



Grazing as a Tool to Enhance Wildlife Habitat  
*In Search of Camouflaged Cowboy Hats*



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- Critical thinking
- Camo cowboy hats
- Where's the beef?
- Optimizing the equation



The Camo Cowboy Hat Continuum




Paradigm Shifts

Is the Wildlife "Tail" wagging the Livestock "Dog"?

or

Can the "Tail" survive without The "Dog"?



"Guys, we have 2 choices . . ."



. . . we can learn to work *with*'em, or we can learn to work *for*'em."

"When they (ranchers) take your (hunting) lease check, and buy round bales, you know you're in trouble."  
- Texas hunting outfitter



**Math Quiz:**

How many calves does it take to equal the profit in a quail?

OR

How many quail does it take to equal the profit in a calf?



**SPA Database**  
Cow-calf Producers in TX



- 75% net less than \$50/cow
  - @ SR of 20 ac/AU = \$2.50/ac
  - @ SR of 30 ac/AU = \$1.67/ac
  - @ SR of 40 ac/AU = \$1.25/ ac

**Is hunting income important enough to you to seek compromise?**



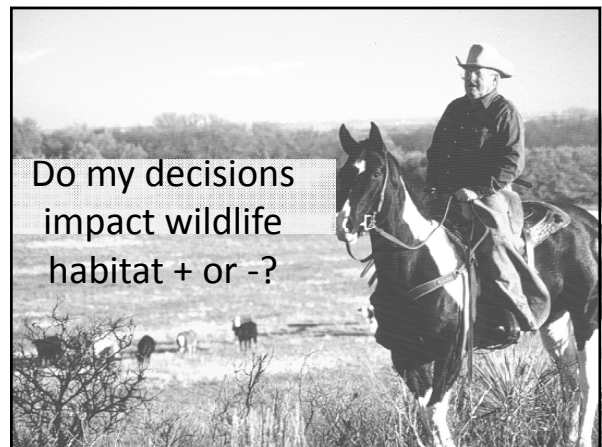
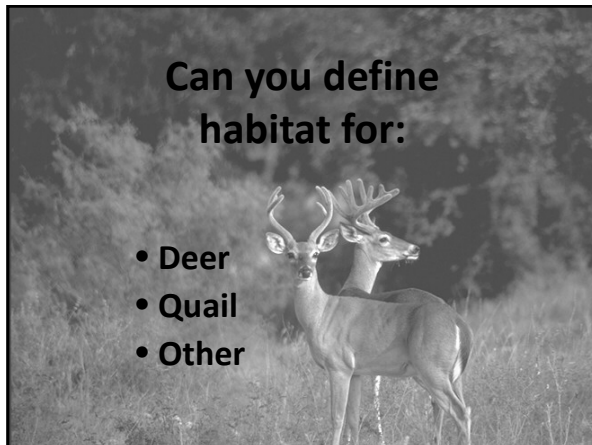
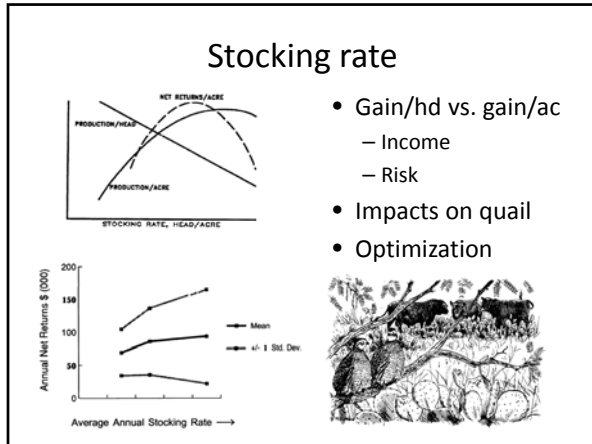
**Continuum of Landowner Goals**



**Pinch points**  
Livestock vs. wildlife


- Stocking rate
- Brush control






### Quail Population Trends (as gauged by QU members)

- 87% cited declining quail numbers since '89
- attributed declines to:
  - Weather 78%
  - Land Use Changes 48%
  - Predators 42%
  - Overgrazing 39%
  - Fire Ants 33%




### Quail Population Trends (as gauged by landowners)

- 64% cited declining quail numbers since '89
- 27% said low quail numbers precluded leasing
  - Weather 11%
  - Overgrazing 1%




### In Search of Camo Cowboy Hats




- Appreciating quail habitat
  - Judge with heightened awareness
- Incorporating quail into mgmt decisions
  - SR (grass sculpting)
  - Brush mgmt (sculpting)

### Do cows and quail compete?




- Forage??
- Grass
- Brush

### Impacts of cattle

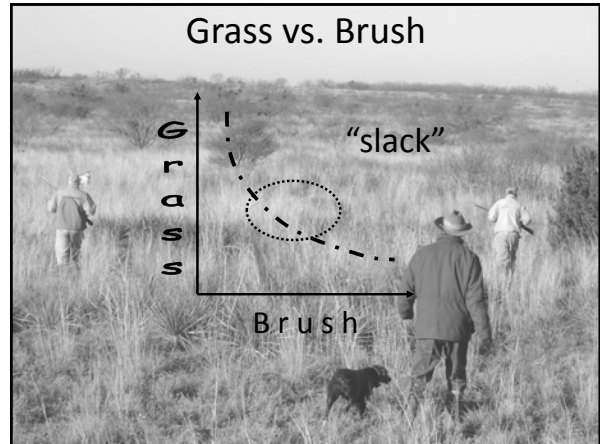


<p><b>Direct</b></p> <ul style="list-style-type: none"> <li>• <b>Nest trampling</b> <ul style="list-style-type: none"> <li>- Rarely a concern</li> </ul> </li> <li>• <b>Nest site availability</b> <ul style="list-style-type: none"> <li>- Commonly a concern</li> </ul> </li> </ul>	<p><b>Indirect</b></p> <ul style="list-style-type: none"> <li>• <b>Structural changes</b></li> <li>• <b>Species composition</b></li> <li>• <b>Vulnerability to predators</b></li> <li>• <b>Associated activities</b></li> </ul>
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### Trade-offs



1. Can cattle and quail *coexist* simultaneously?
2. Can cattle and quail enterprises be *maximized* simultaneously?



**Grazing paradigms**

Livestock manager  
Vs.  
Quail manager

**Range Condition & Quail:  
when fair may be better than good!**

- **Site potential**
  - Rainfall gradient
  - Sandy vs. clay soils
- **Lower classes for food**
- **Higher classes for nesting**
- **Patch grazing provides desirable mix**

**Evolution of thought**

- **Overgrazing**
- **Undergrazing**
- **Grass sculpting**

**A case for understocking**

“Bottom line, moderate stocking rates produce only slightly less average net returns per acre and with much less income variation compared to heavy stocking rate.”

- J. R. Conner

## A case for understocking

“Little or no grass equals little or no quail production.”

- L. Brennan

But grass can get too thick for quail, can't it?

- In more “mesic” areas, yes
- Rarely a problem west of I-35
- Insulation helps increase survival
- Affords options for brush mgmt (e.g. fire)



## Hunter's perspective

- Dog work is key reason for hunting
- Should be able to see dog most of the time
- Grass vs. Brush density
- Habitat for “holding”

## Action levels

(minimum thresholds)

- > 250 nest clumps/ac
  - bunchgrass, tobosa, prickly pear
  - rope from one to the next
- Softball guidelines
  - Shouldn't be visible > 40 feet
  - Should roll with ease at ground level
- Coverts a softball throw apart
- Step from one food plant to next

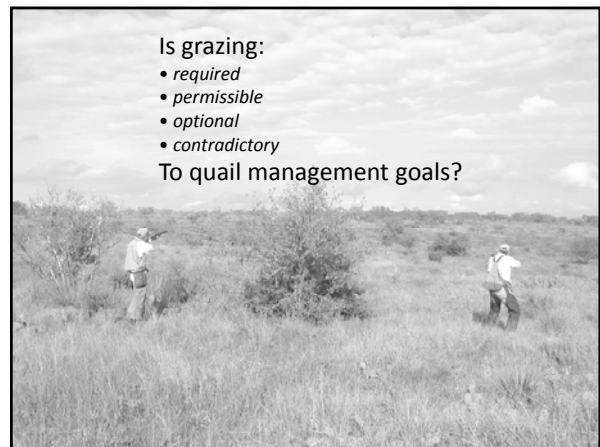
## Grass sculpting

- Understocked most years
  - Light to moderate SRs
- Limited spot grazing
  - Continuous or “slow” rotations
- Flexible

Is grazing:

- *required*
- *permissible*
- *optional*
- *contradictory*

To quail management goals?





**For more information:**

- [texnat.tamu.edu](http://texnat.tamu.edu)
- [www.quailresearch.org](http://www.quailresearch.org)
- [teamquail.tamu.edu](http://teamquail.tamu.edu)
- [d-rollins@tamu.edu](mailto:d-rollins@tamu.edu)

