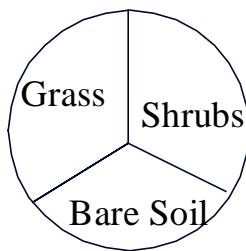




THE COVEY HEADQUARTERS

Volume 13 Issue 3 Fall 2014

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 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.

Missouri Quail Monitoring Part of National Effort

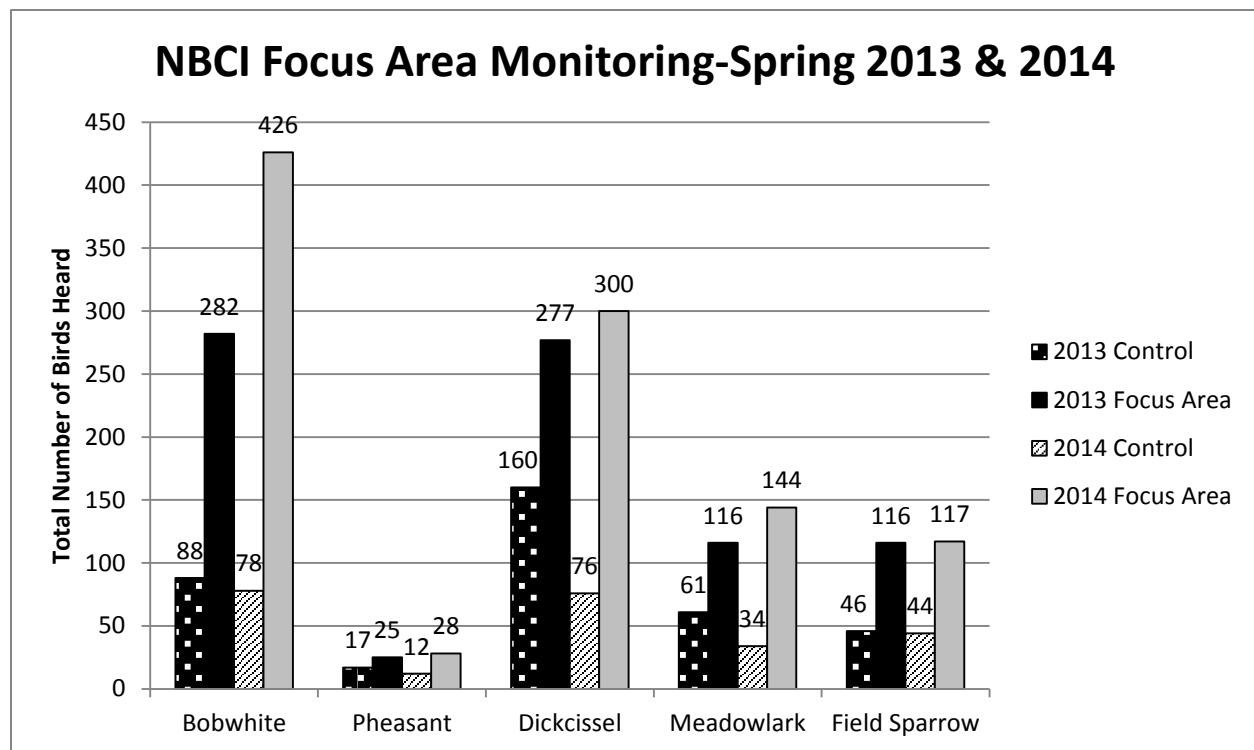
Beth Emmerich, Resource Scientist, Kirksville and Lee Metcalf, Private Lands Conservationist, Carrollton

In spring of 2013, a group of MDC staff and Quail Forever biologists began monitoring quail and songbirds in a portion of the 2C Quail Focus Area in Carroll County. The focus area was named "2C" because it covers a large portion of both Carroll and Caldwell counties. This effort is part of a pilot study to start a "Coordinated Implementation Plan" developed by the National Bobwhite Technical Committee as a part of the National Bobwhite Conservation Initiative or NBCI. The NBCI is a unified effort of 25 state fish and wildlife agencies and conservation partners to restore wild populations of bobwhite quail. The goal of the monitoring plan is to document, within 5-10 years, if quail habitat management can achieve sustainable bobwhite populations. Missouri, Georgia, Iowa, Kentucky, Texas, and Virginia all began the pilot monitoring project, with Oklahoma and Nebraska slated to join the effort in 2014. By working together, other states can see what habitat management techniques work in different geographies, and we can assess how much quality habitat quail require in various parts of their range.

Many of the participating states are just beginning to select their focus areas for habitat management, but in Missouri, we're fortunate that the Missouri Department of Conservation began establishing Quail Focus Areas (QFAs) on private lands in 2004. We have many focus areas already in place, with substantial ongoing habitat management efforts. We selected a 5,200-acre portion of the 2C QFA where habitat management for quail has been taking off through efforts by Department staff and Quail Forever volunteers since 2005. In the focus area, landowners have completed 7.1 miles of edgefeathering (at a 30 ft. width), with 2 more miles already planned. There are 1,591 total acres of CRP in the area with 770 of those acres in warm-season grasses and another 100-150 acres being converted to CP-33 or CP-38 this fall. The percentage of CRP in warm-season grasses will likely increase after this fall as some cool-season grass acres are slated to return to production, and some converting to CP-38. Food plots are planted on 5-10% of the area annually, and 30-40% of the CRP plantings have mid-contract management practices applied each year. These habitat improvements were implemented through USDA Farm Bill programs, the 2C Chapter of Quail Forever, and technical assistance from the Natural Resources Conservation Service and MDC.

In our first spring of monitoring, we heard three times more bobwhite quail in the focus area, compared to the control area. We also heard between 2 and 3 times more Dickcissels, Meadowlarks, and Field Sparrows in the focus area versus the control, demonstrating that habitat management for quail also benefits a variety of other grassland bird species. During the spring of 2014, we heard a total of 426 bobwhites in the focus area compared to only 78 in the control area. Numbers of Dickcissels and Meadowlarks were both quite a bit lower in the control area this spring than they were last year, while the numbers inside the focus area increased. The numbers of Field sparrows were nearly identical in 2013 and 2014, and we continue to hear twice as many in the focus area than the control. Our surveys continue to show that habitat management for bobwhite continues to benefit other grassland bird species.

We are also monitoring the 2C Focus Area in the fall, listening for bobwhite coveys. Last October, we heard an average of 2.7 coveys per point in the focus area, and only 0.3 coveys per point in the control area. We are encouraged by the first two years of spring quail and grassland bird monitoring, and are looking forward to beginning our second year of fall covey surveys in October. This monitoring program would not be possible without the combined efforts of Private Lands, Resource Science, and Wildlife Divisions, Quail Forever, and local volunteers all working together to conduct early morning surveys. Missouri has long been a leader in quail management and monitoring efforts, and we continue to set the bar high for other states looking to achieve success in bobwhite habitat management.



Mark Your Calendar

The Missouri Dept. of Conservation's Southeast Regional Coordination Team will be hosting a Regional Landowner Workshop at the Southeast Missouri University Campus at Malden, MO (700 N Douglass St, Malden, MO 63863) on February 7th, 2015 from 8am – Noon. Participants at the workshop will have opportunities to hear presentations on wildlife, forest, and pond management as well as other topics such as trespassing issues and cost share programs. There will also be a library with conservation related publications, as well as a Landowner Consultation Room where participants can receive one-on-one assistance from biologists to evaluate your farm for wildlife habitat potential. Preregistration is required by calling the MDC Southeast Regional Office at 573/290-5730.

Pollinator Habitat – For the Bees?

Travis Dinsdale, Area Biologist, St. Joseph

Most of you have heard about the increased emphasis on pollinators. Anyone that eats should care about pollinator's as 1 in 3 mouthfuls of food and drink we consume depends on pollination. Additionally, over seventy percent of all wild plants use insect pollination for reproduction. Pollinator's include bees, wasps, butterflies, bats, birds, and many others. Pollinator's are on the decline due to many factors including; diseases, parasites, environmental contaminants, and habitat loss.

In 2010 I decided to establish pollinator habitat. I converted a half acre of hay ground and a half acre of the yard to a 15-20 species mix of native wildflowers, little bluestem and sideoats grama. The mix contained 5 pounds of wildflowers and 2 pounds of grass. I sprayed the site with glyphosate in early October and then burned the residue in late November. I seeded the pollinator mix in early December into the burned area.



Pollinator plot – picture taken July 19, 2014

During the summer of 2011, I high-clipped the plot in June, July and August so the new seedlings wouldn't get shaded out. This past winter, the plot was burned for the first time to remove old plant litter and to encourage wildflower growth.

The original goal of the pollinator plot was to reduce the amount of mowing my wife and I had to do and to have native wildflowers blooming for several months of the year right out our doorstep. The plot is not only good for bees and butterflies, but many species of birds too. This year alone we've seen bluebird, goldfinch, dickcissel, grasshopper sparrow, and pheasant to name a few. In early August I flushed an adult quail with six chicks out of the plot. Two days later I flushed 17 sparrow-sized quail chicks. The group flew a short distance and landed in the middle of the plot. I suspect they are using the plot as brood habitat. It offers a nice overhead canopy of plants and contains bare ground allowing ease of movement. With the diversity of flowers, it attracts many insects that are food to newly hatched quail chicks.

Many programs exist to help you establish pollinator habitat on your farm. Two of the most popular programs are the Conservation Reserve Program CP42 pollinator practice and the Environmental Quality Incentive Program. There are also opportunities to establish pollinator habitat through the Conservation Stewardship Program. Contact your local USDA Service Center for more details. Create some pollinator habitat this winter and help do your part for the bees – and quail!

Youth-Only Quail and Pheasant Season

To provide more opportunities for hunters ages 6 through 15, the Conservation Commission has established youth-only quail and pheasant seasons. Both seasons take place October 25-26, 2014. Youths who are not hunter education certified must hunt in the immediate presence of a properly licensed and hunter-ed certified adult. Adults may assist youths, BUT THE ADULT MAY NOT HUNT quail or pheasant. The quail season takes place statewide. The pheasant season will be held in the north zone only. The north zone is defined as north of Interstate 70 and also in the portion of St. Charles County south of Interstate 70. Check the permits and regulations page on the MDC website (<http://www.mdc.mo.gov>) for more details.

MDC-CRP Incentive Continues

Improve your CRP acres using the MDC-CRP Incentive. Through the program, MDC is offering landowners cost-share assistance for edge feathering, downed tree structures, and fescue and brome treatment adjacent to CRP acres. Additional incentives exist for the following mid-contract management activities – prescribed burning, disking, chemical application, and forb/legume interseeding. Continuous CRP sign up bonuses of \$100-\$150 per acre for field borders, pollinator habitat, and SAFE practices. Below are a couple of landowner successes after utilizing the MDC-CRP Incentive. Contact your local Private Land Conservationist or MDC office for details.

Landowner MDC-CRP Incentive Testimonials –

Nothing like taking it down to the wire. I got it done yesterday, thanks for your patience. While up there, as I kicked numerous pheasant up, I was excited to think how the improvements will help increase the numbers even more. Keep me posted on any programs that I might qualify for in the future. If you ever have interest in taking people or students to my place, feel free to contact me. It is a pretty diverse chunk of ground that holds a large variety of game, and so far is a success story for quail and pheasant. Thanks, Whitney

Our family has always been avid hunters and have been interested in preserving bird habitat. There is a real conflict between modern farming practices and the kind of habitat that quail require to survive. It is very difficult for a farmer in the busy pursuit of making a living off of the land to think about preserving wildlife habitat. It takes some kind of incentive program like the MDC-CRP to keep the landowner focused on improving his wildlife habitat. Along with the incentives, the program gives guidelines to show the farmer the proper steps to take to improve small game habitat.

In the last two years since we implemented this program, we have seen a dramatic increase in the quail population on our farm. It is easy to think about these small steps needed to improve the habitat but it comes at a very busy time of year and it is easy to put these practices aside and wait until later in the year, but by then, many times it is too late. The incentive program gives the farmer enough money to make sure the practices are completed properly and on time. The big benefit, above all else, is the growth of the quail and pheasant population.

I am a seventy year old retired farmer and have been a hunter all my life. It was always strange to me that wildlife lives on private land but the wildlife belongs to the public. So for the first time in my life, MDC has several professionals that are actually working with the landowners who provide the food and shelter for the wildlife. With the MDC-CRP program we are seeing a generous increase in all species of wildlife. Gary and John Dolan

Update to Southwest Missouri Quail Demographics Study

Frank Loncarich, MDC Wildlife Management Biologist

In the last edition of the Covey Headquarters newsletter I gave an update on the 5-yr comprehensive bobwhite quail ecology and demographics study on select conservation areas in southwest Missouri. We are now at the tail end of the nesting season and I want to give a short update on the nesting success to date.

We designed the study to look at quail reproductive parameters in differing landscapes. We had been observing some cases where grassland dominated landscapes were producing more quail than areas that were being managed with a more traditional approach to quail management. As a result, we chose to study quail on 2 managed native prairie conservation areas and 2 traditionally managed conservation areas.

The data we have gathered over the last few months have been eye opening, and show a dramatic difference in production between the study sites. The table below shows the nesting data as of July 31, 2014. Additional nests have been located since then and complete results will be available later this year.

Figure 1. Nesting data for each of the 4 study sites through July 31st, 2014.

“Incubating” means currently incubating as of July 31st.

Area	# Nests	# Incubating	# Destroyed	# Hatched
Talbot	29	3	16	10
Shawnee Trl	18	3	12	3
Shelton	23	5	12	6
Stony Pt	23	4	6	13

If you will remember from previous updates, Shawnee Trail and Talbot represent the traditionally managed sites while Stony Point and Shelton are the native prairies sites. Stony Point jumps out as having the best reproductive output with 13 hatched nests and only 6 destroyed. This was not unexpected as previous data showed that Stony Point had good nesting success. Nest success at Shelton prairie was a disappointment, as we expected it to be similar to Stony Point. However, its small relative size may have something to do with the greater nest loss. Talbot showed good nesting effort but a high level of depredation.

The real surprise to all involved with the study is the very poor nest success at Shawnee Trail. We do not know what to make of this at this point but we plan to investigate further. What this very preliminary data shows, is that nest success across all sites is low but some sites exhibited much lower nesting success than we expected. It also hints that landscape differences may affect nesting in important ways. I also want to point out that this data represents only a portion of 1 years' worth of nesting information. We have 4 more years of data collection to go, at which point we will have a better understanding of what is driving quail reproduction on these areas.

There still remains a couple months' worth of data collection before we really start analyzing what we have. What we have collected so far has been exciting and we look forward to bringing more updates in the future.

Did You Know???

As the leaves begin to fall and the summer vegetation begins to break down, quail enter the “fall shuffle” period. At this time, quail intermingle in large groups, mixing and reorganizing into coveys of eight to twenty birds that shift to areas of heavier winter cover.

Time for a Prescribed Burn?



The late summer/early fall window is a great time to conduct a prescribed burn to improve your native warm-season grass fields for quail. Burning during this timeframe will:

- Reduce the height of next year's grass growth
- Encourage broadleaf plants including ragweed and wildflowers
- Create bare ground within the grass stand making it more usable for small game
- Reduce woody invasion

Get your firebreaks ready and burn any time after August 15th. Postponing until after Sept. 15th will avoid destroying late-nesting quail. You may think it is too green to burn, but there will be enough dead plant litter to carry a fire. Pick a day with the humidity in the 45-60% range and burn small patches so that you do not destroy all of the winter cover in a field. After the burn, consider overseeding native wildflowers and legumes in the burned area in December or January.

Before burning CRP acres, contact your Farm Service Agency to make sure you are following proper program guidelines. If you are new to burning, attend a prescribed burn workshop and make sure you have a burn plan in place before you drop the match. Most NRCS/SWCD offices have burn equipment available for use including drip torches, flappers, rakes and sprayers.

Go to the following website for an information sheet about prescribed burning –
http://efotg.sc.gov.usda.gov/references/public/MO/PrescribedBurn_InfoSheet_4_08.pdf

New Small Game Resource for 2014

Small game hunters should look for a new publication as they head afield this fall. The Missouri Department of Conservation (MDC) plans to release a new resource, *Small Game Hunting Prospects*. This publication will, in part, replace the quail and pheasant reports that have been used in the past. The publication will feature information on species' biology, management recommendations, hunting tips, Managers Notes, and a Where to Go section. Species featured in the report include quail, pheasants, rabbits, squirrels, doves, rails, snipe, woodcock, and frogs. *Small Game Hunting Prospects* will be published electronically, and a small number of printed copies may be available through MDC public offices. Each featured species or group of species will have its own stand-alone section to allow users to print only the information they are interested in.

Small Game Hunting Prospects will include the most up to date regional reports such as weather summaries, biologists' reports, and recent habitat improvements. The *Small Game Hunting Prospects* is now available at the following link - <http://mdc.mo.gov/node/28835>

Fall Covey Headquarter Calendar

September

Mow firebreaks to prepare for late summer and fall burns
Spray sericea lespedeza now through the end of the month
Conduct a prescribed burn to reduce warm-season grass dominance

October

Conduct quail covey call census visit - <http://mdc.mo.gov/node/4708> to learn how
Spray native grass plantings for invading fescue and brome after a killing frost
Most USDA Conservation Programs will announce new signups after Oct. 1
Eliminate fescue and brome from shrub thickets, woody draws, and fencelines after leaf drop

November

Quail and pheasant season begins
Start your edge feathering operations – make new homes for quail and rabbits
Prepare ground for shrub plantings
Order tree and shrub seedlings from the MDC nursery – www.mdc.mo.gov
Basal spray undesirable trees according to herbicide label now through March

Census the Quail on your Property this fall

Fall quail whistling counts should be conducted in October. The maximum distance a quail whistle can be heard is 800 yards, but on average, 547 yards is the limit, so space listening points 1,000 yards apart. With a 547-yard listening radius, you are theoretically hearing quail in a 194-acre circle around you. If trees or topography limit your ability to hear quail whistling 547 yards away, listening stations can be closer together. Put listening stations on ridgetops to maximize the area you survey each morning. Permanently mark each listening station so they can be used every year. Listen only on calm and clear mornings starting 45 minutes before sunrise during the last 3 weeks of October. Listen until about 10 minutes before sunrise. Generally you will not hear the familiar “bobwhite” during the fall calling period. The covey call is a clear load whistle vocalized as “koi-lee.” Listen carefully because the call typically lasts only 30 seconds. For best results, be consistent in the way you collect the data. Keep track of all data and keep it on file for year-to-year comparison. To learn more about fall whistle counts visit <http://mdc.mo.gov/landown/wild/quail/fallcount.htm> The website includes a survey form and recordings of quail calls.



Quail versus Turkey

Is it true that turkey eat baby quail?

A single Florida study from the 1930s noted an instance of turkeys destroying quail eggs. No biological study since has documented turkeys damaging quail nests or feeding on chicks. Turkey researchers have not found a single quail chick or egg fragment while examining thousands of turkey stomachs. In addition, scientists monitoring quail chicks fitted with radio transmitters and watching quail nests via remote cameras have yet to catch a turkey in the act. Given that literally hundreds of studies of wild turkey food habits and predation on quail have been conducted over the past 80 years, the lack of evidence is remarkable. The logical conclusion is that turkey depredation on quail is exceedingly rare, and that turkeys have no direct role in the decline of quail.

Why have turkeys seemingly replaced quail in many areas?

Among the changes that have hurt quail, one that relates to turkeys, is the increase in wooded land. Missouri has gained nearly 2.5 million acres of woodland since the early 1970s. These new woodlands are generally not large stands of healthy, mixed forest that provide valuable wood products or homes to forest interior songbirds. Much of this increase is comprised by small stands of less desirable trees such as cedar, Siberian elm or locusts that have encroached into once-open areas. Along with this expansion of wooded cover, turkeys have colonized parts of the state that were formerly bobwhite strongholds, particularly in the traditional prairie landscapes of western and northern Missouri.

Turkeys and quail share some habitat needs, such as grass for nesting, weedy areas for feeding and row crops and acorns for winter food. However, the trees that turkeys require for roosting can spell trouble for quail. Quail need low-growing tangles of brush and briars for protection from predators and the elements. Tall trees shade out this beneficial woody cover over time and provide strike points for predatory hawks and owls.

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