

APPRECIATING QUAIL

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Abstract: Bobwhite populations are declining across most of their range. Quail managers must develop an appreciation for the bobwhite's needs throughout the year, and how their land management affects quail habitat. In this paper, I describe some of the concerns facing the future of bobwhites in Texas, and some educational strategies that have been designed to address these concerns.

Back in 1991, I convened a group of county Extension agents in Ft. Stockton to discuss an idea for a new program. In order for the new idea to be effective, I needed a solid buy-in from those present. I then told them of my plans to initiate a series of "Predator Appreciation Days." Their pallid stares, and deafening silence, confirmed my suspicions. They thought I'd flipped my lid. I then asked one of them to take a dictionary and read the definitions for the word "appreciate." They include "to value highly" and to "increase the worth of." These are not politically popular connotations of predators among livestock ranchers in west Texas. I encouraged him to read on for other contexts of "to judge with heightened awareness" and "to be cautiously or sensitively aware of." This was the message I hoped to convey to west Texas ranchers. I convinced them of the marketability of the phrase "Predator Appreciation Day" (PAD) as a means of boosting attendance for an all-day program on predator management.

Then I had to convince my superiors. When I sought the approval of TAEX Associate Director Dr. Milo Shult, a former Extension wildlife specialist and veteran of several predator politic wars, he persuaded me not to use the moniker. He reckoned that "not all of west Texas is full of wild-eyed liberals." I bided my time until after Dr. Shult's departure for the University of Arkansas in 1994, and then held the first PAD in Crockett County in December 1994. Since that time, a total of 11 PADs have been conducted and the programs continue to attract 100 or more ranchers per session.

But the word "appreciation" and "predator" in west Texas continued to cause heartburn, and after two successive letters to the Editor of the Livestock Weekly in 1997 (authored by people who'd never attended a PAD incidentally), my superiors suggested that the phrase "appreciation" and "predators" might not belong together. Reluctantly, I changed the wording to "Predator Awareness Workshops" or PAWs. But I was

"hooked on appreciation."

Thus evolved my fascination with the word "appreciate" and how a theme of appreciation could be used to market educational programs on other unsavory critters. In March 1997, the first "Feral Hog Appreciation Day" was convened in Jack County. And on my to-do list is to convene "Brush Appreciation Days" and "Prickly Pear Appreciation Days." These efforts will likely generate additional letters to the editor. Reckon some folks just don't *appreciate* the humor.

Of all the kinds of wildlife with which I work, quail (both scaled and bobwhites) are my favorite. Growing up in southwestern Oklahoma there were no deer, and just a few turkeys, but the mesquite pastures harbored abundant quail. I reckon it was destiny that I would someday coordinate the first ever Quail Appreciation Day (QUAD) which was held on the James Currie Ranch in Glasscock County on October 1, 1998. Since then 10 other QUADs have been conducted, and their popularity is increasing. And, unlike prickly pear and predators, I foresee no political problems associated with mentioning "quail" and "appreciation" in the same phrase.

Poor-bob-white

As opposed to coyotes and feral hogs, quail are easy to appreciate. In fact I challenge you to find someone who bears a grudge against a bobwhite. They don't prey on sheep or chickens, don't uproot peanut crops, and don't hinder sideoats grama production or cattle roundups. I firmly believe that most of the ranchers with whom I deal think more dearly about their bobwhites or blue quail than they do the deer which reside on the ranch.

In a state where white-tailed deer rule, I rejoiced when I heard the following prose (by an unknown

author, but somebody who is on the program here today):

*"The white-tailed deer is truly dear,
from Wink to Nacogdoches.*

*The stuff of dreams, and plans, and schemes,
of lore in hunting coaches.*

*But lo', see here, nimrods far and near,
and certified cervid handlers.*

*Tis said, ahem, by learned men,
it's just a rat with antlers!"*

Back in 1992, I read an article by Dr. Lenny Brennan (Brennan 1991), a Florida quail researcher, who claimed that bobwhites would be extinct in the southeastern U.S. by 2005. "Malarkey" I remember thinking to myself, and I reveled in the fact that 1991-92 quail season was a very good one in west Texas. But I ruminated on Brennan's dire prediction as I followed my setter. Soon, Fred Guthery began making references to Brennan's forecast for the impending doom of bobwhites. "Poppycock" I thought to myself, Guthery should know better.

Somewhere about this time, I read the following quote by Abraham Lincoln. *"Why is it that we never consider rationing until we see the bottom of the barrel?"* Then in April, 1997, I attended Quail IV, a national quail symposium in Tallahassee, Florida convened by Dr. Brennan and his staff at the Tall Timbers Research Station. One by one, quail biologists from various state game agencies sang a somber tune about how bobwhite populations were taking it on the chin. One biologist made reference to "riding the quail wave" (referring to how quail populations had dropped precipitously from the 1930s) and how habitat conditions had changed over the last 50 years. Quail trends from one state (GA) are presented in Figure 1 as an example of quail decline in the southeastern U.S.

A graphic representation of quail decline over the last 20 years is evident by examining data from the Breeding Bird Survey (Sauer et al. 1997)(Figures 1 and 2). In addition to population trends for states, the BBS data allows one to analyze trends for particular ecological regions, and even individual transect routes. Check it out at <http://www.mbr.nbs.gov>.

I don't know about the other Texans present, but I returned with new resolve to mount an educational campaign against the malignant "quail decline" that

seemed to be moving westward. To date, visible evidence of that resolve includes the inception of the Bobwhite Brigade, Quail Appreciation Days, W.I.L.D. about Quail, and this symposium.

Today, you would have little trouble peddling Dr. Brennan's dire forecast anywhere east of IH-35. At the first East Texas Bobwhite Brigade in 1996 I asked the 25 cadets how many had ever seen a wild bobwhite, and at least 15 of the cadets never had. Bird dogs and a box of No. 8s have been replaced over most of east Texas with deer corn and a compound bow. A recent Bobwhite Brigade cadence laments the situation as:

*"Well we hate to hear about the quail decline,
but the white-tailed deer is doing fine.*

*Sell your dogs but have no fear,
sling some corn and go hunt deer."*

Appreciating quail

An appreciation for quail implies that we as managers understand the quail's needs, not just during hunting season, but every day of the year. I think of quail every day. At least twice a week I try to work my setters and as they run among the broomweeds and prickly pear, I ponder quail happenings. I ruminate on Dr. Guthery's latest e-mail questioning this or that quail dogma. I scan the dusty road looking for quail tracks or the omnipresent raccoon's, and cipher on their relationships.

Aldo Leopold cautioned that "the urge to comprehend must precede the urge to reform." We must seek to diagnose and understand the problem before we can apply a remedy. Hence, our presenters over the next two days will espouse various theories about what's causing the quail decline, and offer strategies to slow, halt, or reverse its spread. I assure you there will be differences of opinions interwoven throughout the various presentations. Such debate is healthy.

"Preserving Texas' Quail Heritage into the 21st Century" implies a call to arms to guard something that I believe is very important to each of us. I exhort you to *appreciate* the full array of biological, ecological, and political "weapons" at our disposal. Texas is the final frontier for wild bobwhite hunting, and that's a tradition that we should guard staunchly.

One lesson we should heed from our southeastern neighbors is to not rest on our laurels, or we may one day find that the quail wave played itself out on the

Literature cited

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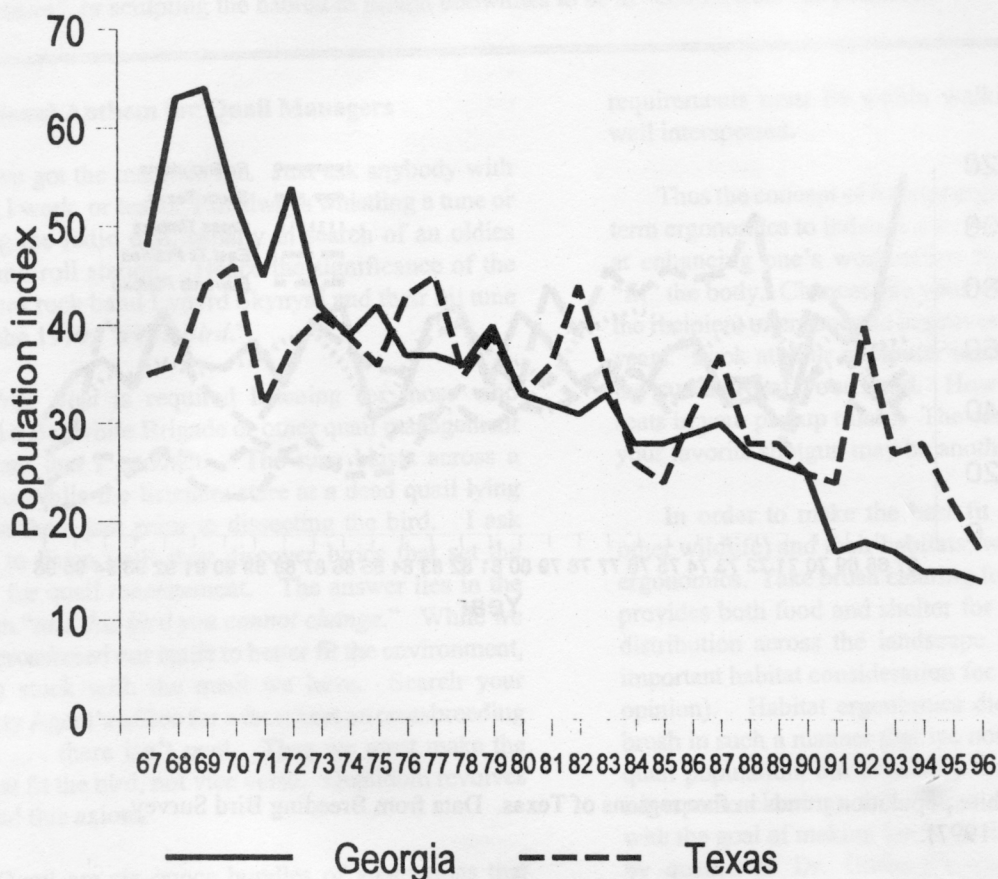


Figure 1. Bobwhite population trends in Georgia and Texas, 1967-96, as estimated by Breeding Bird Surveys (Sauer et al. 1997)

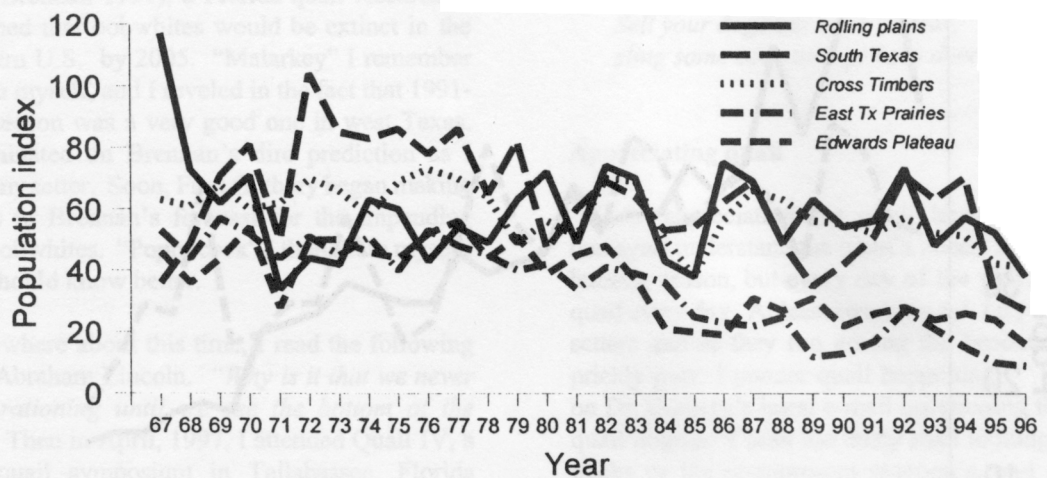


Figure 2. Bobwhite population trends in five regions of Texas. Data from Breeding Bird Survey (Sauer et al. 1997).

GETTING TO KNOW YOUR QUAIL: ANATOMY, ADAPTATIONS AND HABITAT ERGONOMICS

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Abstract: A basic tenet of quail management is that the habitat must be adapted to fit the quail's needs, not vice versa. Quail possess various adaptations that allow them to survive despite a long list of would-be predators. In this paper I discuss anatomical, behavioral, and physiological adaptations of bobwhites. The constraints imposed by certain adaptations dictate that the habitat must be managed to accommodate bobwhite needs. Thus the concept of "habitat ergonomics", or sculpting the habitat to permit bobwhites to be as "comfortable" as possible.

A National Anthem for Quail Managers

I've got the music in me. Just ask anybody with whom I work, or teach. I'm always whistling a tune or surfing the radio dial, usually in search of an oldies rock and roll station. Hence the significance of the southern rock band Lynyrd Skynyrd and their hit tune from the 1970s "*Free Bird*."

Free Bird is required listening for those who attend a Bobwhite Brigade or other quail management program that I conduct. The tune blasts across a jambox while the listeners stare at a dead quail lying before them just prior to dissecting the bird. I ask them to listen until they discover lyrics that set the stage for quail management. The answer lies in the refrain "*and this bird you cannot change.*" While we may crossbreed our cattle to better fit the environment, we're stuck with the quail we have. Search your County Agent's office for a fact sheet on crossbreeding quail . . . there isn't one! Thus we must make the habitat fit the bird, not vice versa. Quaildom revolves around this axiom.

Quail are six-ounce bundles of adaptations that allow them to survive in a wide variety of habitats. Practically every feature of a quail is designed to address the *threat* of predation. For example, the crop (or "crawl") serves as a zip-loc bag for storing seeds so quail can live an eat and run lifestyle. Their anatomical adaptations, plus their paranoia, keep bobwhites afloat in a sea of potential predators.

But adaptations can also serve as chains. Take the bobwhite's white breast meat; it provides adequate energy for short, powerful flights, but it runs out of gas (i.e., energy) quickly. Thus the quail must rely upon its legs, not flight, for its daily locomotion. The chain invoked on the quail means that all of its habitat

requirements must be within walking distance, i.e., well interspersed.

Thus the concept of *habitat ergonomics*. I use the term ergonomics to indicate a structural change aimed at enhancing one's work effort by making the item "fit" the body. Chances are your workplace has been the recipient of ergonomic improvements in the last 10 years. Look at your computer mouse and how it fits the curvature of your hand. How about the bucket seats in your pickup truck? The comb of the stock on your favorite shotgun may be another example.

In order to make the best fit between quail (or other wildlife) and their habitats, we need to consider ergonomics. Take brush clearing for example. Brush provides both food and shelter for bobwhites, and its distribution across the landscape is the single most important habitat consideration for quail in Texas (my opinion). Habitat ergonomics dictate that we clear brush in such a manner that we not only maintain our quail population, but hopefully increase it. Thus we intersperse clearings with strips or mottes of brush with the goal of making 100% of the landscape usable by quail. In Dr. Guthery's lingo, we have then maximized "space-time" of the habitat for a bobwhite, i.e., we have maximized habitability of that site for quail (Guthery 1997).

Ergonomics requires a knowledge of the organism's physical and physiological constraints. Quail prefer to be within fifty yards of brush; it's their security blanket. Thus the distance between strips of brush should not exceed twice that, i.e., 100 yards. But there are interactions between brush and other habitat elements. If the grass cover is abundant, less brush is needed; if grass is scarce (as is the case typically during droughts), more brush cover is desirable (Rice et al. 1994).