



Spring Quail Call Counts Demonstration

Texas A&M AgriLife Extension Service

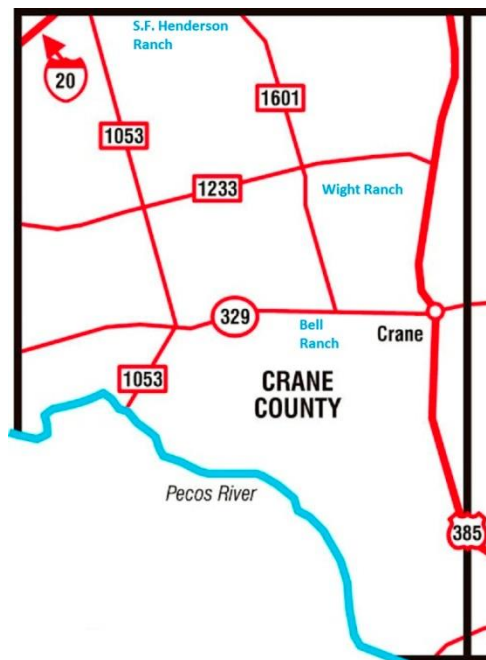
Crane County

Cooperators: Clint & Lois Bell, S.F. Henderson, Bill Wight

BY:

C.L. Eaton, County Extension Agent – Crane County

Ken Cearley, Extension Wildlife Specialist – Amarillo



Summary

The 2010-2012 drought was one of the worst on record. The drought had impacts on livestock, wildlife, and humans. Of all of the wildlife in the region, local ranchers were the most concerned with quail populations and the impact the drought had on their numbers.

Crane County is home to two species of Quail: Scaled or Blue Quail (*Callipepla squamata*) and Bobwhite Quail (*Colinus virginianus*). Blue Quail range from Northwestern Mexico, throughout the Southwestern U.S. into the Southern Plains. Blue Quail are commonly found in Dry Grasslands and Brushy Deserts. Bobwhite Quail range from Northern Mexico to the Mid-Atlantic States. Bobwhites are commonly found in brushy pastures, grassy roadsides, farmlands and open woodlands.

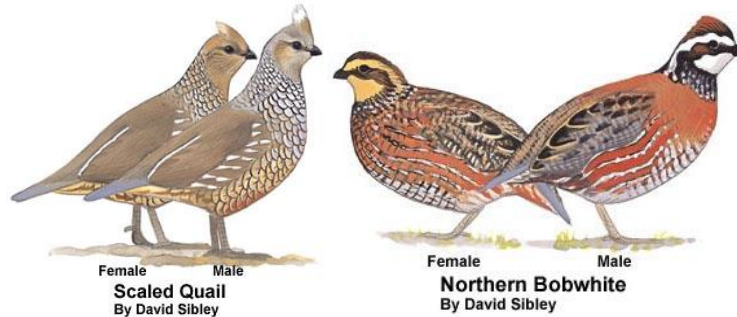


PHOTO 1 – Illustrations of both Blue & Bobwhite Quail

Objective

The objective of this demonstration was to survey the population of both Blue & Bobwhite Quail across Crane County. These numbers will be used as a baseline for annual surveys to monitor quail populations from year-to-year so that land managers can make management decisions for both habitat manipulation and population management.

Materials and Methods

Monitoring transects were mapped out on ranch roads on three ranches in Crane County. Each transect was 4 miles long and consisted of 5 listening points spread out 1 mile apart. A picture was taken at each listening point, to document the habitat and to use in the future for habitat evaluation. Beginning in May and ending in early June, The agent went out to each ranch at sunrise and listened for a five minute period. The process was repeated this on each trek a total of three times. Only rooster mating calls were recorded. Total calls heard and individual birds heard were recorded at each listening point. A Blue rooster call is a single syllabled “whock” that is vocalized infrequently. A Bobwhite Rooster’s call is pretty easily recognized as a two to three syllable call that resembles the words “bob-white” or “poor-bob-white”. A Bobwhite rooster will call much more frequently than a Blue Rooster.

Results and Discussion

FIGURE 1 – Totals of individual roosters & total calls heard by both Bobwhite & Blue Quail on Crane County Ranches

<u>RANCH</u>	<u># OF BLUE ROOSTERS</u>	<u># OF TOTAL BLUE CALLS</u>	<u># OF BOBWHITE ROOSTERS</u>	<u># OF TOTAL BOBWHITE CALLS</u>
<u>S.F. Henderson</u>	2	2	5	14
<u>Wight</u>	1	2	9	43
<u>Bell</u>	2	2	0	0

S.F. Henderson Ranch

The Henderson Ranch transects is located on the Crane-Ector county line southwest of Penwell. Call counts were done in the early morning hours on May 17th, 25th & June 7th. A total of 5 Bobwhite roosters and 2 Blue roosters were heard with total of 14 bobwhite calls and 2 blue calls heard. Pictures revealed a good stand of forbs for quail feed, but less grass cover than what would be desired (due to drought conditions). Brush diversity was also lower than desirable with Mesquite being the norm.



PHOTO 2 – S.F. Henderson Ranch Listening Point

Wight Ranch

The Wight transect was located at Sand Camp northwest of Crane. Call counts were done in the early morning hours on May 23rd, 31st & June 8th. A total of 9 Bobwhite roosters and 1 Blue rooster were heard with a total of 43 Bobwhite calls and 2 Blue calls heard. Habitat photos indicated that the overall habitat of the transect was attractive to Quail with decent native grass cover, adequate feed and reasonably high brush diversity (Sand Sage, Catclaw, Mesquite). One or two of the listening points had tall, dense brush that would be undesirable for Blue Quail.



PHOTO 3 – Wight Ranch Listening Point

Bell Ranch

The Bell transect was located on the Bell Ranch, west of Crane. Call counts were done in the early morning hours on May 7th, 24th & June 4th. A total 2 Blue roosters were heard with 2 Blue calls. Photos revealed excellent brush diversity (Mesquite, Four-wing Saltbush, Catclaw, Creosote). Feed and cover were less than desirable, but that was due to this transect receiving less rainfall than the other 2 transects at the time of the counts.



PHOTO 4 – Bell Ranch Listening Point

Conclusions

The results of the call count were significantly higher than originally predicted. It is safe to conclude that local Quail populations were adversely affected by the 2010-2012 drought, but did manage to persevere. Significantly more Bobwhite Quail were heard than Blue Quail, but this is likely due to their natural tendency to be more vocal than Blues, and not necessarily that they had a higher survivability rate.

Spring call counts, fall roadside counts and habitat evaluation/rating will be administered in 2013 to follow-up with this study.

Acknowledgements

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