

# Youth Forum

## The Lesser Prairie Chicken: On a Collision Course

By Melissa Barth

*Editor's Note: This paper is the third-place winner of the High School Youth Forum contest at the Society for Range Management Annual Meeting, February 2007, Reno, Nevada.*

Centuries ago, the land that is now Colorado, Kansas, Oklahoma, and the Texas panhandle was untouched. The grass was all intact, the landscape was pristine, and water hadn't been forced into manmade ponds and streams. Wild game and larger animals roamed freely, unafraid on the open frontiers. This is the pure world that Spanish conquistadors discovered in the 1500s, the open "sea of grass" my ancestors came to in the late 1800s, but unfortunately, this land is no more.

A wise man once said that change is inevitable, and his words couldn't be truer. But what all has changed? Landscape, forage, and water routes have definitely changed, but what we are interested in today is the wildlife, and one species in particular: the Lesser Prairie Chicken.



Prairie  
Chicken  
Hen

### Past History

In 1541, when Spanish conquistador Francisco Vasquez de Coronado came into the "New World," he wrote back to his benefactors in Spain, "The land is overflowing with thousands of these birds."<sup>1</sup> Since then, the Prairie Chicken population has continued to fluctuate. If one was to look at a chart of the population over time, you'd be left with the impression of a roller coaster track.

The next record of Prairie Chickens appears sometime in the mid 1800s, when the U.S. government sent a survey up the Red River, following the 100th meridian. At this time, there was little sign of any wildlife—let alone a small bird that weighs only a pound and a half. However, in the late 1800s, when settlers began moving towards the Llano Estacado, the land seemed to be overflowing with Lesser Prairie Chickens. The pattern continues; rising during the 1920s, and plummeting during the Dust Bowl days. Today, the population is at an all-time low—there has been a 92% decline since the early 1800s.<sup>2</sup> For the past several years, scientists and

conservation groups have been struggling to find out why the numbers have dropped so drastically.<sup>3</sup>

### Current

Now most people will be sitting here, listening, wondering, “Why am I worried about a bird? What’s the point?!” When I was a little girl, my Mom would tell me “The Horseshoe Story.” It’s a story of how, for want of a horseshoe nail, the horse fell, the knight was slain, the king was killed, the battle was lost, and the kingdom was captured—all for the want of a horseshoe nail. That story is a perfect example for the importance of the Prairie Chicken. One small creature can throw off the entire balance of an ecosystem. The main function of the Lesser Prairie Chicken is to eat insects and forbs—otherwise known as weeds. They thrive in native grasslands—so when the Prairie Chicken population drops off, it usually means your rangeland is also disappearing.

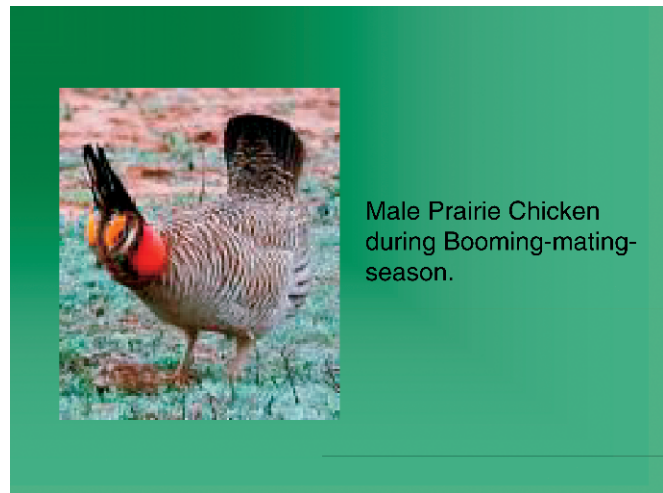
Research has shown us that the Lesser Prairie Chicken is definitely not thriving today; we must find out why. During mating season, the Lesser Prairie Chicken is incredibly selective about its habitat—any area that has nonnative plants isn’t suitable.<sup>4</sup> Also, they tend to stay at least a mile away from overly tall objects—wind turbines, telephone poles, or electric lines. Their selective behavior greatly decreases their chances of finding a comfortable habitat, thus reducing breeding outcomes.

Foraging habits are also putting these birds at risk. Most birds will fly along roadways, hoping to find loose forbs, as well as loose gravel. Birds have a gizzard, where the gravel and seeds mix, acting as a sort of grindstone to break down their food. Roads meet their needs perfectly, but make them easy prey. Most collisions occur when the Prairie Chickens are pursued by predators. The birds will fly up in an attempt to escape, usually straight into a fence, causing a high mortality rate. Forty percent of all Lesser Prairie Chicken deaths occur in this manner.<sup>5</sup>

### Future—What Do We Do?

Growing up on a small ranch, I have fond memories of the first months of spring, listening to the Prairie Chickens “Booming,” or making their mating calls. Occasionally, I’d be fortunate enough to see the males, literally, “strutting their stuff.” During Booming, the males gobble and dance—it doesn’t sound like much, but it’s great to watch.<sup>6</sup> Anybody who asks my reason for being concerned about these birds has never been lucky enough to visit the “Prairie Chicken Disco.”

That’s why I want to preserve these birds—because they are unique and valuable members of a rangeland ecosystem. Now that we know what is endangering them, we can make a start on solving the problems—which, unfortunately, were made for the most part by us. One problem that can be solved by us is the fences. Sutton Avian Center, a private organization working in affiliation with the University of Oklahoma, is putting “flags” on fences.<sup>7</sup> Made of vinyl siding, these small flappers clip onto the fence, and alert the



Male Prairie Chicken during Booming-mating-season.

birds to change their direction. By spacing these 3-inch pieces 4 feet apart, it covers a lot of space. It’s a small step, but taken from research in Europe, it seems to be highly effective. Also, lots of ranchers have old broken fences that they neglect to remove, because it simply takes too much time, and it doesn’t really matter, does it? But to these birds it does, and by taking them down, we can help bring back the Lesser Prairie Chicken.

Another way to bring these birds back is to make an inviting environment. By doing patchwork burning; or cutting out invasive plants and going back to natural forage,



you're sending an open invitation to wildlife like the Lesser Prairie Chicken (Don Wolfe, biologist in association with Sutton Avian Center, personal communication, February 2007). Also, reducing the number of trees and increasing shrubs dramatically increases the possibility of more Prairie Chickens, simply because they mate in open places, and in the winter use shrubs for cover.<sup>8</sup>

## End

My ancestors fascinated me with wonderful stories about the open land, teeming with life, that they came to, years ago. The Lesser Prairie Chicken is a major part of a rangeland ecosystem; without it the delicate balance is thrown off. When my family first arrived in this area, the population of the Lesser Prairie Chicken was skyrocketing. Someday, I hope to see that again by protecting and preserving these birds. I still recall the wonderful stories of my predecessors, and hope to someday share them—as well as sightings of the Prairie Chicken—with my children. Can you think of a better legacy to leave for the future? I can't.

## References

1. NEW MEXICO NATURE CONSERVANCY. 2004. Available at: <http://www.nature.org>, August, 2004
2. OSU EXTENSION SERVICES. [date unknown.] Prairie Chicken management in Oklahoma.
3. WOLFE, D. 2007. Causes and patterns of mortality in lesser prairie chickens. *Wildlife Biology*.
4. OSU EXTENSION SERVICE. [date unknown.] Ecology and management of the Lesser Prairie-Chicken.
5. WOLFE, D. 2006. Don't fence them in. *Grouse Partnership News*.
6. OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION. 2006. Annual report.
7. SUTTON AVIAN CENTER. 2007. Fence marking for Lesser Prairie Chickens.
8. NATIONAL RESOURCES CONSERVATION SERVICE. 1999. Lesser Prairie-Chicken.

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