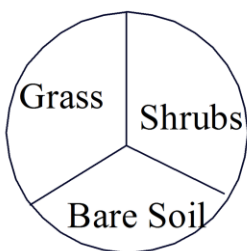




# THE COVEY HEADQUARTERS

Volume 11 Issue 4 Winter 2012

This newsletter is aimed at cooperators and sports-people 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](mailto: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.

## Dry summer a boon for bobwhites

*An early spring and below-average rainfall boosted quail nesting efforts for the second year in a row.*

Formal surveys and informal reports from across Missouri paint an encouraging picture for fans of the bobwhite quail.

The historic drought of 2012 was tough on wildlife species that require abundant water. However, it was a welcome relief for quail and other ground-nesting animals after four wet summers.

"Quail are particularly sensitive to cool, wet conditions during their nesting and brood-rearing period," says Max Alleger, a wildlife ecologist with the Missouri Department of Conservation (MDC). "Newly hatched bobwhites aren't much bigger than bumblebees, and they are extremely vulnerable to getting wet and chilled for the first few weeks of their lives. Cool, wet weather can seriously hamper their nesting efforts."



Alleger says Missouri's quail population took a serious beating from record-breaking rainfall in 2008. The wet, cool springs of 2009 through 2011 weren't much better for quail. However, the birds posted respectable gains once the summer of 2011 turned dry, and they built on those gains this year. That recovery got an early boost from an unusually mild winter.

“The winter of 2011-2012 was a non-event compared to what Missouri usually experiences,” says Alleger. “Unseasonably warm temperatures and scarce snowfall likely improved quail survival. The mild winter gave way to an early spring, with March 2012 being the warmest on record for Missouri. Plant emergence and development, covey breakup, and nesting all ran about three weeks ahead of normal by most accounts.”

That head start allowed quail to raise more chicks earlier. They also got a break in the form of dry weather. The period from March through August was the fourth-driest on record, exceeded only by the Dust Bowl years of 1934 and 1936 and by the drought year of 1988. MDC field staff throughout the state began reporting encouraging signs early in the summer, noting that the drought actually improved quail brood-rearing habitat. The lack of rain prevented the development of dense, matted grass that makes it hard for quail chicks to move around at ground level. The drought also ensured the availability of areas of bare soil, another important component of quality quail habitat.

Although row crops suffered terribly from lack of rain, Alleger says the effect on quail was minimal. “Food plots are in poor condition, but scattered, late summer rains produced a flush of ragweed, foxtail and other native annuals, which will provide food resources into winter. And although conservation area managers were unable to conduct prescribed burns this summer, dry conditions allowed them to apply other management practices in areas that have been too wet during recent years.”

MDC field staff reported seeing sizeable quail broods early in the season, indicating that initial nesting attempts had succeeded. Later nests may have been more impacted by hot, dry conditions. These encouraging anecdotal reports were verified by results from surveys MDC conducts each year to gauge quail nesting success.

MDC collects information about trends in quail populations and habitat each year. Resource Scientist Beth Emmerich says the birds began nesting activity earlier than usual this year, giving them a running start. Surveys showed the highest number of quail in the western Ozark border and Ozark Plateau regions. The Mississippi Lowlands, which experienced the worst drought in Missouri last summer, had the next-highest quail counts. Northwestern Missouri had the lowest counts. The full 2011-2012 quail-population status report is available at [www.mdc.mo.gov/node/3689](http://www.mdc.mo.gov/node/3689).

A continuing concern to quail managers is habitat loss. High crop prices prompted Missouri farmers to take 154,855 acres out of the Conservation Reserve Program (CRP) this year. If the same percentage of land with expiring CRP contracts is put back into row crops in 2013, the two-year loss of habitat will exceed 230,000 acres.

Congress created CRP to prevent erosion of cropland. The original legislation has been augmented to provide wildlife benefits. Withdrawal of land from CRP has direct negative effects on quail and other wildlife.

One bright spot is Missouri recently received an additional allocation of CRP acres. Landowners interested in improving their land for quail and other wildlife can contact any MDC or Natural Resource Conservation Service office. However, no new enrollments will occur until Congress approves a new farm bill.

MDC manages 19 conservation areas (CAs) specifically for quail. Managers rate quail brood-rearing habitat and this year's nesting success as good on these quail emphasis areas (QEAs). However, they rate hunting prospects on QEAs as only fair, because of losses suffered in the previous four years. For a list of QEAs, visit [www.mdc.mo.gov/node/3333](http://www.mdc.mo.gov/node/3333).

## New MU Extension Publication

Well over 100 wildlife species, including bobwhite quail, cottontail rabbits, and many species of song birds, benefit from early successional plant communities in Missouri, however, this type of habitat is often in short supply. A new publication, "[Establishing and Managing Early Successional Habitats for Wildlife on Agricultural Lands](#)" has been designed to feature the planning process that has been used to address wildlife considerations and implement habitat management practices and educational demonstrations that also complement agronomic objectives at the MU Bradford Research Center near Columbia, Missouri. The information also serves as a case study that can be used for planning and implementing habitat management practices that benefit a variety of wildlife species that require early successional plant communities, which producers and land managers will find useful.

## Sign up for an e-copy of The Covey Headquarter Newsletter

Stay in touch with MDC news and events online. Go to the following website - [http://mdc.mo.gov/user\\_mailman\\_register](http://mdc.mo.gov/user_mailman_register) to subscribe to the Covey Headquarters Newsletter via e-mail. The e-mail version will come to you about 4-5 weeks earlier than the printed version. There are several news releases, newsletters and periodicals listed on this website. Be sure to click "yes" on "Covey Headquarters" to start receiving your issue by e-mail. If you would like to be taken off the print version, please send an e-mail to the address listed at the top of this newsletter.

## Winter Covey Headquarter Calendar

### December

Order your covey headquarter shrubs from the [MDC nursery](#) through May. Blackberry, shrub dogwoods, and wild plum are best for quail.

Check with your local USDA office regarding 2013 Farm Bill program signups.

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

### January

Dormant seed native warm-season grass and wildflowers.

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

### February

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

Continue your edge feathering projects and create covey headquarters throughout your farm.

Get your spray equipment ready to kill fescue and brome around shrubs and edge feathered areas.

## What will Mother Nature throw at quail next?

**Bill White, Private Land Services Chief, Jefferson City**

For Missouri, 2008 - 2010 was the 3rd wettest 3-year period in the past 117 years, 1993 - 1995 was 2nd wettest, and 1991 - 1993 was the very wettest 3-year period on record. In 2012, we turn around and have the drought of a lifetime. While 2012 was tough on agricultural producers in Missouri, it has been a better year for quail than the wet years of the last 2 decades.

Many are still concerned what impacts our drought may have had on Missouri birds. In early August, during the height of the drought, I was privileged to attend the Northern Bobwhite Technical Committee (NBTC) meeting in Abilene, TX. With the exception of the bootheel, our flight there took us over a brown landscape all the way to Abilene.

It was fitting that the meeting focused on the effects of drought on quail. One of the presentations from the University of North Texas told of a study they conducted to determine the effects of heat on quail eggs. They found that a temperature of 113 degrees in the nest began to kill eggs. At a temperature of 126 degrees, all eggs are lost. Luckily we did not get to even 113 degrees here this summer. A Wildlife Division quail radio collar project on two CAs in SW Missouri showed that quail nests were successfully hatching a brood up through August, in support of the Texas study.

Later during our NBTC field trip, the air temperature was clocked at 104 degrees. A soil thermometer they had placed along the field trail with bare soil recorded a temperature of 139 degrees. Another soil thermometer placed in the shade of a shrub recorded 86 degrees and yet another soil probe placed under vegetation next to a stock tank overflow recorded a cool 79 degrees. So here is another value of the bare soil we promote for quail, especially when shaded. This summer I noticed a number of areas where rabbits had dug into dry soil in shaded areas on my farm. I always wondered why they did this, is it to cool themselves?

In 2011, researchers at the Rolling Plains Quail Research Ranch north of Abilene, TX, recorded a 99% drop in insect abundance from 2010 gathered in sweep net surveys. If you remember, Texas was hit by a drought rivaling the 1930s during the summer of 2011 and their quail population dropped 83%. While insect abundance may not have declined as precipitously in Missouri, from observations we do know that insect abundance here dropped substantially in certain areas during July and August of 2012. As you know quail chicks need insects during the first months of their lives to fuel that quail chick growth engine.

## **Did You Know???**

Many programs and policies of the U.S. Department of Agriculture (USDA) were authorized under the Food, Conservation and Energy Act of 2008 ("2008 Farm Bill") through Sep. 30, 2012. These include a great number of programs impacting millions of Americans, including programs for farm commodity and price support, conservation, research, nutrition, food safety, and agricultural trade. Because Congress has not passed a 2012 Food, Farm and Jobs Act, USDA can no longer make new commitments for programs for which the Department's authority or funding has expired. Currently, USDA is not approving any new contracts for the Grassland Reserve, Wetland Reserve, and Conservation Reserve programs. Indications are that there will be an Environmental Quality Incentive Program ranking period sometime this winter. Contact your local USDA Service Center to learn more.

## **Order Your Covey Headquarter Shrubs Now**

The George O. White State Nursery has made some changes this year. Instead of ordering trees and shrubs in quantities of 25, they are offering bundles from 10-40, 50-90, and 100+. There will no longer be a "quail cover bundle" as in years past. However, since you can order in smaller quantities, you can make your own quail cover bundle to meet your needs. Choose a mix of wild plum, blackberry, aromatic sumac, ninebark, gray and roughleaf dogwood. Plant them on a 3 foot spacing in a spot at least 30x50 foot in size.

## **Check out the MOre Quail Blog**

Follow this link - [mdc.mo.gov/node/8728](http://mdc.mo.gov/node/8728) for tips and insights from the MDC quail guys. Learn management techniques that will help you create high-quality habitat in every season.

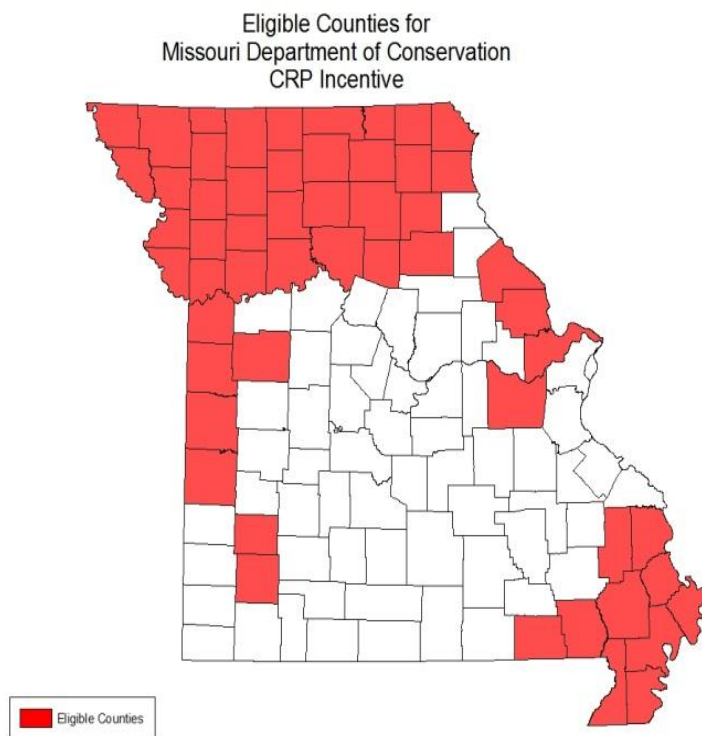
## **MISSOURI DEPARTMENT OF CONSERVATION OFFERS FINANCIAL INCENTIVES FOR NEW AND EXISTING CONSERVATION RESERVE PROGRAM LANDS**

Starting December 1, 2012 the Missouri Department of Conservation (MDC) is offering financial incentives for enrolling new Continuous Conservation Reserve Program (CRP) acres and to assist existing CRP contract holders with implementing Mid-Contract Management activities in 54 counties across Missouri. MDC will provide an additional \$100 - \$150 per acre incentive to enroll new CP33 – Habitat Buffers for Upland Birds, CP38 – State Acres for Wildlife Enhancement (SAFE), CP42 – Pollinator

Habitat, or CP23 – Wetland Restoration. This incentive is in addition to the \$100 - \$150 per acre Sign-up Incentive Payments already provided by the Farm Service Agency (FSA) for new enrollments.

MDC will also provide an additional \$18 - \$60 per acre for Mid-Contract Management activities such as prescribed burning, disking, herbicide application and legume or native forb interseeding on existing cool-season grass (CP-1) and warm-season grass (CP-2) CRP acres. This MDC incentive will be in addition to the cost-share assistance provided by FSA for completion of Mid-Contract Management activities. MDC incentives ranging from \$100 - \$200 are also available for installation or enhancement of shrubby cover within or adjacent to CRP land.

The Mid-Contract Management incentives will be available starting December 1<sup>st</sup>, however the incentives for enrolling new CRP acres will not be available until Congress passes or extends the Farm Bill. Contact your local MDC Private Land Conservationist or your Soil and Water Conservation District County Clerk to enroll in the MDC CRP Incentive program. Visit <http://mdc.mo.gov/> to find your local Private Land Conservationist contact.



## Three new Farm Bill Biologists hired in Missouri

We are excited to announce that three new Farm Bill Wildlife Biologists have been hired in Missouri. Casey Bergthold, Mary Crowell, and Scott Engelman are all being added to the team. These new biologists will work with area landowners and farmers to implement wildlife habitat conservation measures aimed at increasing quail and other wildlife populations. Through a partnership with the Natural Resources Conservation Service (NRCS), Missouri Department of Conservation (MDC) and Pheasants Forever and Quail Forever (QF); we aim to help restore quail numbers in Missouri.

Casey Bergthold is located in the Shelbyville Field Office and covers Shelby, Marion, Monroe and Lewis Counties. Casey is a native Northeastern Missouri and holds a B.S. in Fisheries and Wildlife from the University of Missouri-Columbia and a M.S. in Biology from Tennessee Technological University. Casey spent his youth working, hunting, and fishing on his families' farm near Santa Fe, Missouri – and while he enjoys hunting almost anything—days spent pursuing upland game and mushrooms are particularly



treasured. He joined Pheasants Forever and Quail Forever in October 2011 as a Farm Bill Wildlife Biologist in Southeastern Iowa where he worked primarily with landowners interested in improving or creating wildlife habitat through the Conservation Reserve Program. Contact Casey at [CBergthold@pheasantsforever.org](mailto:CBergthold@pheasantsforever.org) or (573) 823-0675.

Mary Crowell is located in the Ste. Genevieve Field Office, covering Ste. Genevieve, St. Francois and Perry Counties. Mary is from the St. Louis area and graduated with a B.S. in Wildlife Conservation & Management from Missouri State University.

In 2007, she began working as a Bobwhite Quail monitoring technician for MDC and fell in love with quail habitat management. In recent years Mary has been working on the Amphibian, Reptile and Small Mammal crew of the Missouri Ozark Forest Ecosystem Project examining how timber management affects the ecosystem on a landscape scale. In her free time she enjoys plinking, wildlife photography and hiking in the beautiful Ozarks with her husband and their Australian Kelpie. Mary can be contacted at [mcrowell@pheasantsforever.org](mailto:mcrowell@pheasantsforever.org)

Scott Engelman is located in the Milan Field Office and will be covering Sullivan, Grundy, Mercer and Putnam Counties. Scott grew up near Minneapolis, Minnesota, and holds a B.A. in Environmental Studies with a Biology focus from Gustavus Adolphus College in St. Peter, Minnesota.

Scott grew up canoeing and fishing in the Boundary Waters Canoe Area (BWCA) of Northern Minnesota, hunting upland game across Minnesota and the Dakotas, and has spent as much time ice-fishing as possible in recent years. He spends his spare weekends fishing at his family's cabin near Brainerd, Minnesota. Having recently caught his first channel cats, he is eager to explore what Missouri's natural resources have to offer. Scott is joining PF and QF after several years working for a private prairie restoration company in Central Minnesota, where he helped restore native prairie and wetland landscapes in agricultural and urban settings alike. Contact Scott at [sengelman@pheasantsforever.org](mailto:sengelman@pheasantsforever.org).

The Farm Bill Biologists are employees of, and supervised by QF, with daily instruction and leadership provided by NRCS and MDC. Funding is provided by NRCS, MDC and local QF Chapters. The Farm Bill Biologist Program began in 2003 with 4 positions and has grown to about 106 biologists in 18 states.

## **Burn warm-season grass stands to benefit native wildflowers and quail brooding cover!**

Jeff Powelson, Private Land Conservationist, St. Joseph



Do you find your warm season grasses have overtaken your native wildflowers? Now is a great time to prepare for next year's summer beauty as well as next year's brooding cover for upland birds. As you walk around your favorite private land hunting spots or your farm, take a look at the old fields, CRP fields and woodlands. Is the grass getting a little too thick for you to walk through? Do you find yourself struggling through grass or heading towards the edge of a food plot or crop field for an easier walk?

If you answered yes, now is the time to set back the rank stand of grass to stimulate next year's wildflower show and brooding cover. If left unmanaged, these fields will not provide brooding cover next year.

Remember, 40 to 60 percent of a quail's home range should be in a grassy/weedy stage with lots of bare ground, better known as brooding cover. The remaining should be in nesting (10 to 30 percent) and shrubby cover (10 to 20 percent). Ideally, these habitat components should be scattered throughout the home range.

Unfortunately, many landowners don't begin habitat work until late winter or early spring. Any management is better than none, but this year consider doing a little habitat work before Christmas. Consider burning a portion of your rank CRP grass fields or old fields in late November or early December. Don't burn more than 10 to 20 percent of your grassland or old field acres. You don't want to remove too much cover during the fall or winter. You shouldn't burn it all at once either. Small, 5- to 20-acre burns are a good size for a winter burn. By burning this time of the year, you will expose the plant crowns and surface roots to Mother Nature's cold weather. This will set back your grasses while giving your wildflowers a chance to express themselves the following spring and summer.



You may lose a day or two of hunting when conducting late fall or early winter burns on rank warm-season grass stands, but these results are so much better than spring burns. Plus, you can come back in the spring and strip-disk the field or over seed forbs in the winter. It is much easier and less stressful to spread out your prescribed burning "to-do list" throughout the year, often starting in August and ending in early March.

## Mark Your Calendars

**November 30, 2012** – Wildlife Habitat Management Workshop, Sikeston Outlet Mall meeting room, Sikeston, MO, 1:30PM to 4PM. Farm tour near Matthews to follow. RSVP by contacting Scott James, 573-545-3593 x3.

**December 5, 2012** - Prescribed Burn Workshop, Bass Pro Shop, Independence, MO from 5:30PM to 9PM. Call 816-622-0900 to register.

**December 13, 2012** – Prescribed Burn Workshop, Bray Conservation Area, Rolla, MO from 5PM to 8PM. This class is for folks that have an approved management plan or would like a prescribed fire management plan. RSVP by contacting Nancy Bates, 573-364-6202 x109.

**December 15, 2012** – Prescribed Burn Workshop, Bray Conservation Area, Rolla, MO from 5PM to 8PM. This class is for folks that have an approved management plan or would like a prescribed fire management plan. RSVP by contacting Nancy Bates, 573-364-6202 x109.

**December 20, 2012** – 18 Months with Bob – A look into the life of quail, Litton Center, Chillicothe, MO from 6PM to 8PM. Learn the life of a quail during each season over an 18 month period. Refreshments and handouts provided. RSVP by contacting Andrew White, 660-646-6220 x116.

**January 3, 2013** – Management Practices for Wildlife, Litton Center, Chillicothe, MO from 6PM to 8PM. Learn habitat management practices for quail and other upland wildlife. Refreshments and handouts provided. RSVP by contacting Andrew White, 660-646-6220 x116.

**January 15, 2013** – 18 Months with Bob – A look into the life of quail, Carrollton Public Library, Carrollton, MO from 6PM to 8PM. Learn the life of a quail during each season over an 18 month period. Refreshments and handouts provided. RSVP by contacting Andrew White, 660-646-6220 x116

**January 19, 2013** - Landowner Burn Workshop and Demo. Poosy Conservation Area Carlton House (west side of Indian Creek Lake off Hwy U) in Livingston County. 9AM start time with a hands-on burn to follow (weather permitting). Participants will learn how to safely conduct a prescribed burn for CRP, wildlife and natural community management. Attendees who wish to help with the burn should have leather boots and gloves. Lunch, refreshments and handout materials will be provided. Please RSVP by January 16<sup>th</sup> to Scott Roy 660-359-5685 x114.

**January 22, 2013** – Management Practices for Wildlife, Carrollton Public Library, Carrollton, MO from 6PM to 8PM. Learn habitat management practices for quail and other upland wildlife. Refreshments and handouts provided. RSVP by contacting Andrew White, 660-646-6220 x116.

**February 12, 2013** - 18 Months with Bob – A look into the life of quail, Brookfield Area Career Center, Brookfield, MO from 6PM to 8PM. Learn the life of a quail during each season over an 18 month period. Refreshments and handouts provided. RSVP by contacting Andrew White, 660-646-6220 x116

**February 9, 2013** - Landowner Burn Workshop and Demo. Lake Paho Conservation Area Shop in Mercer County, MO. 9AM start time with a hands-on burn to follow (weather permitting). Participants will learn how to safely conduct a prescribed burn for CRP, wildlife and natural community management. Attendees who wish to help with the burn should have leather boots and gloves. Lunch, refreshments and handout materials will be provided. Please RSVP by February 6th to Scott Roy 660-359-5685 x114.

**February 12, 2013** - Regional Landowner Workshop in Wayne County, MO. For directions and registration call the Southeast MDC Regional Office at 573-290-5730. Sessions include wildlife management, habitat, programs, one-on-one technical assistance with aerial photography, and door prizes.

**February 26, 2013** - Management Practices for Wildlife, Brookfield Area Career Center, Brookfield, MO from 6PM to 8PM. Learn habitat management practices for quail and other upland wildlife. Refreshments and handouts provided. RSVP by contacting Andrew White, 660-646-6220 x116.

**June 20, 2013** - UMC Bradford Quail and Native Plant Field Day – details coming in future newsletter.

UNIVERSITY OF MISSOURI  
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The Covey Headquarters Newsletter  
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