

REVERSING THE DECLINE OF QUAIL IN TEXAS



Dr. Dale Rollins

State Coordinator

Texas A&M Agrilife Quail Initiative
San Angelo

REVERSING THE DECLINE OF QUAIL IN TEXAS

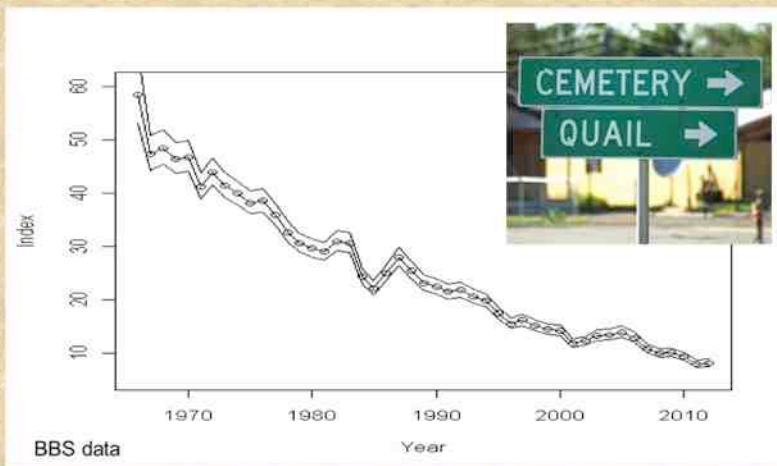
Overview:

- Status of quail
 - U.S.
 - TX
- Recovery strategies
- New research
- Outreach education
- 2014 Hunting forecast

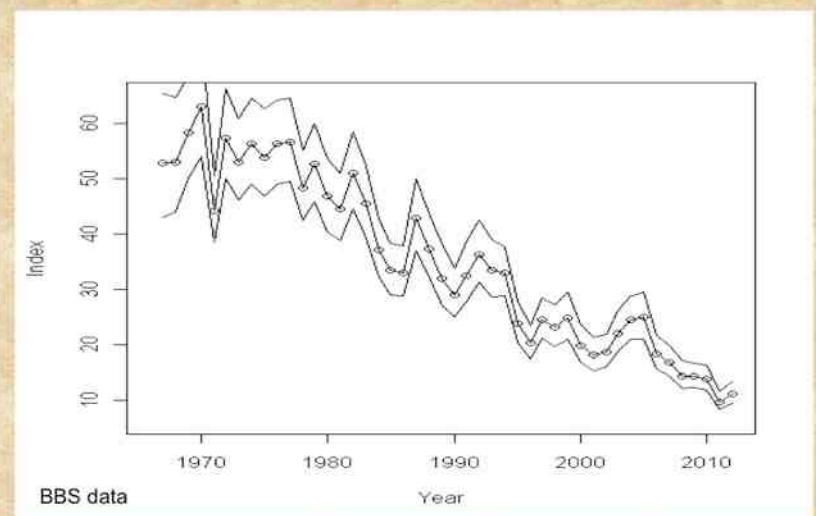


C. Hill

America's greatest conservation tragedy



Houston, we have a problem.



What's your Quail I.Q.?

In which Texas city was this picture taken??

- A. College Station
- B. Memphis
- C. Wellington
- D. Falfurrias



What's your Quail I.Q.?

In which Texas city was this picture taken??

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The Texas Quail Conservation Initiative (TQCI)

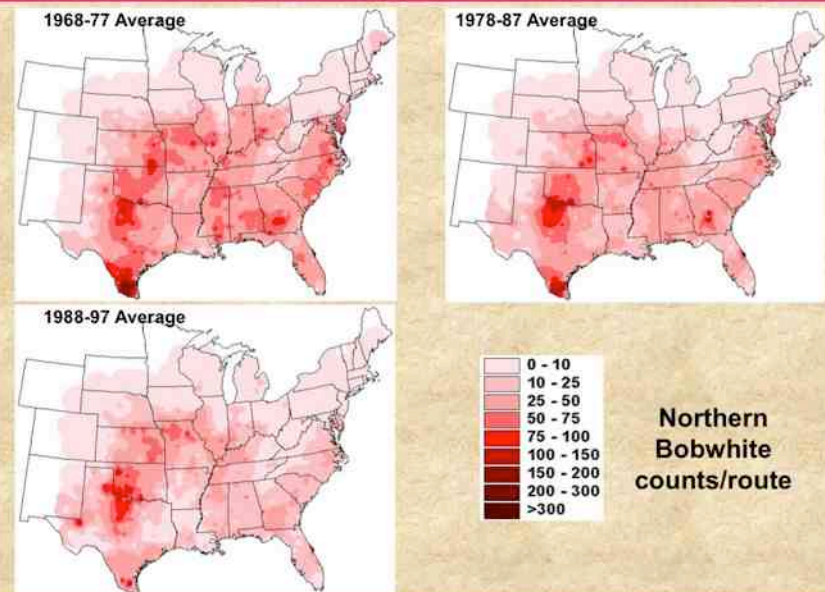
A Recovery Plan for Northern Bobwhite and Scaled Quail



Robert M. Perez
Upland Game Bird
Program Leader

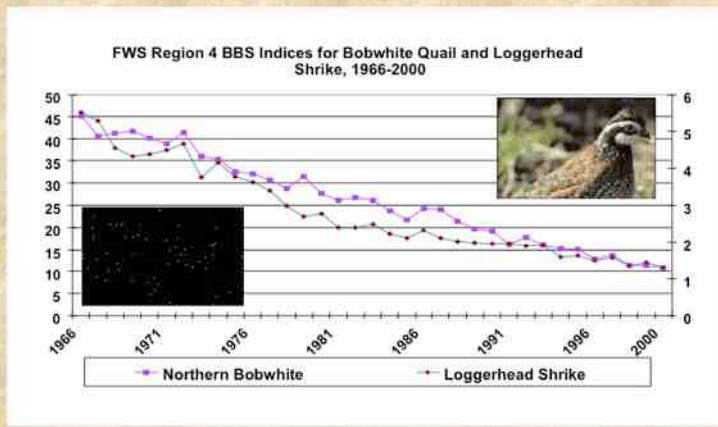


National Perspective



Interpolated map of northern bobwhite abundance based on BBS, Adopted from Peterson, Wu and Rho (2002)

National Perspective



BOBWHITE:
OMNIVORE, PREY,
SOCIAL, GROUND-
NESTER, HUNTED

SHRIKE: CARNIVORE,
PREDATOR, SOLITARY,
SHRUB/TREE NESTER,
NOT HUNTED

National Perspective

Other Declining Species USFWS Breeding Bird Survey – Southeast Region Successional or Scrub Breeding Guild

- Field Sparrow
- Grasshopper Sparrow
- Blue-winged Warbler
- Prairie Warbler
- Bachman' Sparrow
- Red-cockaded Woodpecker
- Dickcissel
- Eastern Towhee
- Brown Thrasher
- Indigo Bunting
- Eastern Meadowlark



“the canary of the prairie”



www.bringbackbobwhites.org

How many eggs are typically found in a bobwhite's first nest?



- A. 2
- B. 4
- C. 8
- D. 14



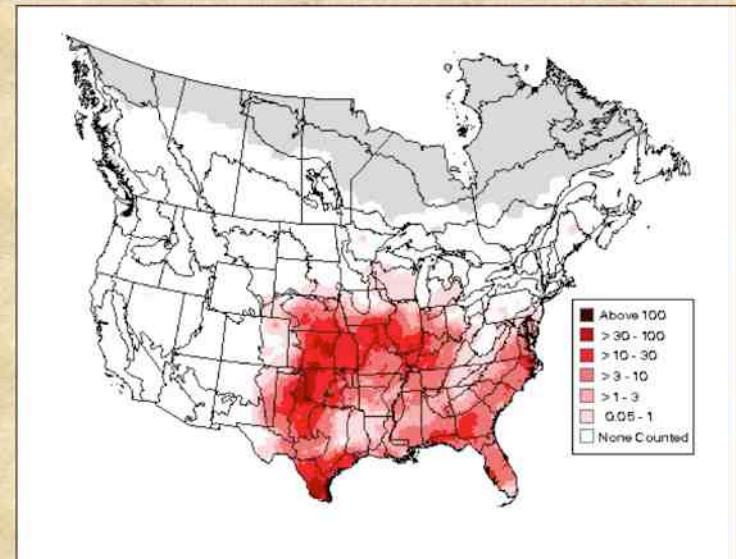
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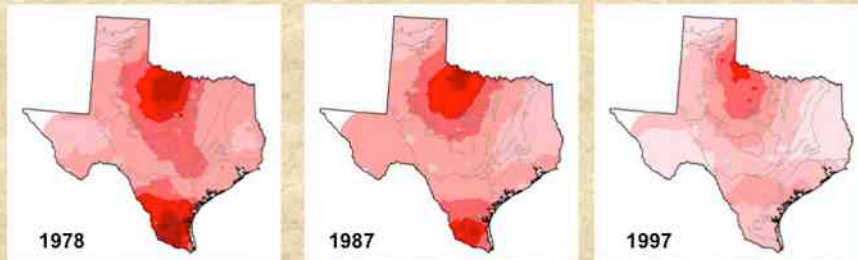


Texas: the Alamo of Quail Conservation



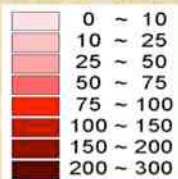
<http://www.mbrpwrc.usgs.gov/bbs/ra2011/ra02890.htm>

Texas Perspective: Say it Ain't so!



Bobwhite populations have declined 3-8% annually since 1978 across most areas of TX.

NBW abundance
(counts/route)



Texas Perspective

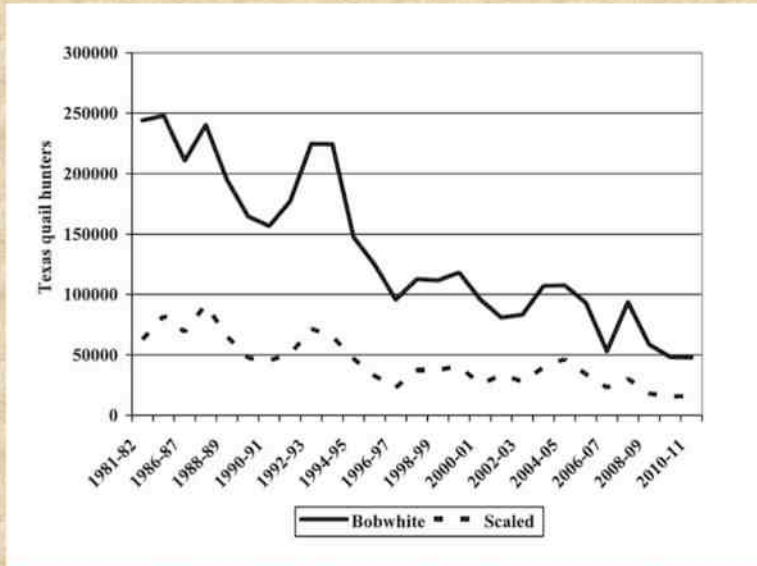
TEXAS ISSUES

LAND MANAGEMENT PRACTICES

- Grazing Management
- Conversion of Native Pasture
- Lack of Fire

LAND/HABITAT FRAGMENTATION





Quail hunter participation in Texas declined 79% from 1981 to 2010 (Purvis 2011).

Quail are Valuable Birds

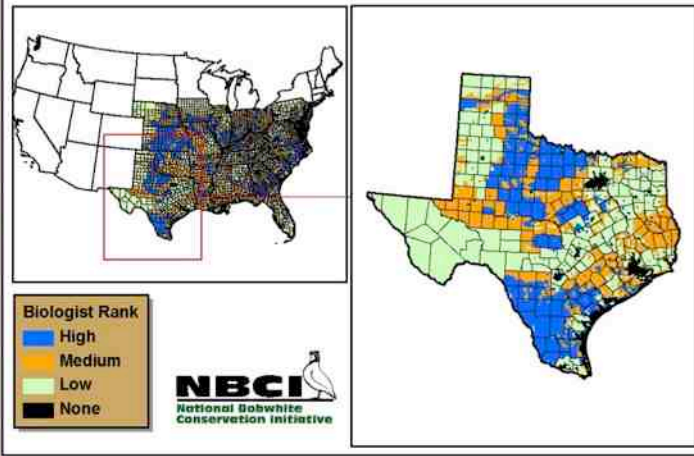
- The avid *QU/QC* hunter spent:
 - \$10,354 per year (1999)
 - \$8,600 (in 2010)
- Majority spent in destination county
- Lodging, fuel, food, supplies and leases
- Average of \$254/bird – Quail Escargot!

- Johnson et al. 2012



Texas Perspective

National Bobwhite Conservation Initiative: Texas Biologist Ranking Information



Texas Perspective

SOLUTIONS

- Develop a rational, scientific approach to species recovery
- Follow the footsteps of other successes
- Capitalize on the power of partnerships
- Seek public buy-in and support



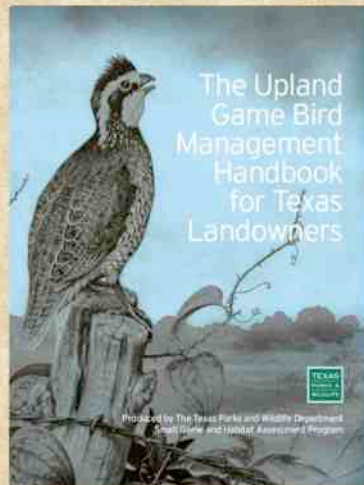
The Partners:



Texas Perspective

Conclusion:

- Project will take 25 to 30 years to complete
- All the “easy” wildlife restoration projects have been completed
- No one group will do this alone, It needs partnerships to be successful
- Will take a huge shift in societal values and attitudes
- Will require unique and inventive ways to change obstacles into opportunities
- State and Federal Agencies will need to work together
- Landowners will be the backbone of this Initiative



Robert Perez
(Robert.Perez@tpwd.texas.gov)

http://www.tpwd.state.tx.us/huntwild/wild/game_management/quail/

How many *functional* ovaries does a quail hen have?

- A. One
- B. Two
- C. Four
- D. None

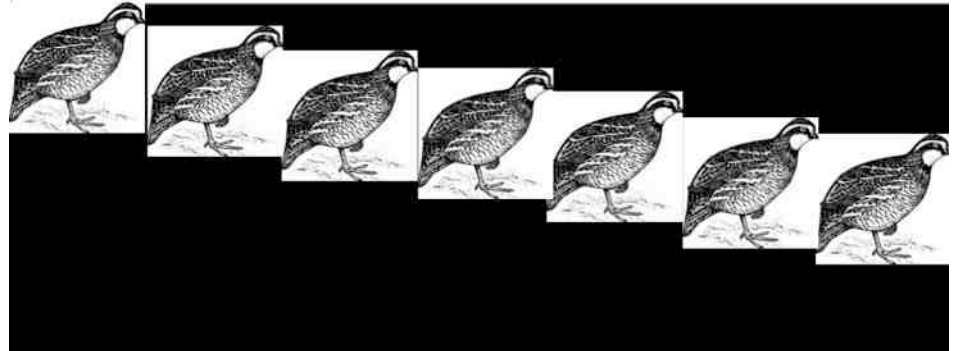
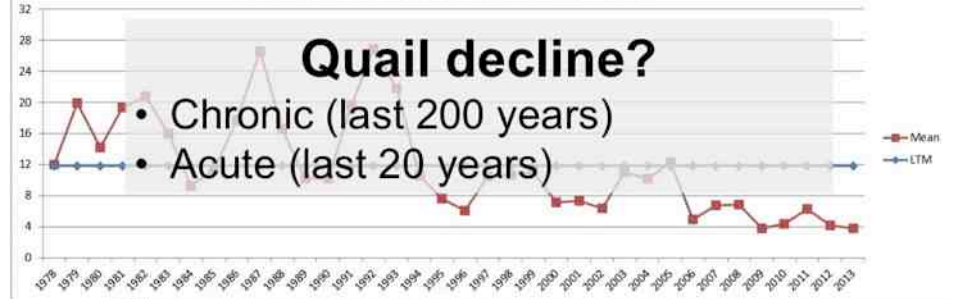


How many *functional* ovaries does a quail hen have?

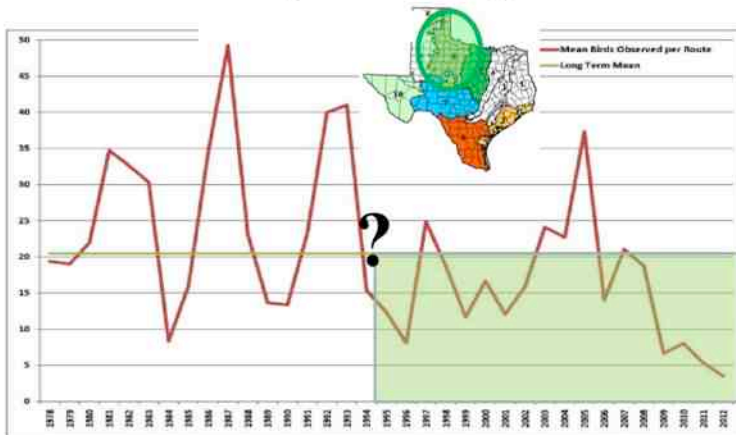
- A. One
- B. Two
- C. Four
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Texas Statewide
Roadside Bobwhite Quail Trends 1978 - 2013



Bobwhite Trends Rolling Plains Region



Source: http://www.tpwd.state.tx.us/huntwild/hunt/planning/quail_forecast/forecast/rolling_plains/

The smoking gun??

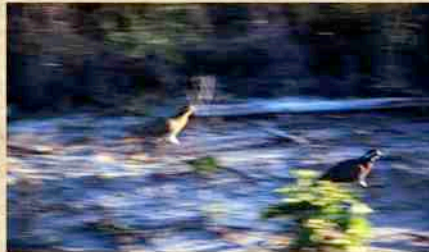
- Disease?
- Aflatoxin?
- Predators?
- Pesticides?
- Habitat loss?
- Fire ants?
- Fragmentation?
- Drought?
- Parasites?
- Overhunting?
- Climate change?
- GMOs
- Invasive spp?
- Feral hogs?



Which of the following groups of animals tends to be the greatest threat to quail in Texas during the breeding season?



- A. Hawks and owls
- B. Snakes
- C. "Mesocarnivores"
- D. Poachers



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- C. "Mesocarnivores" ✓
- D. Poachers



TEXAS A&M
AGRI LIFE
EXTENSION



TEXAS
PARKS &
WILDLIFE

Exceptional item: \$2.0 M



Partner	Actual	In-Kind	Total
Texas A&M AgriLife Extension Service	.	\$262,357	\$262,357
Texas Parks and Wildlife Department	\$54,705	.	\$54,705
Texas Wildlife Association	.	\$28,000	\$28,000
Big Covey Chapter of the Quail Coalition	\$4,760	.	\$4,760
Total	\$59,465	\$290,357	\$349,822

Research

- **21 proposals submitted**
- Judged by panel
- 13 projects funded
- \$1,117,339
- **Texas A&M University**
 - Wildlife and Fisheries Sciences
 - Institute of Renewable Natural Resources
 - Veterinary Pathobiology
 - AgriLife Research– Uvalde
- **Texas A&M – Kingsville**
- **Texas Tech University**
- **University of North Texas**
- **Rolling Plains Quail Research Foundation**



Research

- impact of parasites
- impact of toxins
 - Aflatoxin
 - Neonicotinoid insecticides
- diagnostic testing for diseases
- field studies on health factors as influenced by environmental conditions

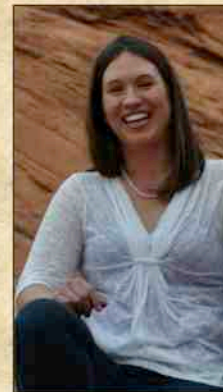


Research (con't)

- impacts of predation
 - Fire ants
 - Feral hogs
- translocation for restoration of scaled quail
- genomic sequencing and bioinformatics



Outreach education



Becky Ruzicka



Dale Rollins

Over 40 AgriLife County Extension Agents and others

Quail Appreciation Days

(for "Students of Quail")



Quail Appreciation Days

	Program Type	County and Participation	Date
1	Quail Appreciation Day	Clay (35)	May 07, 2014
2	Quail Appreciation Day	San Saba (30)	May 13, 2014
3	Quail Appreciation Day	Shackelford / Stephens (65)	May 14, 2014
4	Quail Appreciation Day	Victoria (35)	May 20, 2014
5	Quail Appreciation Day	Wheeler (40)	May 23, 2014
6	Quail Appreciation Day	Archer	September 16, 2014
7	Quail Appreciation Day	Pala Pinto	September 17, 2014
9	Quail Appreciation Day	Zavala	September 30, 2014
10	Quail Appreciation Day	McMullen	October 1, 2014
11	Quail Appreciation Day	Jim Wells / Duval	October 2, 2014
12	Quail Appreciation Day	Wilson	October 15, 2014
13	Quail Appreciation Day	Webb	TBA
14	Quail Appreciation Day	Navarro	TBA
15	Quail Appreciation Day	Glasscock	TBA
16	Quail Appreciation Day	Lee	TBA
17	Quail Appreciation Day	Kinney	TBA
18	Quail Appreciation Day	Roberts	TBA

Landowners and County Agents

"to judge with heightened awareness"

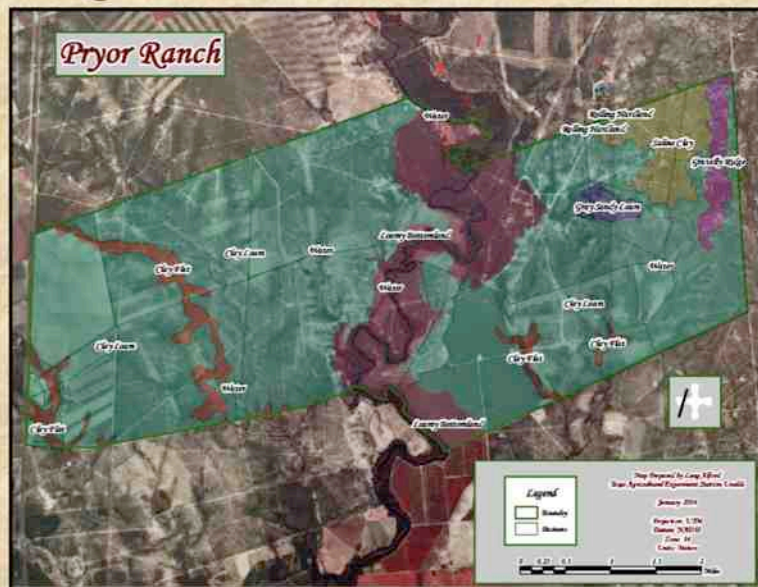
M^cFADDIN CAFE



Habitat Evaluation

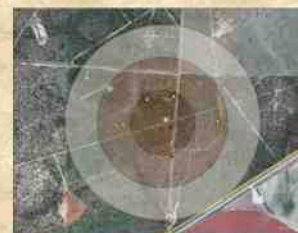


Texas Quail Index: Result Demonstration



Call Count Surveys

- Survey ranch for 3 consecutive mornings
 - 10 mi transect
 - survey stations at 1 mi intervals
 - 5 min / station
 - 600 yd circle
 - Count whistling males

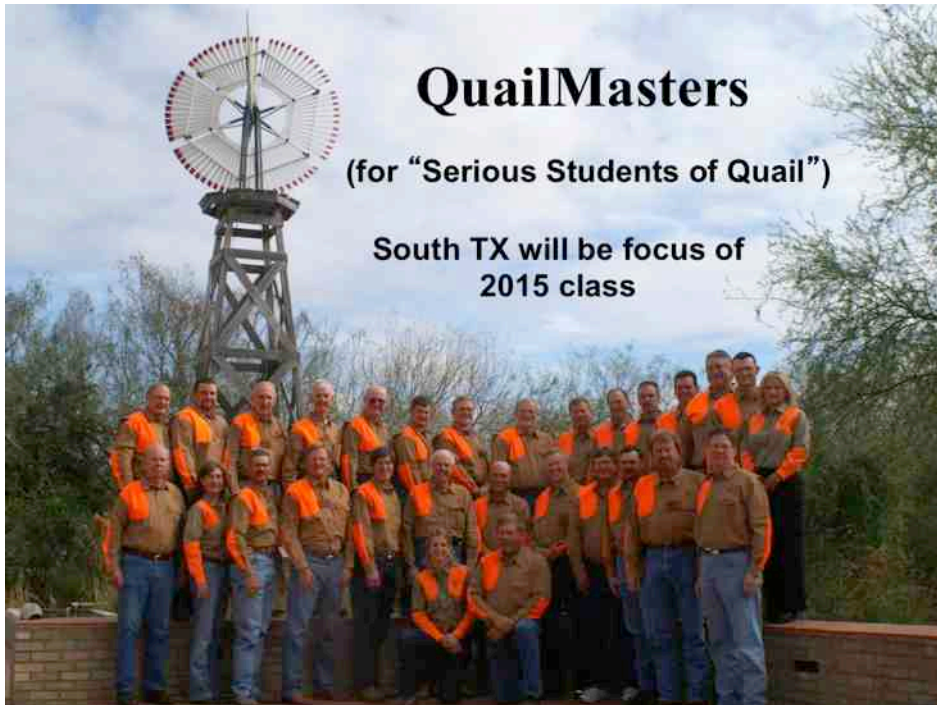


Dummy Nests



Camera Trapping





QuailMasters

(for "Serious Students of Quail")

South TX will be focus of
2015 class

TEXAS BRIGADES

Educating and Empowering
Youth Conservation Ambassadors



Texasbrigades.org





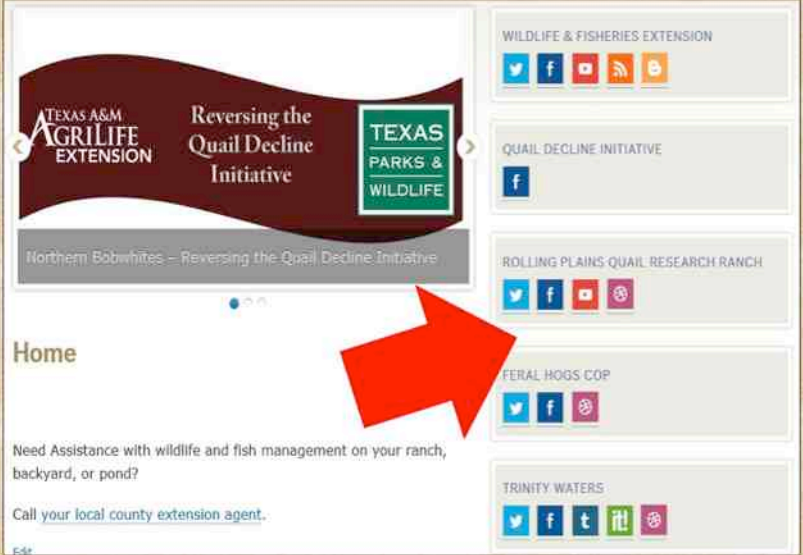
The Future of Conservation



"Anyone can count the seeds in an apple,
but no one can count the apples in a seed." 

- Anonymous

Check Us Out! wildlife.tamu.edu



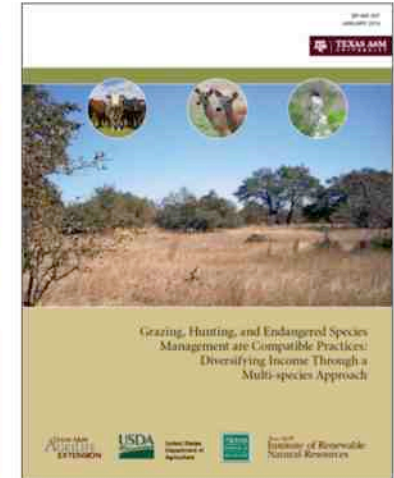
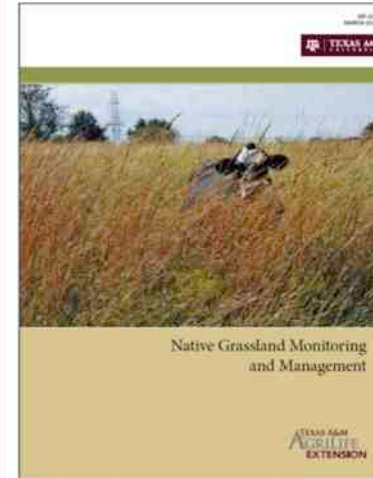
Home

Need Assistance with wildlife and fish management on your ranch, backyard, or pond?

Call your local county extension agent.

Publications

- Research-based guidelines for landowners to improve land management



Is there an app for that?



What is the *minimum* number of potential nest sites *per acre* that a manager should seek to provide in order to provide good nesting cover for quail?




- 25
- 125
- 300
- > 1,000



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- A. 25
- B. 125
- C. 300 
- D. > 1,000



TEXAS A&M
AGRI LIFE
EXTENSION

TEXAS
PARKS &
WILDLIFE

REVERSING THE DECLINE OF QUAIL IN TEXAS

Statewide symposium

16-18 Sept 2015

Abilene

Featuring:

- Tour
- Research Updates
- Success stories
- Keynote speakers



Upcoming
field day:

**26 Sept
RPQRR**

quailresearch.org



Rolling Plains Quail Research Ranch
7th Annual Field Day
Friday, Sept 26, 2014 • 9 a.m. – 2:30 p.m.

"Restoring Quail and Their Habitats"

Co-sponsored by:



Topics to include:

- Re-stocking with wild-trapped quail
- Renovation of post-CRP pastures for quail
- "Quail oases"
- Hunting season forecast
- Forb & shrub response to prickly pear control
- Plant Identification
- Updates on disease research and other topics

3 CEUs available for
Private Applicators

Pre-registration is \$10 per person (includes catered lunch) until Sept. 19th, then \$20 thereafter and at the door. Make check payable to "RPQRR" and mail to RPQRR, P.O. Box 61517, San Angelo, TX, 76906. For more information call Dale Rollins (325-650-0311) or e-mail drollins@quailresearch.org. Bring a friend!

2014 Forecast



- *Weather pattern*
- *Nos. up in all regions*
- *Hotspots:*
 - *Coastal Prairie*
 - *South Tx Plains*
 - *Panhandle*
 - *Blue quail*

