Quail-News

The Quail-Tech Alliance Newsletter

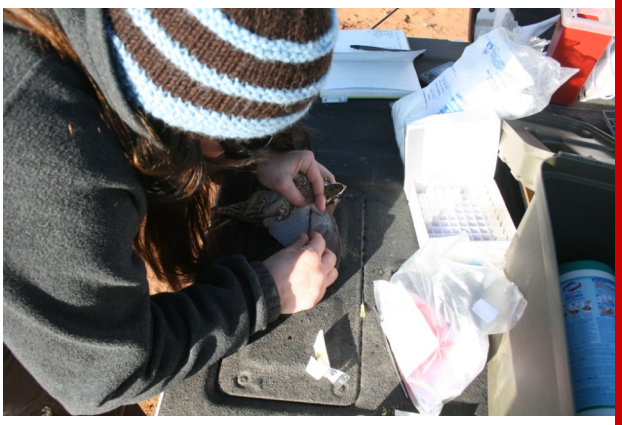
Spring 2011

Quail-News: Issue 4.0

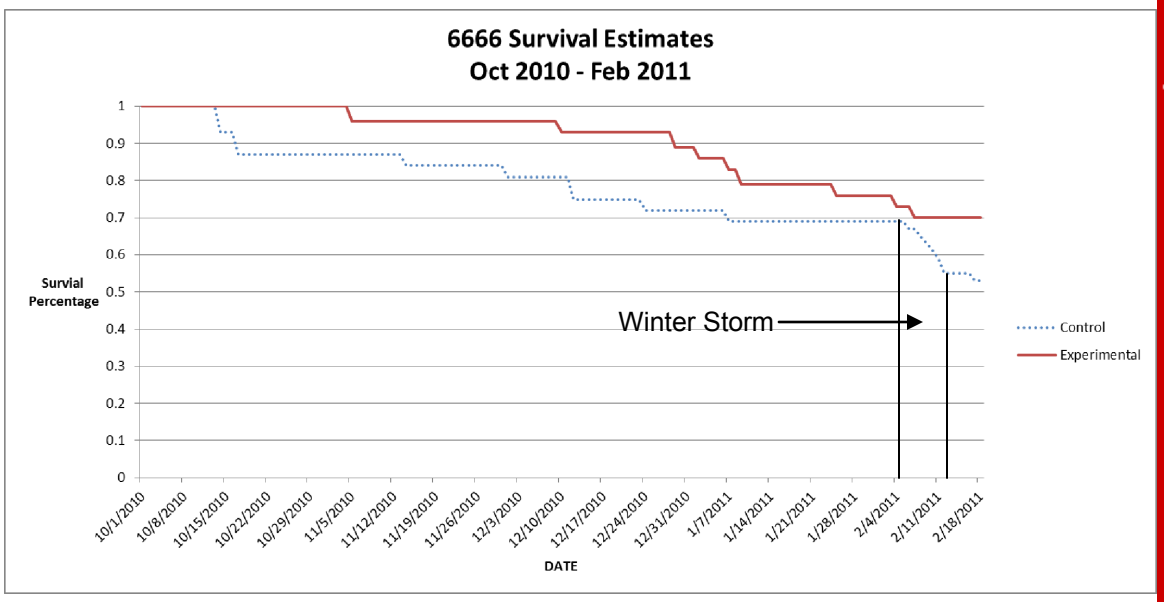
Study Update

Supplemental Feeding Study on the **6666 Ranch**:

By Byron R. Buckley, Graduate Research Assistant



We first described a supplemental feeding study taking place on the 6666 Ranch in our Winter 2010 Newsletter. You will recall this research, which started in September 2010, is using a 14,000 acre pasture separated into 1,000 acre treatment and control plots. The treatment plots receive supplemental feed while the control plots receive no supplemental feed. Supplemental feed is provided by broadcasting sorghum into the existing woody and herbaceous standing cover on permanent feeding routes. We have been monitoring the movements and survival of radio marked hens since October 1, 2010 and have analyzed hen survival data for both experimental units (feed provided) and control units (feed not provided) from Oct 1st to Feb 18th. Currently the hens in experimental units have a substantially higher survival rate (70%) than control hens (53%). It is too early to make strong inferences, but having 17% more hens able to start nesting would be a major benefit. Trapping has resumed on the 6666 ranch to augment radio marked northern bobwhite hen numbers prior to nesting season. We will be monitoring the hens throughout the summer to compare differences in reproductive success between experimental and control units. Look for updates in future newsletters concerning hen survival through the spring, nest initiation dates, nest success, and chick survival.



Land Management:

If grass is particularly short, consider reducing stocking rates, or consider stockers rather than cows and calves.

Consider using stockers to "flash graze" this Spring if forage resource is sufficient, remove livestock by mid-June or first of August at the latest.

Vegetation Management for Quail During Our Current and Future Droughts

By Ronald Sosebee

No one needs to be reminded how dry it has been in the Rolling Plains since September 2010. Very little precipitation has been received during the autumn of 2010 and during the winter going into the spring of 2011. As long as la Niña is in effect it will continue to be relatively dry. Hopefully, we are in a "short-term" and not a "long-term" drought. The upside is that "it will rain someday". And when that day comes, we as landowners and ranchers need to be in a position to capture as much of the rainfall as possible and retain it on site (where the precipitation falls). Hopefully, we can catch some "tank water" also, but we don't want all of the rainfall to run off. So, with the above prelude, what has this got to do with management of the vegetation for quail? With a limited amount of precipitation during the autumn and winter, the grasses have had very little chance to produce new basal growth from which tillers are derived and carbohydrates are stored from which new growth will come this spring. And, the weeds have had very little chance to either germinate (annuals) or produce rosettes (perennials). Therefore, the herbaceous vegetation very likely has been negatively impacted by the lack of precipitation since September 2010.

Differing habitat management techniques

First, lack of residual herbage such as bunch grasses with a stubble height not sufficient to provide protective cover during the very cold periods of January and February could have had a serious negative impact on the quail population. The lack of residual herbage this spring also leaves a void for nesting cover as well as protective cover. If livestock is part of your operation and numbers were not adjusted last autumn, then you might consider adjusting them this spring. If your goal is to produce more quail, then maintenance of a desirable habitat is absolutely necessary. If "nothing has changed in your livestock management scheme", change has occurred in the vegetation anyway because of the weather patterns. And the impact of the weather patterns has probably been exacerbated by livestock grazing. Short-grass vegetation (i.e., blue grama-buffalograss or curly mesquite-buffalograss) usually does not provide sufficient cover for either protection or nesting for quail.

Therefore, it is very important that livestock numbers be adjusted to match the desired amount of vegetation to be maintained for quail habitat. An alternative to cow-calf operations is to reduce the cow herd numbers and incorporate stockers in your operation to maintain the flexibility that will allow maintenance of the desired vegetation to support good quail habitat.

In addition to the lack of grass cover, there could be a lack of weeds this spring. Weeds are important for seed production and insect growth which provide the bulk of the diet of both mature and young quail.

Shrubs are not likely to be affected by short-term droughts. The shrub cover should continue to be as good as it was prior to the drought.

Ronald E. Sosebee
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A Texas Tech professor in the Department of Natural Resources Management was presented a Sustained Lifetime Achievement Award at the 64th Annual Meeting of the Society for Range Management in Billings, Mont.

Ron Sosebee, who's been involved in the growth and development of the range, wildlife and fisheries degree programs at Texas Tech for more than three decades, was honored with the award which is given to members for long-term contributions to the art and science of range management and to the Society for Range Management.

Update Concerning Survival of Pen-Raised Northern Bobwhite Released Into the Wild

Circle A Ranch, Archer City, TX

By: Paul Woods, Graduate Research Assistant

Native vegetation inside Circle A flight pens.

Most science based studies have reported poor survival of pen-raised birds released into the wild. Often mortality of all monitored individuals occurred within a few days or weeks. For instance, Fies et al. (2000) reported total mortality of 60 radio-marked pen-raised birds within 9 days of their release into the wild in Virginia. We decided to examine release of pen-raised birds for ourselves, because some landowners were reporting success. We initiated a study on George Allen's Circle A Ranch (mentioned in our Summer 2010 Newsletter) designed to estimate the survival of pen-raised Northern Bobwhite released into the wild. This study was conducted on the Circle A ranch August through December, 2010. There were a total of 700 pen-raised quail released between July 19th and July 21st. The 10 week old birds were obtained from a commercial breeder and kept in a flight pen for two and half weeks prior to release. The flight pen contained cover which mimicked the release site habitat. Two hundred of the released birds were banded and 50 of these banded birds were also equipped with 1.5 gram radiotransmitters.

Circle A Ranch flight pen

Banded bird taken 7 1/2 months after release, note the Quail-Tech band on its leg.

The quail were released in coveys of 25 throughout the ranch at various barrel feeders containing sorghum with watering devices connected to the side. At least one radio-marked bird was placed in each covey. Radio-marked birds were located every two days and their status determined. Several birds were depredated within the first 10 days. We censored these birds from the analysis, because we assumed these mortalities were influenced by capture and handling related complications. With this censor, the survival rate through October 1 exceeded 80%. Including these censored birds survival rate still exceeded 60%.

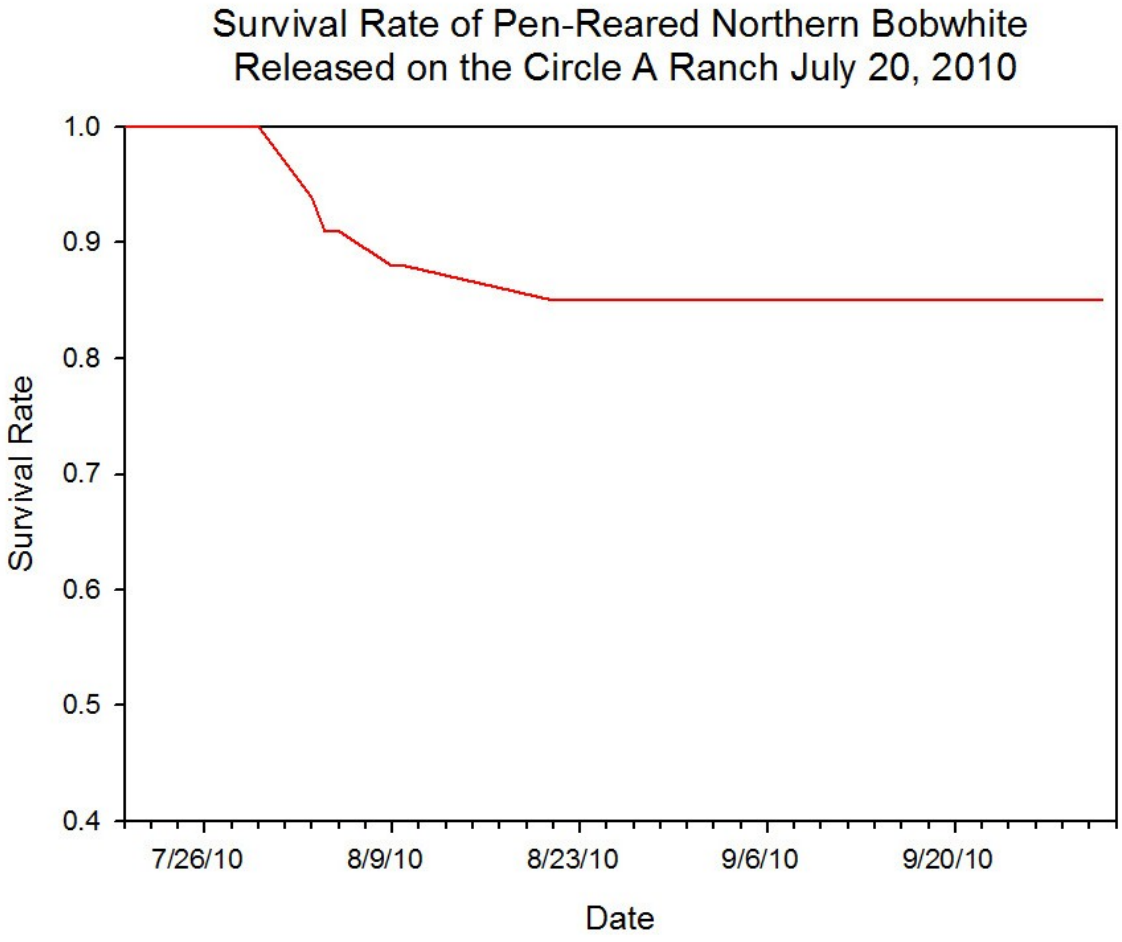
By October 1, the batteries in radios worn by all of the surviving birds began to fail. Battery size (and thus life) was restricted because of the limited weight which 12 week old birds could carry. Consequently, a sample (10) of banded birds was recaptured from the wild, equipped with adult-sized transmitters, and then re-released. Survival of these birds through the end of December was 52%.

Survival Rate (continued)

These results are encouraging, especially because most of the previous literature reported failure. Additionally, almost every hunt on the Circle A including the last week of quail season produced banded birds. This study will be replicated starting July 2011 and will use a larger sample size of recaptures fitted with adult-sized transmitters.

Fies, M. L., J. E. Fischer, and D. E. Steffen. 2000. Survival of game farm, F1-Wild progeny, and wild-relocated northern bobwhites using two release methods. Proceedings of the Annual Conference of the Southeastern Association Fish and Wildlife Agencies 54:350-364.

Owl casting containing a Quail-Tech radiotransmitter.



Shrub Planting and Artificial Cover Project

Woody cover is the foundation of quail habitat. Unfortunately, many areas which could otherwise be suitable quail habitat lack sufficient woody cover. Conservation Reserve Program (CRP) acreages are a prime example of this problem. A significant amount of money has been spent reseeding acreage including CRP to native warm season grasses and forbs, but without sufficient woody cover these areas will not hold quail populations. Two solutions have been used in the past to combat this problem. Artificial cover structures such as brush tepees have been successfully used to substitute for woody cover. These require some maintenance over time and are not aesthetically pleasing as a long-term solution. Alternatively, native shrubs can be planted as seed, root stock or containerized plants. Unfortunately, it takes frequent watering the first year to get the plants established and several years' growth before they are of adequate size to provide cover. These limitations have prevented many landowners from attempting to plant shrubs in an effort to reclaim areas of their property for quail habitat.

Artificial cover enclosure

Birds using enclosure including a hen with a radiotransmitter from Fall 2009

We are working on a combination solution. An artificial cover source designed to be predator resistant and allow immediate use by quail. It is also designed to be used in conjunction with shrub plantings to provide shrubs a water source which landowners only need to replenish once a month. Once shrubs are of sufficient size landowners can remove the artificial cover source to a new location or altogether if more shrub plantings are not required. Check out the accompanying pictures which illustrate quail use of the structure as well as predator interest. Birds (wild) fed and rested in the structure during the day, but moved out to roost in the grassland at night. The structure in the picture does not have accompanying shrubs. These will be added this spring. Look for more information about this structure in future newsletters.

Brad Dabbert
Associate Professor
Texas Tech University

Badger attempting predation at enclosure

Bobcat attempting predation at enclosure.

My Last Days

Puppy Camp!

The last day of any Quail Season is like watching a giant fir tree being felled by a skillful logger. In ultra slow motion the day dawns with anticipation of a great finish, big finish, last day – one to remember.

I've been very privileged in the last several years to do just that – finish well. Some better, bigger or more memorable than others.

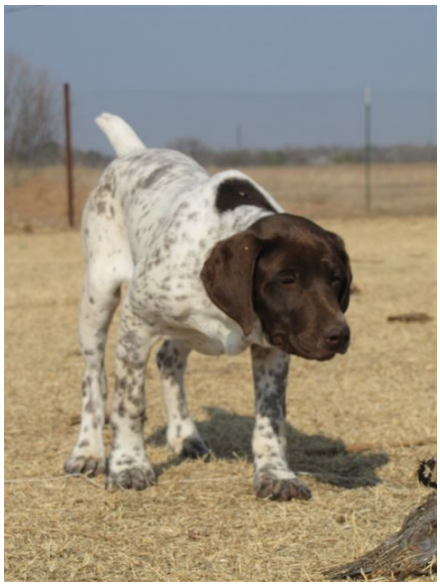
2005, 2006 & 2007 provided a last day limit of birds with a ceremonial removal of caps and handshake which preserved the gentlemanly class with which our sport was founded.

That "18th green" approach reminds us to give thanks for great birds, fine birddogs, hunting partners and the thrill of the hunt not just the killing.

Puppy Camp!

Since the inception of The Quail Tech Alliance my last day focus has changed but my goal still centers on numbers. But now it's the number of quail that got away that counts the most.
2008 brought a good last day finishing at 1 p.m. with the great satisfaction of finding twelve coveys with none below ten birds. We had been good land stewards I thought. The newly purchased ranch was smiling at its new caretaker.

2009 came and Spring call counts threw a bucket of ice water reality square in my face as call counts sank by 18%. What the heck was going on? Spring rains gave great encouragement for an abundant hatch. Cover of weeds was growing ever higher. But the season was mediocre and my last day of 2009 started with two covey finds right out of the gate but slowed to six coveys and fear setting in by 5 p.m. It was a long somber drive back home but hope continued to burn because of a belief in the conservation techniques of Quail Tech's "best practices" that I had adopted.



Puppy Camp!

Spring 2010 came with abundance all around. Call counts were up and you couldn't throw a bowling ball without flushing a mating pair. The rains came just right. 1/4" here and 1 ½ " there. Overall 7" above average for the year. No "tank rains" – no 8 inchers but good, slow soaking rains. Very early in July I was given the first present of Quail Christmas. My good friend and hunting partner Shane Shobert and I were cruising the ranch shooting photos of the spring bloom when we came upon a pair and brood of blue quail chicks. Eighteen chicks and proud adults to guard them. We sat quietly and soaked up the first gift of the morning. As the year progressed, a good rebound was underway and broods from "bumblebees" to seasoned flyers seemed abundant. August found good coveys in all areas of the ranch. Dove season provided good covey numbers as we cleared new hunting lane's and began our feeding program.

My 2010 season started in early February and as I put my dogs down for the first run a strange feeling dawned as hours passed of prime time without an honest point. Finally there they were. Good solid point, first flush of the year! Only four birds !! Well they're spread out feeding, I thought, but as our circles got wider, no more birds.

The season rocked on with six coveys in the morning being average. By the last weekend we were having to really hustle to get 6-7 coveys all day.

My Last Days (continued)

Puppy Camp!

The last weekend brought with it 50 mph winds with 80 degree temps. My setters were too much a part of family to chance a heatstroke so Saturday of closing weekend became puppy camp. Four of us split some training birds and worked puppies all day and fried crappie all that night. Closing day loomed.

Closing Day 2010 –

I was so excited I couldn't sleep and finally rolled out at 4:30 a.m. I had been invited to hunt horseback on the Tongue River Ranch near Dumont. It was on! Big Finish, Great Finish! Let's finish the season right! All good thoughts driving in the dark but as the sun came up I discovered that, while the forecast hadn't changed, the wind had. Cool and cloudy, it's on!

Jimmy Bailey, a man who loves birddogs as much as any human being I know, had the horses in the trailer and the dogs loaded. We unloaded in a pasture that had been skillfully grazed but pounded by a freak February hail storm. I was worried. The cover was preserved and the feed abundant with good stands of ragweed and sunflower. Mounted and away we struck the first covey within 400 yards and ten minutes. Seven birds. Right away the second thirteen bird covey was pointed. The third covey followed the second by just a few minutes. I was in heaven. On and on covey after covey. The next three were all coveys of twelve to fifteen birds. The last covey was a point by a single dog 740 yards away as measured by the GPS. We hurried to the point, dismounted and approached the dog from behind. As I swung around to the far side the covey, which had relocated, exploded at my feet. The exhilaration of birds flying up your pant leg and between you and your shotgun can't be described. So exciting was that moment that my last day was complete without firing a shot at that last covey. Six coveys in an hour and forty five minutes. Hope was restored that we might be alright. Maybe we had enough coveys that the prospects of next year's hatch would fuel our off season dreams.

Puppy Camp!

What a finish to Quail Christmas. That final covey, close enough to knock my hat off, was just the adrenaline I needed.

As we loaded the horses and dogs we removed hats shook hands and celebrated our grand sport and the precious resource that are our wild quail of Texas.

My last day was my best.

Quail First,
Charles

Forever There

The last living Blue Quail,
stands silent on the plain.
A Bobwhite hen, wings over chicks,
sits waiting for a rain.

We have to act to save these birds,
the job is yours and mine.
The clock is ticking, join this call,
and work while there's still time.

These noble birds are holding on
in corners here and there.
They need our help, the time is now,
our duty is to care.

Return them to their rightful place,
on thundering covey rise.
Our land, our sport depends on us
to stop their swift demise.

Before "Bobwhite" is silenced,
and the sterile land lays bare,
Take up the cause so quail can live
and be forever there.