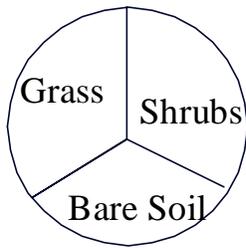




THE COVEY HEADQUARTERS

Volume 7 Issue 4 Winter 2008

This newsletter is aimed at cooperators and sportspeople in Missouri to provide information on restoring quail. This is a joint effort of the Missouri Department of Conservation, USDA-Natural Resources Conservation Service, and University of Missouri Extension. If you would like to be removed from this mailing list or have suggestions for future articles please contact jeff.powelson@mdc.mo.gov or 816-232-6555 x122 or write to the address shown.



The name of this newsletter is taken from an old concept.....that a quail covey operates from a headquarters (shrubby cover). If the rest of the covey's habitat needs are nearby, a covey should be present. We are encouraging landowners to manage their quail habitat according to this concept. Use **shrubs** as the cornerstone for your quail management efforts. Manage for a **diverse grass, broadleaf weed and legume mixture and provide bare ground** with row crops, food plots or light disking **right next to** the shrubby area.

When Life Gives You Lemons, Make Wildlife Habitat!

Ted Seiler, Private Land Conservationist, Macon, MO

We have all heard the old saying about lemons, lemonade, and making the best of a bad situation. While looking at some of the wildlife management practices on my land the other day, that saying came to mind, but with a little twist. I have only 4 acres to play with, but I try to make the most wildlife habitat I can with that little piece of land. In all honesty, the "lemons" that I've been dealt were not too sour. But they were opportunities to lose or gain wildlife habitat, depending on how they were handled.

I was handed one such "lemon" last fall when I needed to put in a new sewer system for our house. The project involved trenching new pipe across my favorite little patch of quail cover on the property, as well as digging a lagoon and tearing out additional cover. When the project was completed, as glad as I was to not have any more plumbing issues, I was a little disappointed at the appearance of the ground my wife had affectionately termed "the jungle". There was hardly a stitch of cover for my quail to hide in, but I knew the sacrifice was going to be short term (as well as unavoidable).

I knew I could not immediately put the cover back in, but there was something I could do. I tossed some wheat and fertilizer out on the freshly disturbed area to create a little food for this year. All fall and winter, deer ate on the lush green growth. Now that the seed is maturing, I see and hear quail in that area all the time. It is only about 1/10th of an acre, but there is a lot of food in that small plot and it required very little effort on my part.

Another "lemon" was dealt when we had a big wind storm a few years back. In addition to blowing down a large old barn, the storm knocked a lot of branches (some of which were very large) out of trees in the yard. The branches became brush piles scattered around the edge of the yard. I sprayed the existing grass, placed the large parts of the branches on the bottom, and then scattered the smaller branches over the top. The brush piles were successful enough at increasing rabbit numbers that I was forced to fence them out of the garden so I could keep a few vegetables for my family.

My final "lemon" is my lack of equipment. I can not justify spending money on equipment to disk and plant food plots on my small acreage. To date, I have been able to do nearly everything with my yard mower, a hand

pump sprayer, and occasionally borrowing an ATV disk and ATV from a friend. It takes a little more planning and a lot more effort than it would if I had a tractor and a disk, but I mow walking trails anyway so I placed those where I knew I'd need fire breaks and they serve a dual purpose. I time my spraying and burning so crops like wheat can be planted by burning and throwing the seed into the fresh burned area and letting the ashes cover the seed in the next rain. These crude methods do not result in cash crop quality stands, but they do not have to. All I am harvesting are wildlife sightings and occasionally a little meat for the table.



While none of these examples was really a bad hand I was dealt, there are instances where the “lemon” is a pretty sour pill to swallow. One such example is a newly cleared power line right of way. I have seen people spitting mad about a power company “ruining” their favorite spot to sit and hunt turkeys, or the best deer cover on the farm. There is really nothing you can do to prevent the power companies from maintaining their right of way (nor should you want them to stop), so you can either make the best of the situation or just be mad. If it were me, I'd take advantage of the new opening and plant a green browse food plot that would still attract turkeys and deer. Then, you can re-create the lost cover in another area.

One landowner I know allowed the county to borrow dirt off his land for a built up road and new bridge across the river. They took out a lot of brushy cover where they took the dirt from and he was worried about his quail. Given the situation, my advice was to plant quail friendly warm season grasses in the newly disturbed right of way, rather than allowing the county to plant fescue. How good of “lemonade” he was able to make remains to be seen, but we are certain that it will be better for quail than the fescue would have been.

Wildfires have burned hundreds of acres that the landowner had no intention of having burned. Wind and ice storms can make a forest look like a disaster area. Flooding might drown out crops year after year. A dry year makes a duck marsh just another bottom field. Each of these disturbances provides an opportunity to make a positive gain in wildlife habitat.

Charred ground provides an opportunity to eradicate non-natives like fescue and create room for plants that produce abundant food and cover. Downed branches from wind and ice storms can create thick cover at ground level, as well as opening up the canopy to allow sunlight to reach the forest floor and stimulate lush growth. Frequently flooded fields can be enrolled into a government program and turned into a wetland. During a drought, wetlands can be disked to stimulate annual plants that attract numerous waterfowl and other wildlife.

There will always be some situations that can not be made into a positive thing for wildlife. Most of these situations come about as a necessity of a farming operation, construction project or something that we deem important. These types of projects will go on regardless of their impacts on wildlife. If we can look for a way to dovetail wildlife habitat improvements along with these projects, wildlife will not lose out as bad as they otherwise could. So next time life throws you a lemon, MAKE WILDLIFE HABITAT!!

Did You Know???

Few quail live beyond 14 months and many hens fail to survive long enough to reproduce. With over 80% of the annual population failing to carry over to the next year, an annual quail crop cannot be stock-piled: good production and survival of young must occur annually if high quail numbers are to result each fall. This depends on a combination of favorable weather and favorable habitat.

Conservation Contractor Website

Want to make sure your wildlife management efforts succeed the first time? Hire a conservation contractor. These trained habitat helpers can implement wildlife management plans and practices to your satisfaction. Try the website out - www.mdc.mo.gov/cgi-bin/mdcdevpub/apps/contactsnonmdc/main.cgi The contractor list was updated in April 2008. Just list your county and practice you would like implemented to see if a contractor is available in your area. This is a great site to find a contractor to help you with your Conservation Reserve Program mid-contract management practices.

Quail Focus Areas – Targeting private land habitat work

Quail Focus Areas were identified in areas where landowners were already managing for quail, near conservation areas with good quail habitat, and/or where conservation partners have expressed an interest in quail management. Today, there are 34 Quail Focus Areas located throughout the state. Many focus areas are around 30,000 acres in size, but some are even larger because of wide-spread landowner interest and success. Within focus areas, staffs have been working with landowners to improve quail habitat by providing technical and financial assistance. Landowners and conservation partners are also spreading the news about Quail Focus Areas and the benefits of habitat management. Success will come one farm at a time. Every little bit helps! Listed below are highlights of two Quail Focus Areas.

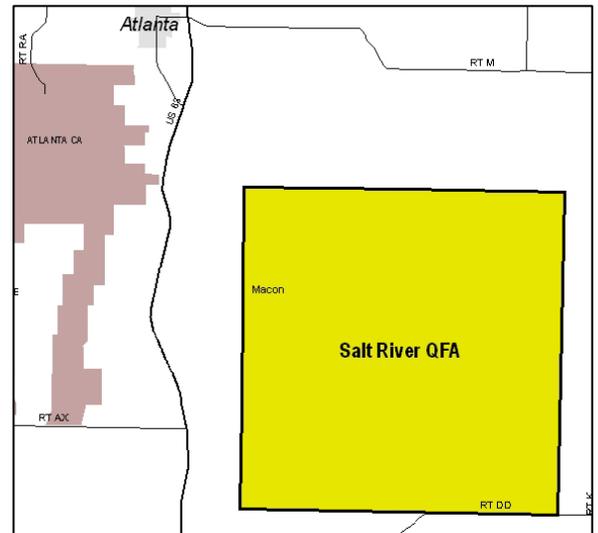
SALT RIVER QUAIL FOCUS AREA

Region: Northeast **County:** Macon **Size:** 10,216 acres

Person to Contact:

Ted Seiler, Private Land Conservationist
(660) 385-2616, ext. 118

Focus Area Facts: The Salt River Quail Focus Area is just a few miles east of US Highway 63 and the Atlanta Conservation Area. In the Salt River Quail Focus Area in 2007-08, nearly 1,000 acres of grassland and old fields have been prescribed burned. A group of 13 landowners met and discussed habitat management and observations of results in February 2008 and plan to make this an annual meeting. Some of the edge feathering projects are now 3 years old and are really looking good. The county is also getting involved. Recently, the county re-constructed a gravel road in the focus area nearly all of the roadside right-of-way was seeded to a warm-season grass mix for quail. There is still a lot of work to be done, but much has been accomplished in the short time the focus area has existed. Staff would like to impact at least 500 acres in the focus area each year.



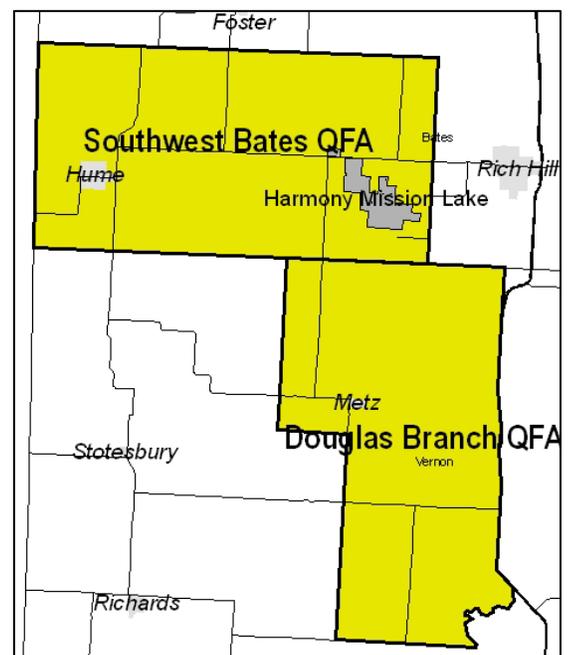
DOUGLAS BRANCH QUAIL FOCUS AREA

Region: Kansas City **County:** Vernon **Size:** 36,818 acres

Person to Contact:

Scott Sudkamp, Private Land Conservationist
(417) 667-8137, ext. 128

Focus Area Facts: Located in north-central Vernon County, the Douglas Branch Quail Focus Area is in the middle of an area where cooperators have been working to improve quail habitat in this row crop and CRP landscape. Landowners have been busy establishing CP33 field borders and edge feathering, and managing existing CRP fields with prescribed burning. Landowners and conservation groups have also reached to the local community. In 2007, Department of Conservation staff and Quail Forever members hosted a youth hunt to promote quail management and to encourage kids to take up the sport. In 2008, Department staff identified a new focus area, Southwest Bates County QFA, which lies to the north of Douglas Branch QFA. Contact Scott for information on both focus areas.



CRP/SAFE for Missouri Grassland Birds

Cropland owners within portions of Adair, Benton, Barton, Dade, Harrison, Jasper, Lawrence, Pettis, St. Clair and Sullivan and Vernon Counties may enroll in a new Conservation Reserve Program practice (CP38) designed to benefit Missouri's grassland birds. CRP/SAFE gives crop producers the freedom to enroll their least productive fields, or portions of fields. Land does not have to be designated as Highly Erodible to be eligible. Best of all, the landowner chooses exactly where to locate the 20-acre minimum enrollment.

According to Missouri Extension Economist Joe Horner, "The new CRP soil rental rates are roughly equivalent to comparable cropland cash rental rates recently summarized in the MU 2008 Cash Rental Rate Survey. For farmers looking to reduce risks and secure "direct deposit" profits from their worst acres, this is an excellent opportunity. In the current financial climate, some producers may also need to use this program to reduce future necessary lines of credit", according to Horner.

CRP/SAFE Benefits

Participants enrolling eligible cropland for 14-15 years receive:

- Annual CRP rental payments based on updated soil rental rates
- Farm Service Agency (FSA) and Missouri Department of Conservation(MDC) incentive payments
- Cost-share to establish habitat-enhancing grassland cover

CRP/SAFE Requirements

- Land must lie within a prairie-chicken focus area. Contact FSA to see if your farm is in the focus area.
- Minimum 20-acre enrollment; portions of fields may be designated by the landowner.
- Trees taller than 10' must be removed from the perimeter of enrolled acres (Non-CRP cost-share may be available).
- Only upland crop fields are eligible.
- Maintenance is required and includes high-mowing 1/3 of enrolled acres annually.

Grass Cover Establishment Cost-Sharing

Participants may establish Permanent Introduced Grasses/Legumes or Rare and Declining Habitat (native prairie restoration) plantings. In return they receive up to 90% of establishment costs from FSA, plus a Signup Incentive Payment (SIP) of \$100/acre. MDC will pay an additional one-time \$50/Ac. bonus for establishing approved cool-season grass/legume mixes, and a one-time \$75/Ac. bonus for prairie restoration plantings. The MDC bonus is limited to a state total of 2,000 acres per the state of Missouri fiscal year. Visit your local FSA office for more information on CRP/SAFE.

Grand River Grassland Prairie-Chicken Monitoring Update

Kendall Coleman, Private Land Conservationist, Albany, MO

The greater prairie-chicken once ranged throughout diverse prairies in central North America. In the 1800's, it is estimated that hundreds of thousands of these birds populated Missouri. This population peak was flattened by 1906 due to market hunting and the relentless loss of prairie habitat. In 1999, the Missouri Department of Conservation (MDC) placed the greater prairie-chicken on the state endangered species list. The introduction of tall fescue and the encroachment of trees throughout prairie landscapes continue to add to the reduction of prairie-chicken populations. Some 93 percent of the original range is now gone and an estimated 500 prairie-chickens remain including the restored population that exists in northwest Missouri.

In response to this continued and rapid decline, the MDC and the Nature Conservancy has identified the Grand River Grasslands Conservation Opportunity Area. Approximately 30,000 acres of this grassland focus area is located in Harrison County with Dunn Ranch and Pawnee Prairie Conservation Area located near the center. It currently is the largest stable to increasing population of prairie-chickens in Missouri.

To maintain this isolated population of prairie-chickens, our goal is to provide optimal habitat within a limited space. In 2005, a recovery plan for the greater prairie-chicken was developed by a team of MDC staff. Team

members drafted several objectives including monitoring by the Resource Science Division of MDC to determine the effectiveness of management options.

The monitoring efforts, of individual birds, will focus on determining prairie-chicken preferred habitats, nesting success, and chick survival rates. Grassland managers will benefit from observations of nest site selection, brood-rearing areas, and winter cover selected by radio-collared birds.

Twelve males and nine female prairie-chickens were captured last winter on Dunn Ranch using baited trap sites. The captured birds were weighed, banded and radio collared with a transmitter. Last spring, three initial nests and two re-nests were located and monitored using radio tracking. Data was collected including the number of eggs, nest site location, existing vegetative cover, invertebrate concentrations, and in some cases, predator involvement. Three of these nests hatched successfully, unfortunately no chicks survived until fall. Five of the twelve tagged adult males remain alive. Only one of the nine tagged adult females is still alive.

We have learned much about prairie management and conservation techniques, but much is left to uncover. The information we collect from our observations will help guide the direction we take on both public and private land prairies, benefiting the prairie chickens and hopefully reversing the current declining population trend.

Check it out!

Stan Stewart, with the Alabama Department of Conservation and Natural Resources recently published a new quail publication. Check out this excellent quail management guide for landowners, and biologists. Download a copy at <http://www.outdooralabama.com/hunting/game/quail/quailbook.pdf> Even though the book was written for Alabama quail fans, the guide is still appropriate and a “must have” for Missouri quail enthusiasts. It doesn’t make a difference. Nesting, brooding and shrubby cover is the same for quail in Alabama and Missouri!

2008 Upland Game Bird Hunting Prospects

Beth Cole, Agriculture Wildlife Ecologist, Kirksville, MO

Conservation Agents and Protection Division volunteers conducted roadside counts of bobwhite quail from August 1-15 in 107 of Missouri’s 114 counties. Surveyors count the number of quail observed while driving 20 miles per hour or less along permanent 30-mile gravel road routes. Participants are instructed to conduct counts beginning at sunrise on clear, dewy mornings with light winds to increase chances that bobwhite will be near roadsides. These observations are used to provide an index of quail abundance across the landscape. Because only a small portion of each county is sampled, the index best represents quail population trends at large scales, such as statewide and multi-county blocks such as the zoogeographic region (see map). The statewide long-term trend of the index closely follows other statewide indices of abundance including the North American Breeding Bird Survey (BBS) and Missouri quail harvest estimates. The roadside survey routes are run almost entirely through private land, so the quail index is a reflection of conditions on Missouri’s private lands.



This year’s statewide index of 2.9 quail per 30 mile route is 12% below last year’s index of 3.3. This is 17% below the 5-year average (2003-2007) and 25% below the 10-year average (1998-2007) (Table 1). Production appeared to be low this year, with the statewide average chick count at 0.8, 45% below last year’s count. Total quail counts were variable among zoogeographic regions with counts being highest in the Northeast Riverbreaks (4.9), followed by the Ozark Plateau (3.2) and the Western Prairie (3.0). Counts were lowest in the Northern and Eastern Ozark Border (0.7) and the Mississippi Lowland (0.9) (Table 1).

Weather conditions over the past year may have negatively impacted bobwhite this year. Temperatures in February and March were colder than average statewide, a period when food is scarce for adult birds. The

southwest and Ozark portions of the state experienced significant ice storms in December and February. The same region also had severe weather spawning 33 tornados and flash flooding on January 7-8. Overall, statewide temperatures ranged from 2-8 degrees above average in December and January, but precipitation was about 48% above average. February through May had cooler than normal temperatures and precipitation that ranged from 27% to 130% above normal (NOAA Midwestern Regional Climate Center). Precipitation continued to remain above normal throughout the summer, resulting in localized flooding events in many regions of the state. The cool, wet spring could have resulted in a negative impact on nesting and chick survival. Such events can destroy nests and cause chicks to die from hypothermia because their feathers are not developed enough to insulate the birds at a young age. Bobwhites are fairly prolific and populations can quickly recover from losses due to weather if habitat conditions are good.

Habitat conditions in Missouri vary from very good to poor throughout the state. Over-grazed, fescue-dominated pastures, loss of native grass stands, removal of low growing, dense woody cover, and increased commodity prices have all led to losses in preferred bobwhite habitat. Many programs are in place to assist private landowners in improving bobwhite habitat on their property, including the USDA Conservation Reserve Program (CRP), Conservation Buffers for Upland Birds (CP33), CRP State Acres for Wildlife Program (CP38), Missouri Department of Conservation programs, and habitat programs from organizations including Quail Unlimited and Quail and Pheasants Forever.

Table 1. Average number of quail counted per 30 mile route along 107 routes during August 1-15 2008

Zoogeographic Region	# of Routes	2008 Counts	2007 Counts	Long-term Avg. ('83-'07)	% Change from long-term Avg. ('83-'07)	% Change 2007-2008
N.W. Prairie	11	2.82	5.73	7.87	-27%	-50.8%
N. Riverbreaks	10	2.40	5.20	7.84	-33.7%	-53.8%
N.E. Riverbreaks	20	4.95	3.26	9.59	-66.0%	51.8%
W. Prairie	12	3.08	3.25	15.50	-79.0%	-5.2%
W. Ozark Border	11	2.45	2.85	6.88	-58.5%	-14.0%
Ozark Plateau	24	3.17	2.92	2.98	-1.9%	8.6%
N. & E. Ozark Border	12	0.67	1.92	2.77	-30.7%	-65.1%
Mississippi Lowlands	7	0.86	1.43	5.73	-75.0%	-39.9%
Total for Regions	107	2.88	3.30	7.21	-54.2%	-12.7%

Cass County Meets Northern Bobwhite Conservation Initiative goals!

Cass County, in west central Missouri, is the second county in the nation to achieve their Northern Bobwhite Conservation Initiative (NBCI) habitat goals set forth in 2002. The national plan set a habitat goal of creating 13,420 acres of quail friendly habitat on improvable agricultural acres in Cass County. An improvable agricultural acre is described as land offering potential for improving quail numbers and includes all pasture, hay, Conservation Reserve Program acres, and forest acres, but only 80% of the crop acres.

Since 2002, over 15,300 acres of quail friendly habitat has been completed in Cass County and quail numbers are responding to the improved management. Habitat improvements include establishing miles of CRP field borders and filter strips, converting undesirable grass fields to native warm-season grass and wildflowers, restoring degraded prairie and creating miles of low-growing woody cover with edge feathering or shrub plantings. Today these areas are providing the needed nesting, brooding and escape cover that have been lacking in this intensively farmed area.

Meeting the NBCI goals became possible through the cooperative partnership between United States Department of Agriculture, Quail Unlimited, Missouri Department of Conservation, National Wild Turkey Federation, and hundreds of landowners interested in quail management. The West Central Missouri Chapter of Quail Unlimited, located in Cass County, has played a critical role in promoting quail conservation in the county. This active chapter has won six out of the seven past years the National Habitat Award from Quail

Unlimited for their conservation efforts. Congratulations to the West Central QU Chapter and all the organizations, agencies, and landowners involved in restoring this critical habitat!

Mark Your Calendars

Prescribed Burn Workshops

January 27, 2009 – 6PM to 9PM at the University of Missouri-Extension Conference Room, Hillsboro, MO. **Pre-registration is required**, call 636-789-2441 Ext. 3. Seating is limited, so register early!

January 28, 2009 – 5:30PM at the Bass Pro Shop in Independence. Contact Andy Carmack at 816-622-0900 or Paul Lowry at 816-792-8662 to register

March 14, 2009 - 9AM to noon at the Moberly USDA Service Center, demo burn to follow. Contact Ted Seiler 660-385-2616 ext. 118 to register

March 28, 2009 - 9AM to noon at the Macon USDA Service Center, demo burn to follow. Contact Ted Seiler 660-385-2616 ext. 118 to register

Quail Survival During Floods and Extreme Rainfall Events

With widespread flooding and extremely heavy rains in the Midwest will there be any quail left???

Quail have evolved to overcome the extremes of weather if suitable habitat is available. The hens will nest multiple times, hatching has been frequently documented in mid-September, and the males will incubate eggs or brood chicks to enable the hen to re-nest. Current research in Missouri in two locations demonstrates a 'late hatch' this year. Eight birds have been captured and fitted with radio collars and half of these birds were hatched in September. Many programs restrict mowing during the peak nesting season (May 1 – July 15). However, in wet, cool years it is extremely important to not mow your odd areas even after July 15. Thousands of quail and other grassland bird nests were still active after July 15 this year.

Extreme rainfall events cause many nests and chicks to be lost. Heavy rainfall can cause partial flooding of nests and a cooling of the eggs, causing death of chicks within the eggs. Once chicks have hatched, it takes them several days to gain the ability to regulate their own body temperature. If a drenching rain occurs during this period to the extent that the hen cannot keep the chicks dry, they will chill and perish.

It is in years such as 2008 that we see a 'late hatch'. Meaning that most of the initial quail nesting or broodrearing attempts failed and the birds have brought off a successful second or third nest attempt. These late hatches occur during dry weather in the last half of the summer. There is a growing belief that these late hatched birds will not call during the traditional October covey call counts, but will sound off during decent conditions later into November. We get several reports from landowners saying they didn't know they had quail until they were sitting in a deer stand on a cold, still November morning and heard the coveys calling. Flooding in large river bottoms will not only destroy nests, but it can cause the loss of adult birds. Quail are not capable of long sustained flights to fly out of flooded areas. In fact, observers have noted flushed quail drowning when they could not fly far enough to find more high ground. But, if high ground is available, leave the quail to find it! A Carroll County farmer noted that he had a pair of quail stay on the roof of his home during a flood event in 2007! Others have reported birds sticking it out in the elevated driveway of a barn, on a debris pile or on a levee top.

If quail have the right habitat they will bounce back during times of good weather. While quail have been subjected to some extreme weather events during the last 2 years, we still hear from cooperators who are doing habitat work that they are seeing good to decent quail numbers this fall. The best insurance you can have for a consistent quail population is provide the habitat components they need, manage it and hope the weather cooperates long enough during the summer for the persistent quail to bring off a hatch.

Winter Covey Headquarters Calendar

December

Burn native warm-season grass fields to set back the grass and encourage annual weeds.

Disk your CRP acres by Dec. 31.

Don't delay - order your covey headquarter shrubs (shrub dogwood, wild plum, blackberry) this month.

Drop honeylocust and hedge trees in fencelines for quail covey headquarters. Don't forget to spray the stumps.

January

Stop wasting money on inputs on low-yield cropland edges. Visit your local FSA office and enroll these areas in CRP practice CP33.

Burn your CRP acres this month to reduce grass competition and increase wildflower abundance.

Dormant seed native warm-season grass and wildflowers.

February

Interseed wildflowers/legumes in conjunction with your CRP management practices. Cost share is available from USDA.

Broadcast annual lespedeza over recently burned areas and firelines.

Create covey headquarters by dropping large trees along fencerows and leave them where they fall.

Finish burning your native warm-season grass acres this month. For quail, DO NOT burn rank stands of native grass after March 15.

UNIVERSITY OF MISSOURI
 Extension

 NRCS Natural Resources
Conservation Service

The Covey Headquarters Newsletter
3915 Oakland Ave
St. Joseph, MO 64506

RETURN SERVICE REQUESTED

