

Official Newsletter of the Barber County Conservation District

BANKERS AWARD NOMINATIONS BY: TIM MARSHALL, COUNTY AGENT

The Conservation Awards Program, better known as the Bankers Award, will again be held in Barber County in 2010. This program is being sponsored by the Kansas Bankers Association (KBA). This year the KBA, K-State Research and Extension, and the Kansas Department of Wildlife and Parks are proud to announce six award categories including Energy Conservation, Water Quality, Water Conservation, Soil Conservation, Windbreaks, and Wildlife Habitat.

The purpose of this program is to stimulate a greater interest in the conservation of the agricultural and natural resources of Kansas by giving recognition to those farmers and landowners who have made outstanding progress in practicing conservation on their farms. Two hundred and seventy-nine Kansas producers and landowners were recognized for their efforts in 2009.

Nominations can be made by any person in the county. They should be sent to the Barber County Extension Office or the Barber County Conservation District by October 1, 2010.

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!



POSTER CONTEST

Each year, the Barber County Conservation District sponsors the National Conservation Poster Contest. The contest provides kindergarten through twelfth grade students an opportunity to convey their thoughts about soil, water and related natural resource issues through art. This year's theme, "Conservation Habits = Healthy Habitats", also follows the annual Stewardship theme. Teachers receive an informational packet containing the guidelines for the poster contest, as well as poster paper to get the kids started. The annual contest starts at the district level. District winners advance to the state level. Finally, state winners advance to the National Contest. National winners are recognized each year at the NACD Annual Meeting. All posters will be on display for judging at the conservation office on October 12. If you are interested in volunteering your artist's eye for judging the entries, please stop by the office.

MAKING COVER CROPS WORK FOR YOU

BY JARRED KNEISEL

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 tre-



mendous 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.

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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.

Rarely in life are there choices you get to make that allow you to have your cake and eat it too, especially when it comes to ranching. Often improving wildlife habitat, and making your ranching operations more simple comes at the expense of your profits, a trade-off few are willing to make. Fortunately, every once and a while someone somewhere thinks outside the box and comes up with something brilliant which allows us to accomplish multiple goals with something as simple as a concept. In my opinion, patch burn grazing is an example of this, allowing you to make your ranching operations simpler, improve wildlife habitat, and keep your bottom line healthy. So, What is it? How can I implement it on my land? And Why is it so beneficial?

What is It?

Patch burn grazing is the purposeful grazing of recently burned pastures and then burning another pasture after a certain amount of time to move the cattle to another location, thus creating a mosaic effect on the land. It's actually quite simple ...all you are doing is mimicking the natural grazing ecology that once occurred in this region. Perhaps Oklahoma State says it best when they explain patch burning like this..."Patch burning allows livestock to freely select the most recently burned part of a unit or pasture. Livestock spend 75% of their time on these patches and typically evenly utilize all the palatable plants within the entire burned patch. Then within 6-12 months burn another portion of the unit. This will shift the focal grazing point to the new burn patch. After the heavy utilization (1.5-2.5 years post burn) a transition state of bare ground, forbs, and low amounts of standing biomass and litter occurs. Within 2.5 -3 years post burn the patch receives very little grazing pressure, which allows biomass and litter to accumulate. This patch is then ready to be burned and grazed again. This is all accomplished without fences or other management input besides the use of prescribed fire".

How Do I implement it on my land?

First, you will want to choose a moderate stocking rate. Moderate stocking rates do not yield lower profits, especially in this system. The goal is to have a gradient of grass conditions from lawn like conditions in the most recently burned patches, to the nearly untouched grasses in the patch least recently burned. Too high of stocking rates will lead to grazing in the patches least recently burned, and cause low fuels in extreme cases. Stocking rates too low will lead to not enough grazing of the most recently burned patch and an absence of that mowed lawn state. Obviously, everywhere in between will be a gradient of those two conditions.

Second, you will choose the rate at which fire makes a full cycle. In our region that would likely be a 4 year cycle, as it is recommended for areas with between 18 and 30 inches of rainfall annually. However, since we are right on the tipping point of that recommendation, you could also opt for a longer burn cycle. To make getting the burns in easier, you could burn in both dormant and growing seasons.

The system would look something like what "figure 1" is displaying for a 3 year return cycle for which you burn in both the growing and dormant seasons... (for a 4 year rotation, you would simply have 8 patches instead of 6). The size of these patches does not matter, but it is probably not very feasible economically in less than 100 acre patches.

What are the Benefits?

Ranching benefits: The beauty of Patch Burning is that it does not require gathering or moving cattle before burning because they will already be in the recently burned areas and out of the way. Fire also keeps invasive species at bay so you will no longer have to worry about controlling them with mechanical or chemical

control. And we all know what a continuous battle fencing is on a ranch, and with this system you will have

to worry much less about fence upkeep and building because the burned patches are your new fences! Deferring grazing to get a burn done is no longer needed, making burning much more cost efficient. We all know rest is pivotal to a pasture, and this system provides rest for each portion of a pasture for 2 to 3 years (depending on the return cycle you choose). Frequent Barber county droughts? No problem! Patch burning allows you to manage for drought by stockpiling forage, and if needed, delay burning. Burning is also easier to get in each year due to plenty of excess litter, which allows you to burn in more humid and cooler conditions. Of course this ends up being safer conditions to burn in too!

Wildlife benefits: Wildlife managers strive to preserve biodiversity (greatest number of different species) and unfortunately standard rotational grazing often does not sustain this. Why? Because standard rotational grazing often creates homogenization, or grasses all of similar heights and structure, which only benefits wildlife who prefer that intermediate successtional stage of grass and forbs (or lack there of). Patch burning on the other hand creates a mosaic effect or heterogeneity across the landscape. This heterogeneity creates habitat for a greater diversity of species. Additionally, a greater abundance of forbs are seen, which in turn increases insect populations. Insects are a crucial source of protein and of utmost importance for many, many wildlife species, especially their young. A great conceptual illustration of the importance of heterogeneity can be seen in "Figure 2" with grassland birds; however a similar concept can be used with any class of wildlife. You can see in the figure that if we only had the intermediate grasses, some species could not inhabit the property, or would be there in far fewer numbers.

On a final note, this article does not do Patch-Burning justice and to learn more I recommend reading Oklahoma State's "Patch Burning: Integrating Fire and Grazing to Promote Heterogeneity" and visit their website at ...http://fireecology.okstate.edu/patch_burning.html .

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Figure 1: On the right, Photo Courtesy of Oklahoma State

Figure 2: On the Left, Photo Courtesy of Oklahoma State

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September 17, 2010

EQIP/WHIP Application Cutoff Date - November 15, 2010

Salina, Kansas, September 17, 2010—Eric B. Banks, state conservationist for the Natural Resources Conservation Service (NRCS), announced that the application evaluation cutoff date will be **November 15, 2010,** for the Environmental Quality Incentives Program (EQIP) and Wildlife Habitat Incentives Program (WHIP). These programs were authorized under the Food, Conservation, and Energy Act of 2008 (2008 Farm Bill).

"These two programs are very popular with producers in Kansas, and the NRCS wants to give producers time to get a conservation plan developed and get an application submitted in a timely manner," said Banks.

"I know fall crops will need to be harvested and everyone will be busy. Setting the cutoff date now, should allow producers to get a plan and sign an application.

"Stop by the NRCS office at your first opportunity and get the process started," said Banks.

Applications may be submitted anytime; however, applications submitted by the November 15th cutoff date will be evaluated for Fiscal Year 2011 funding.

Apply at Local NRCS Office

Landowners and/or operators with eligible cropland, rangeland, or forestland with any EQIP/WHIP natural resource concerns should apply at their local NRCS field office and work with them on a conservation plan. 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>).

Socially Disadvantaged, Limited Resource, and Beginning Farmers and Ranchers

"EQIP and WHIP are available to help address the unique circumstances and concerns of socially disadvantaged, limited resource, and beginning farmers and ranchers, who have natural resource concerns that need to be addressed on their land," said Banks.

Producers in Kansas who qualify as socially disadvantaged, limited resource, and beginning farmers and ranchers will be ranked in a separate ranking pool.

Organic

EQIP is available for treating natural resource concerns on organic systems. Organic producers, or those transitioning to organic, may apply for the EQIP to address their natural resource concerns during this period.

Information Available

As information becomes available, it will be placed on the Kansas NRCS Web site <u>www.ks.nrcs.usda.gov/</u> <u>programs/eqip/</u> and <u>www.ks.nrcs.usda.gov/programs/whip</u> or be available at your local USDA Service Center from the NRCS or conservation district staff. USDA is an equal opportunity provider and employer.

SCKRAC 2010 SUMMER FARM TOUR

SUBMITTED BY TERRY D HODGSON

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.

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FAIR

On Thursday, July 22, we loaded up the truck and headed south to once again set up for the fair. This year's booth highlighted the 60 years of the Barber County Conservation District.. A second display was set up highlighting this year's stewardship theme "Conservation Habits = Healthy Habitats" giving kids ideas for the poster contest this fall. Information was also available on the Wildflower Tour, the upcoming No-Till Tour and the products and services provided by the District. With an abundance of literature and



great photo displays there was plenty for everyone to see. The District put out event recycling bins across the fair grounds and everyone put them to great use. The winners of our door prizes this year are Faith Poland and Dale Hoch who won the kids prize of a sports bottle filled with lots of candy, and Kendra Harnden who won the adult prize of a recycling bin. Congrats to all of them!! It was great to see everyone at the fair this year!! We can't wait to see you next year!!

*The waste oil collection trailer will be in Barber County sometime in the near future. If you have waste oil for disposal, please call the district at 886-5311 ext. 3 so we can get you scheduled.

E-WASTE TRAILER

E-Waste Collection a Success!!

On June 21, the first ever county-wide, two location e-waste collection was held in Barber County. The one day event netted 18 pallets of e-waste 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. A \$5 disposal fee is required for TVs and monitors only. Collections will be accepted only during business hours, 8 AM – 4 PM, Monday through Friday.

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 1 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.