aims to establish a learning community, where authorized entities, Notill on the Plains, NRCS and other conservation partners can participate, provide, improve and deliver training. The system will provide advanced features to support traditional courses, workshops, or instructor-led online courses. Producers will be eligible for the National Certified Agriculture Program for No-till Producers which is currently being developed by No-till on the Plains in collaboration with GeoAgro and Aapresid.

No-till practices promote clean air and improve water quality for everyone. For producers, the practices help improve the soil quality, eventually improving the quality of their yields. The curriculum uses the best no-till practices world-wide and is based on holistic management of the CNT system. Utilizing a management system of CNT addresses many of the long-term resource concerns that are priorities for the NRCS. Courses include water infiltration into the soil, permanence of cover for the soil, diverse rotations, cover crops and green manures, proper nutrient and pest management, and proper management of livestock both above and below ground (including the microbes living in the soil that create a healthy soil).

Producers using this educational tool benefit with increased productivity, stronger financial stability, and a system that they have committed their operations to for the long-term. The longer a producer or landowner remains in a CNT system, the greater the benefit. The reclamation process continues to enhance soil quality. For most producers, up to 96% of soil erosion has been eliminated. Eliminating soil erosion enhances water quality by reducing sedimentation that deposits in waterways and streams and ultimately ending up in lakes and reservoirs forever changing the aquatic habitat.

Permanent cover on soil all but eliminates particulate matter and air quality issues involved with production agriculture. CNT soils store carbon and reduce overall agricultural CO2 emissions. CNT enhances the soil with biological organic compounds using cover crops and diverse crop rotations, reducing applied fertilizers which can leach into the groundwater. Properly managed CNT soils have lower surface temperatures which lowers evaporation rates, resulting in more moisture for the crops reducing plant stress and slowing depletion of aquifer systems.

CNT is beyond sustainable because it can restore the original soil structure and aggregation that makes native soils efficient and productive. Nutrient requirements are more easily managed and herbicide and pest management issues decrease rapidly. Each facet of this system lives in synergy with and directly impacts the next facet.

## POSTER CONTEST WINNERS

This year's poster contest was an exciting one! This year's theme of Conservation Habits = Healthy Habitats encouraged 219 hopeful kids to participate in this year's poster contest. The competition was fierce this year. All of the posters were excellent in content and quality, but we could only have one winner in each category to move on to state. And the winner's are.....

<u>2nd - 3rd</u>	<u>4th - 6th</u>
1st - Grace Bedwell	1st - Kyla Alojacin
2nd Danielle Bedwell	2nd - Riston Landwehr
3rd - Kaleigh Schaefer	3rd Rylee Waller
<u>10th - 12th</u>	Special Purpose
1st - Tim Romine	1st - Jacob Terhune
2nd - Brittany Boggs	2nd - Terren Burkes
	<u>2nd - 3rd</u> 1st - Grace Bedwell 2nd Danielle Bedwell 3rd - Kaleigh Schaefer <u>10th - 12th</u> 1st - Tim Romine 2nd - Brittany Boggs

Tim Romine placed third in his division at the state level. Grace Cantrell and Melinda King also placed at the state level receiving honorable mention in their divisions for their posters. Join us at the Barber County Conservation District Annual meeting on January 15, 2011 to congratulate the 1st, 2nd, and 3rd place winners at the county & state levels!!!!!

## **Products For Sale**

Grass Seed - The Barber County Conservation District is a licensed seed dealer. Contact us for all your grass seeding needs.

Pipe — We stock a large inventory of corrugated plastic and metal pipe for all your drainage needs; terrace pipe outlets, ponds, culverts, and drainage around the house.

**19** Strand Lite Cable — for electric fencing. Non-slinky effect makes for easy installation and moving. Fencing posts, clips, joint clamps, gate springs, and other fencing supplies also available.

## SCHOLARSHIP RECIPIENT

Congratulations to Calandria Jarboe, daughter of Carl and Mariann Jarboe, as the recipient of the John Farney Memorial Scholarship for the 2010-2011 school year. Calandria is pursuing a degree in Agriculture Education and Horticulture Business at the University of Nebraska - Lincoln. Her school activities include President of the Horticulture Club, Parliamentarian of Sigma Alpha, and member of Phi Alpha X the Horticulture Honors Society, and the Ag Ed Club. Calandria also enjoys being an active member of the community including helping with Lighthouse, an after school program for children. Calandria enjoys working with plants, reading books, riding horses, and running a half-marathon. We wish you the best of luck in obtaining your degree, Calandria!



### SCKRAC 2010 SUMMER FARM TOUR

An annual event of SCKRAC is their Summer Farm Tour, which is hosted by a volunteering local Conservation District within the boundaries of the Alliance Chapter. For 2010, the Barber County Conservation District hosted this event and when the bus pulled away from the South Barber High School 38 interested participants were aboard.

Five stops had been planned for the group and a great deal of diversity in crops, techniques, equipment and the like were seen and talked about. The first stop was made at one of the farms of Matt Cantrell. Matt has been in No-till for the last 10 years and gave the group a great synopsis of his cropping system and the changes that have occurred on his farm due to his change in how he farms the land.



The second stop was at the John Forester farm where Linda and John were both present to talk about their operation and what they were doing to control erosion and improve return on his investments. John spoke of a couple of the USDA programs that he participates in in-order to meet the needs of the lands. The District's new 15-foot Great Plains No-Till Drill, which John used this past spring to plant native grass, was also available for the group to see.

The third stop was at one of the Jeff Bahr farms where Jeff showed us and talked about his experience with using Sunn Hemp as a cover crop after his wheat crop to provide nitrogen back to the soil in a natural way that makes this crop and others a very important option when it comes to planting legumes in rotation with production crops to reduce the amount of commercial fertilizers that are needed to grow the crop following the cover crop of Sunn Hemp.

The fourth stop was at the Bob Schrock farm south of Hazelton which led us into knowing more about the crop of Sesame. Bob likes this crop and believes that it has a place in his rotation and is excited about the potential that it has as a warm season broadleaf after a cereal grain crop such as wheat. Sesame loves the 100 degree heat and has been bred to not shatter, which gives this crop a lot of potential use for our area.

The fifth and last stop before dinner was at the farm of Danny Lukins' where we got a look at some double crop soybeans which had gone through a tough time this summer due to a webworm problem that seemed to never go away. With the help from neighbors and friends it appeared that Danny was well on his way to getting the problem solved, the only question now is if the crop has enough time to mature, it seems that the webworm issue has put the crop behind schedule in regards to maturity. Another rain and a late freeze would set Danny up pretty well to having a successful soybean year.

After 3 hours of travels around Southeast Barber County all parties were ready for a cold glass of iced tea and chicken fried steak which were no problem to get at the Plum Thicket Restaurant once we arrived back in Kiowa. It was a wonderful day and everyone seemed to be able to take something from their time on the tour that may help them "back home" which is why the Alliance has made this tour a vital part of their service to the communities that they serve and will continue to provide in the years to come. If you have any questions about or would like to join the South Central Kansas Residue Alliance Chapter which covers: Barber, Comanche, Kiowa, Harper, Cowley, Kingman, Pratt, Reno, Sumner and Sedgwick counties please contact your local conservation district or NRCS office.

#### SUBMITTED BY TERRY D HODGSON

## Soil Compaction

#### by Steven P. Graber, Resource Conservationist Natural Resources Conservation Service Dodge City, Kansas

Soil compaction occurs on nearly every farm in the United States. The results of compaction can be evident in crop growth. Careful thought should be given to planning your tillage operations. Just how many passes will be needed to prepare your seedbed? The trend has been toward reduced, or no tillage, mainly due to the cost of fuel. However, there is something else besides fuel savings. Every trip across the field compacts the soil forming zones where crop growth is impaired.

Soil compaction can manifest itself in a couple of different forms. Compaction caused by the wheel traffic and compaction from the tillage implement itself. Research has shown that the first pass of the tractor causes the most soil compaction. This is without a doubt the major cause of soil compaction.

The weight of tractors has increased from less than 3 tons in the 1940s to approximately 20 tons today for the big four-wheel-drive tractors. This is of special concern because spring planting is often done before the soil is dry enough to support the heavy planting equipment. Greater axle loads and wet soil conditions increase the depth of compaction in the soil profile. Compaction caused by heavy axle loads (greater than ten tons per axle) on wet soils can extend to depths of two feet or more. Continuous sweep plowing or disking at the same depth year after year will cause serious tillage pans just below the depth of tillage in most soils. The tillage pan is generally relatively thin (two to four inches thick), and can have a significant effect on crop production. This can be alleviated by varying depth of tillage over time or by special tillage operations.

Compaction causes reduced yields and may worsen other problems that reduce yields such as disease and low nutrient supply because of reduced root distribution. Assessment of the severity of compaction problems is best done by inspection of the soil and crop roots. If root growth is restricted due to compaction, deep tillage such as subsoiling may be warranted.

The depth of yield-limiting soil compaction will determine the required depth of tillage and tillage tool selection. If compaction occurs in the top six to eight inches of the soil, tillage tools such as a chisel plow can be used to shatter the compacted layer. However, if compaction is below eight to ten inches, tillage tools such as a subsoiler, ripper, or paraplow may be needed. The key is to operate the tillage tool no deeper than necessary, one to two inches below the bottom of the tillage pan. Also, the soil needs to be dry in order for the operation to shatter the tillage pan.

The alleviation of the compacted soil is not easy. Although subsoiling or chiseling can alleviate compaction immediately, the second pass by a single vehicle or implement may nullify the effort. The use of different strategies will be the best shot at solving the problem. Reducing tillage, increasing organic matter, controlling traffic, and if necessary, subsoiling will all benefit the soil improving soil quality and increasing crop production.

You might think that one pass across the field will not hurt much, but that one pass with the wrong soil conditions may be one too many. Be careful and think, is this tillage pass really necessary? If you plan your tillage operations and stay out of the field as much as possible, you will save fuel and your crops might just produce better yields.

For more information about soil conditions, please contact your local Natural Resources Conservation Service (NRCS) office or conservation district office located at your local county USDA Service Center.

For more information about NRCS programs, visit the Kansas NRCS Web site at<u>www.ks.nrcs.usda.qov</u>.

## What Is It, A Wildflower, A Forb or A Weed?

## by Carl Jarboe

One question often precludes another and this is one of those. The answer is; it depends on who you are. The same plant can be all three and often is. It really just depends on where the plant is and who sees it first.

If you are fortunate to have an opportunity to take a walk in a pasture this spring you are likely to see many different wildflowers in full bloom, that is if you are from town or live in a city. To the local rancher the very same plant may represent a weed; it is



replacing or at least competing with native grass species that he sees as necessary to keep his livestock gaining weight. The range management specialist will see the same plant as a forb. A needed part of the natural plant community, providing a flower for our insect pollinators, beauty for the casual passerby and at the same time providing nutrition to livestock or simply holding the soil in place preventing erosion.

Catclaw Sensitive Briar, Prairie Clover, Cobea Penstemon and Bush Morning-glory are just a few of the nutritious forbs commonly found in well managed pasture land. Livestock love these plants and seek them out. Over grazing can eliminate them from the range site. When management is changed and they have a chance, they will return.

Take time to attend the Wildflower Tour this May sponsored by the Barber County Conservation District. You will have an opportunity to see and identify many wildflowers, forbs and weeds. You can decide which category fits.

## WILDFLOWER TOUR

Every year on Mother's Day weekend we meet at the Medicine Lodge High School to begin a fun filled day exploring nature's wonderful wildflowers. While enjoying a continental breakfast of cinnamon rolls, fresh fruit, juice, and coffee we will view a slide show of the glorious flora of Barber County. After breakfast, we're off to the first identification stop where our expert guides will educate tour goers on the splendor of Barber County's wildflowers. After a delicious lunch and a chance to relax a little, we head back out on the range for another gaze at natures wonders.



This year's tour is scheduled for May 7. The price of the tour is \$15 which includes a continental break-fast, lunch, an afternoon snack, and transportation to at least two sites. Be sure to check out our Wild-flower Tour T-Shirts! We have five different designs available for purchase. Also check out our various books for sale on the wildflowers of Kansas.