V.G. Young Institute of County Government

Texas A&M AgriLife Extension

Texas A&M NRI Natural Resources Institute

Texas Parks & Wildlife

Wildlife Appraisal Practices for Property Tax Professionals

GENERAL INFORMATION

Wildlife Appraisal Practices
for
Property Tax Professionals

October 2020

Seminar Presented by:

V.G. YOUNG Institute of County Government
TEXAS A&M AGRILIFE EXTENSION

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TEXAS A&M NRI
NATURAL RESOURCES INSTITUTE

TEXAS PARKS & WILDLIFE

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SEMINAR INFORMATION

EDUCATIONAL SPONSOR

Welcome! The Wildlife Appraisal Practices for Property Tax Professionals Seminar is sponsored as a program of the V.G. Young Institute of County Government, part of the Texas A&M AgriLife Extension Service. The V.G. Young Institute of County Government is an approved provider of Continuing Education for Property Tax Professionals in the State of Texas (TDLR Provider No. 1664).

CONTINUING EDUCATION

Continuing education hours will be available to individuals participating in the seminar. The Texas Department of Licensing and Regulation has approved a total of 6.5 hours of continuing education and CJCAT has approved a total of 7 hours of continuing education. In order to receive credit, you must the credit form that will be emailed at the end of the workshop. If you have any questions about continuing education credits, email: vgyi@ag.tamu.edu.

EVALUATIONS

At the close of the seminar please turn in the evaluation form to the registration desk. Your feedback is valued and will help us plan future workshops.

PLANNING COMMITTEE MEMBERS

Katy Gottwald, Program Coordinator, V.G. Young Institute of County Government, Texas A&M AgriLife Extension Service

Larry Pierce, Regional Program Leader, East Region Agriculture and Natural Resources and 4-H Youth Development, Texas A&M AgriLife Extension Service

Tim Siegmund, Private Lands Program Leader, Texas Parks and Wildlife Department

AGENDA & CLASS SCHEDULE

Day 1

9:00 a.m. — **Local Resources for Appraisers on Wildlife**
Speaker: Larry Pierce, Regional Program Leader, Texas A&M AgriLife Extension Service

9:30 a.m. — **Value of Open Space- Public Benefit of Private Working Lands**
Speakers: Tim Siegmund, Private Lands Program Leader, Texas Parks and Wildlife

10:20 a.m. — **Legislative Intent of Proposition 11**
Speaker: Joe Holcomb, Agriculture & Timberland Appraiser at the Property Tax Division of the Texas Comptroller of Public Accounts

11:10 a.m. — **Habitat Control**
Speaker: Jesse Oetgen, Biologist, Texas Parks and Wildlife District

12:00 p.m. — **Adjourn**

Day 2

9:00 a.m. — **Erosion Control and Supplemental Water**
Speaker: Kyle Wright, State Water Quality Specialist, USDA – Natural Resources Conservation Service

9:50 a.m. — **Supplemental Food and Shelter**
Speaker: John Tomeček, Assistant Professor and Extension Wildlife Specialist, Texas A&M AgriLife Extension Service

10:40 a.m. — **Managing Populations, Predator Control, and Census**
Speaker: Billy Lambert, Regulatory Biologist, Texas Parks and Wildlife

11:30 a.m. — **Practical Application of Wildlife Appraisal Practices**
Panel: All Speakers

12:00 p.m. — **Adjourn**

SPEAKER BIOGRAPHIES

Billy Lambert received BS and MS degrees from Texas Tech University in Wildlife Management in 1992 and 1998; worked as a Research Associate for the Caesar Kleberg Wildlife Research Institute until 2000 when I started employment with the TPWD as a regulatory biologist for the College Station area.

Joe Holcomb is an Agriculture and Timber Land Appraiser at the Property Tax Assistance Division of the Texas State Comptroller. He is responsible for the appraisal of agricultural and timberland productivity values regarding the Property Value Study. Along with valuations, he also responds to agricultural and timberland questions from taxpayers, appraisal districts, and government officials. Joe is a graduate of Texas A&M University with a Bachelor of Business Administration. He has been employed by the Comptroller's Property Tax Assistance Division for over 5 years. Before this, he was employed as a residential appraiser at McLennan County Appraisal District for four and a half years.

Larry Pierce has been employed with Texas A&M AgriLife Extension Service since 1997 serving as County Extension Agent in Atascosa, Dimmit, and Washington County. Since 2014, Larry has served 44 counties in the East Region of Texas as the Regional Program Leader for Agriculture and Natural Resources and 4-H Youth Development. In this role, he provides training and support to county Extension agents, develops innovative educational programs and advances partnerships for the agency.

Jesse Oetgen is a Technical Guidance Biologist with the Texas Parks and Wildlife Department, where he provides wildlife management assistance to private landowners and ranch managers in 21 counties of North-Central Texas. Prior to beginning his career with TPWD in 2002, Jesse obtained a bachelor's degree from Texas A&M University and master's degree from Louisiana State University, both in Wildlife and Fisheries Sciences. He lives near Weatherford with his wife, 3 daughters, and son.

Tim Siegmund was born and raised in Giddings, TX. A bachelor's degree and graduate research at Stephen F. Austin State University was followed by employment with TPWD in 2009. In College Station, Tim was responsible for 7 counties performing wildlife surveys, public outreach, technical guidance, prescribed fire assistance, public hunting opportunity, wildlife tax valuation planning and dealing with other wildlife issues. Starting Nov 1st, 2017 Tim began his role as the Private Lands Program Leader for TPWD dealing with private lands issues in a statewide capacity. Tim resides in College Station with his wife and three children.

John Tomeček is an assistant professor and Extension Wildlife Specialist for the Texas A&M AgriLife Extension Service where he provides support on the management of wildlife and its habitat to a diverse stakeholder group, including private landowners, land managers, ranchers, farmers, government agencies (city, county, state, and federal), non-government organizations, and urban residents. Tomeček specializes in research and education on a variety of issues, especially nuisance animals (overabundant deer, predatory animals, crop pests), the management of game animals, and wildlife disease concerns (including zoonotic diseases). In the past, Tomeček worked as a private consultant and researcher, addressing issues of wildlife integration on agricultural lands, mitigating damage from or reducing numbers of overabundant or nuisance animals. He has also worked extensively on the culture and habits

SPEAKER BIOGRAPHIES

of wildlife resources users, helping to tailor management solutions that are not only scientifically sound, but socially accepted. He has a Ph.D. in Wildlife and Fisheries Sciences from Texas A&M University, and a Bachelor of Arts and Master of Arts in Anthropology from the University of Texas at Austin.

Kyle Wright is currently the Acting Water Resources/Landscape Planning Staff Leader for the Texas USDA Natural Resources Conservation Service (NRCS) at the state office in Temple Texas. In addition, he is the State Water Quality Specialist on the Landscape Planning staff. Kyle has a Bachelors' and Masters' degree from Angelo State University. He has 20 years of experience in the private sector as well as 17 years of federal service. Kyle spent much of his life in West Texas and now resides In Salado, Texas.

Agency Resource Professionals

Texas A&M AgriLife Extension Service is a unique education agency with a statewide network of professional educators, trained volunteers, and county offices. It reaches into every Texas county to address local priority needs. Some of our major efforts are in mitigating drought impacts; conserving water use in homes, landscapes, and production agriculture; improving emergency management; enhancing food security; and protecting human health through education about diet, exercise, and disease prevention and management.

Find your local County Extension Agent https://agrilifepeople.tamu.edu/extensionLists/counties

Connect with Extension https://agrilifeextension.tamu.edu/

Texas Parks & Wildlife Department (**TPWD**) provides outdoor recreational opportunities by managing and protecting wildlife and wildlife habitat and acquiring and managing parklands and historic areas. It has inherited the functions of many state entities created to protect Texas' natural resources.

Find your local biologist https://tpwd.texas.gov/landwater/land/technical_guidance/biologists

Connect with TPWD https://tpwd.texas.gov/

Texas A&M Forest Service (**TFS**) conserves and protects the resources and lands of the Lone Star State. Conserving Texas' trees and forests, the state agency helps property owners maintain land and natural resources to ensure forestlands remain productive and healthy not only for the environment, but for generations of Texans to come.

TFS is also one of the lead agencies for incident management in the state. From the initial response to ongoing recovery, the agency strives to protect Texas from wildfire and other types of disasters. TFS does this by not only fighting wildfire and responding to incidents, but also by building capacity and increasing public awareness about community protection and wildfire prevention.

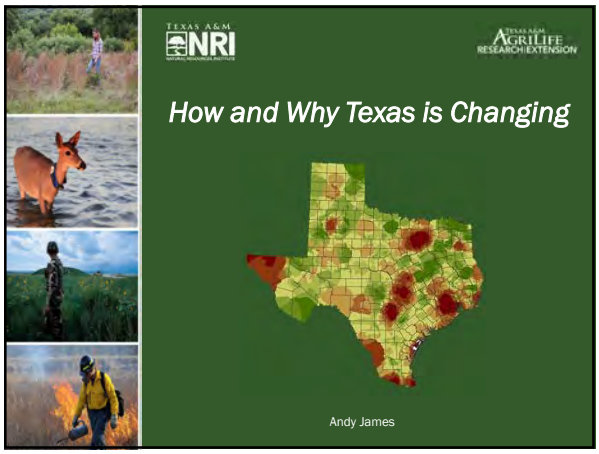
Find your local Texas Forest Service http://texasforestservice.tamu.edu/ContactUs/

Connect with TFS http://texasforestservice.tamu.edu/

USDA Natural Resources Conservation Service (**NRCS**) is a federal agency that works hand-in-hand with the people of Texas to improve and protect their soil, water and other natural resources. For decades, private landowners have voluntarily worked with NRCS specialists to prevent erosion, improve water quality and promote sustainable agriculture.

Find your local USDA service center https://offices.sc.egov.usda.gov/locator/app

Connect with Texas NRCS https://www.nrcs.usda.gov/wps/portal/nrcs/site/tx/home/



1

Value of Rural Lands

- Rural working lands –critical role in providing water, food, energy, and national security
- *Effective* conservation requires innovative solutions to sustaining private rural working lands.
- Review of data to give a perspective on challenges
  - More people…
  - Less farms and ranches…
  - Changing landowners….
- Opportunities and approaches

2

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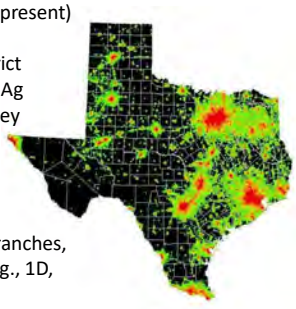
Texas Land Trends

- Trends in land use (1997-present)
- Primary datasets used
  - County Appraisal District
  - USDA NASS Census of Ag
  - Texas Landowner Survey
- Relationships among
  - Land Value
  - Land Ownership
  - Land Use
- ***Working Lands*** – farms, ranches, family forests, wildlife (e.g., 1D, 1D1)



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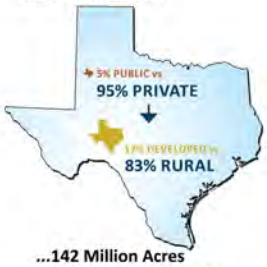
More People....

4

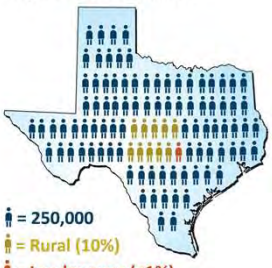
Changing Texas

171 Million Acres...



...142 Million Acres
Private Working Lands

Population: 28 Million



= 250,000
= Rural (10%)
= Landowners (<1%)

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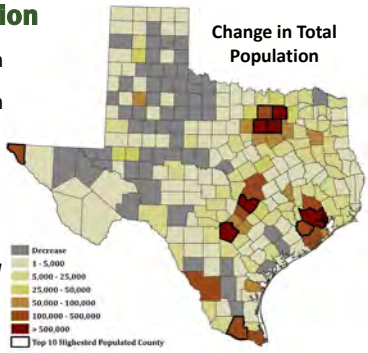
Texas Population

- 1997 – 19 Million
- 2017 – 28 Million
- 48% increase
- 450,000+/year
- 64% of increase occurred within *Top 10 Populated* Counties

Change in Total Population



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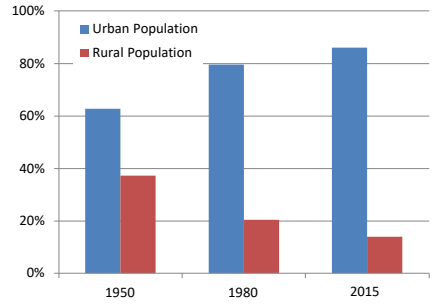
Texas Rural and Urban Populations



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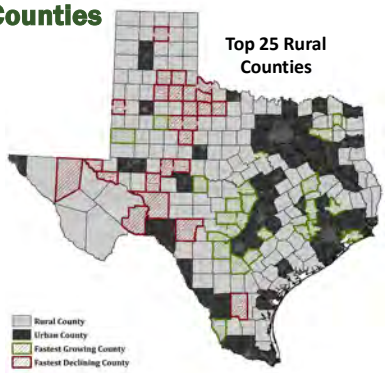
Rural Counties



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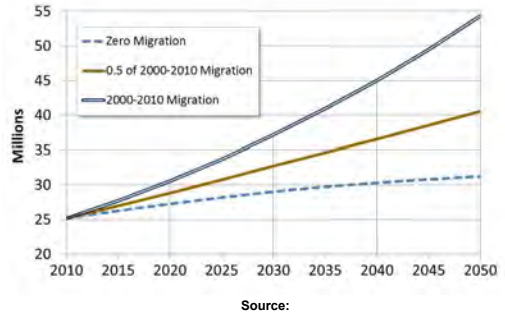
Texas Projections (2010-2050)



Source:
State Demographer

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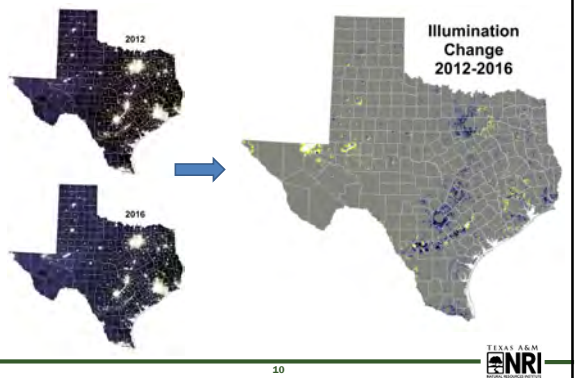
Night Time Illumination



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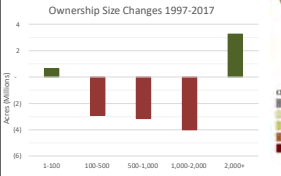
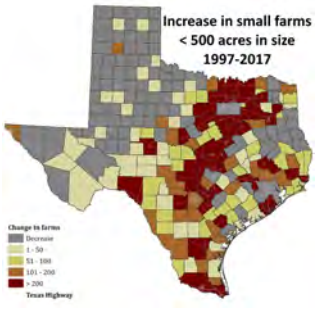
Working Land Loss – *Fragmentation*

- 20,000+ *new* farms and ranches (1997-2017)
- 6.1M acres impacted





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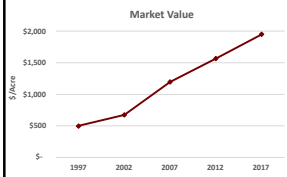
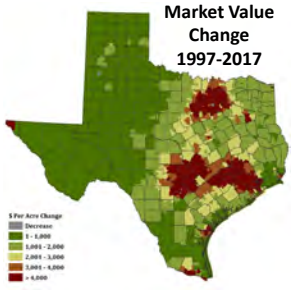
Market Value – *Driver*

- 1997 – $499/Acre
- 2017 – $1,951/Acre
- Gain of $1,452/Acre





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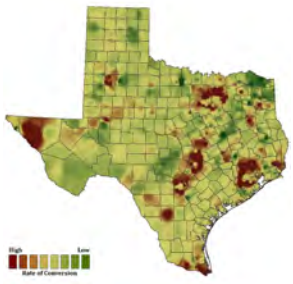
Working Land Loss – *Conversion*

- 1997 – 143 Million acres
- 2017 – 141 Million acres
- Loss ~2 Million acres



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Why is Land Stewardship Important?

"Water conservation starts where the first rain drop falls".
-President Lyndon B. Johnson

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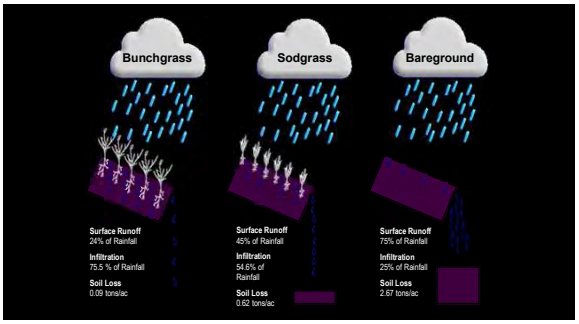

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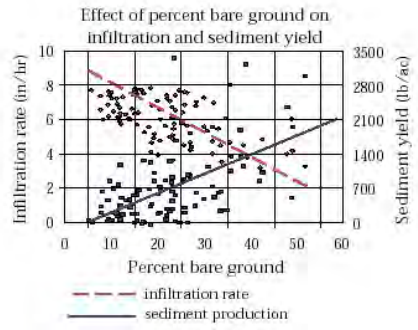
Effect of percent bare ground on infiltration and sediment yield
Infiltration rate (in/hr)
Sediment yield (lb/ac)
Percent bare ground
infiltration rate
sediment production

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Plant Vigor-Leaves and Roots
Caring for the Green Zone, Riparian Areas and Grazing Management
Alberta Riparian Habitat Management Project, "Cows and Fish Project"

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How Grazing Affects Root Growth

Percent leaf volume removed:	Percent root growth stoppage:
10%	0%
20%	0%
30%	0%
40%	0%
50%	2-4%
60%	50%
70%	78%
80%	100%
90%	100%

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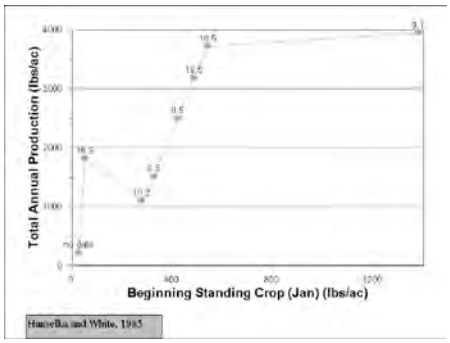

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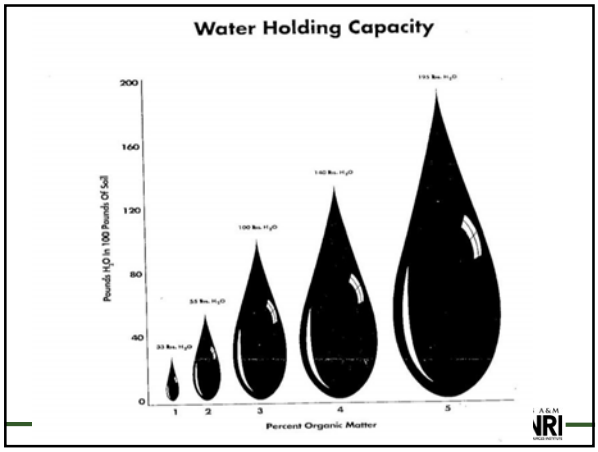

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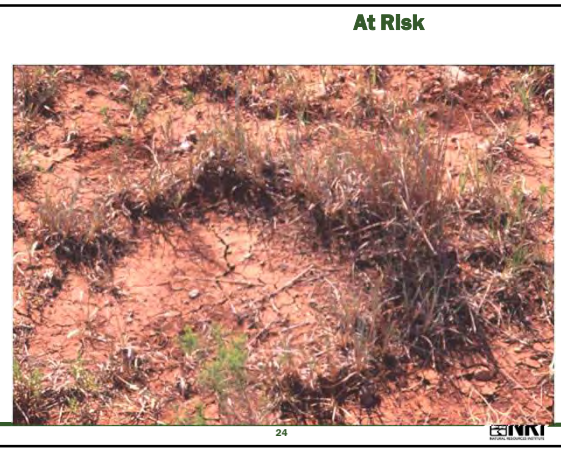

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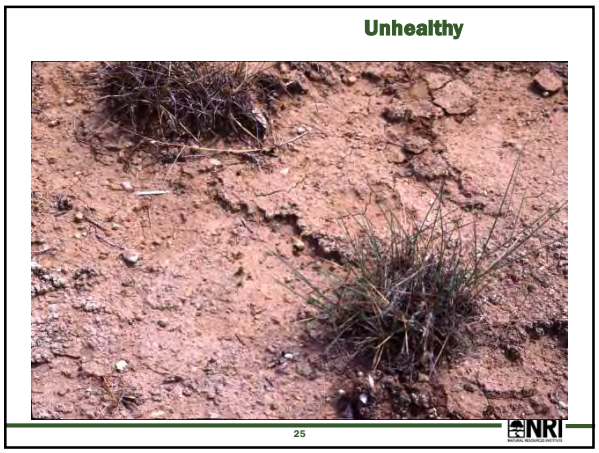

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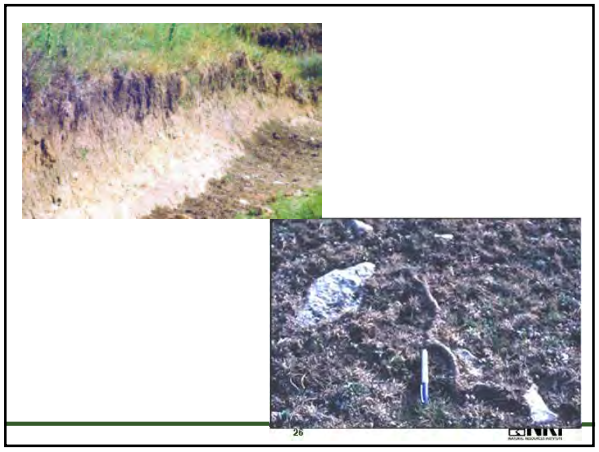

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Proper residue level; additional grazing requires regrowth

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- Healthy Rangeland
  - High quality/quantity water source
  - Forage for livestock production
  - Wildlife habitat.
- Unhealthy Rangeland
  - Increased runoff with high nutrient and sediment content
  - Decreased infiltration which is needed for the production of native plants required by livestock and wildlife.

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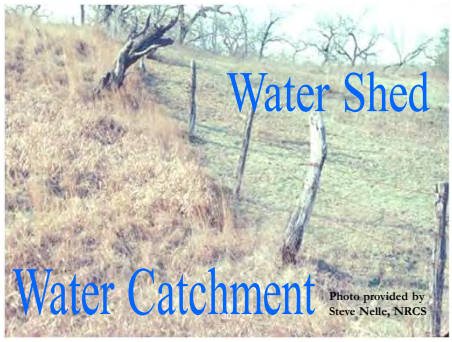

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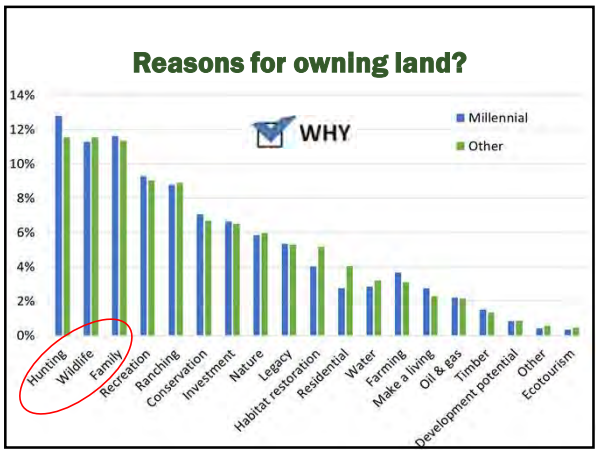
Reasons for owning land?
WHY
Millennial
Other
14%
12%
10%
8%
6%
4%
2%
0%
Hunting
Wildlife
Family
Recreation
Ranching
Conservation
Investment
Nature
Legacy
Habitat restoration
Residential
Water
Farming
Make a living
Oil & gas
Timber
Development potential
Other
Ecotourism

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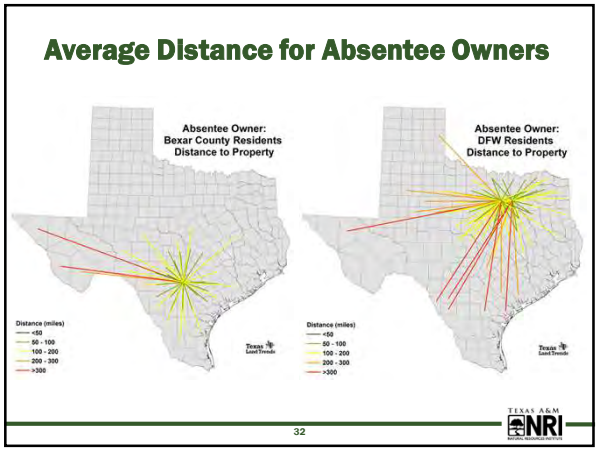
Average Distance for Absentee Owners
Absentee Owner:
Bexar County Residents
Distance to Property
Absentee Owner:
DFW Residents
Distance to Property
Distance (miles)
<50
50 - 100
100 - 200
200 - 300
>300
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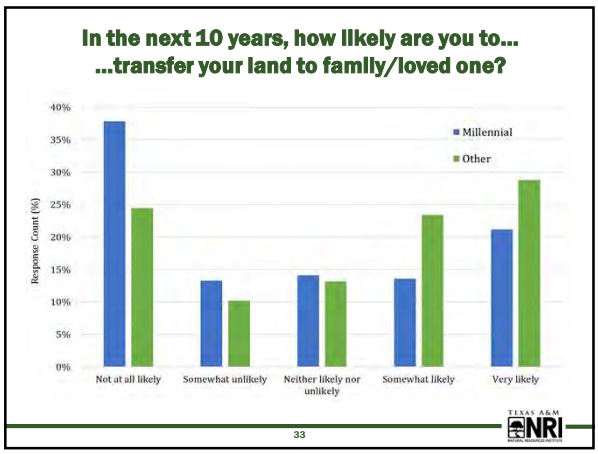
In the next 10 years, how likely are you to...
...transfer your land to family/loved one?
Millennial
Other
Response Count (%)
40%
35%
30%
25%
20%
15%
10%
5%
0%
Not at all likely
Somewhat unlikely
Neither likely nor unlikely
Somewhat likely
Very likely
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Changing Landscapes...
Future of Rural Texas

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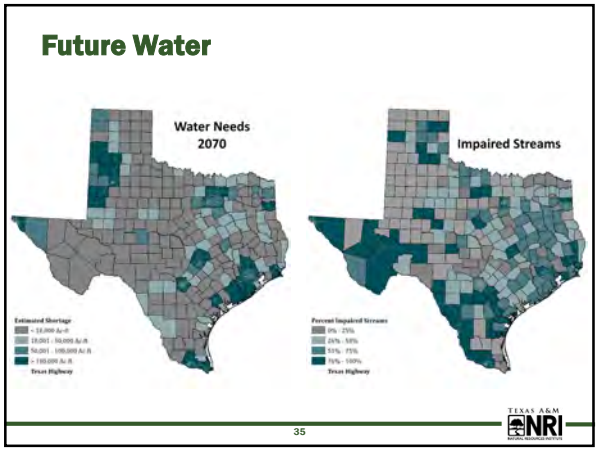
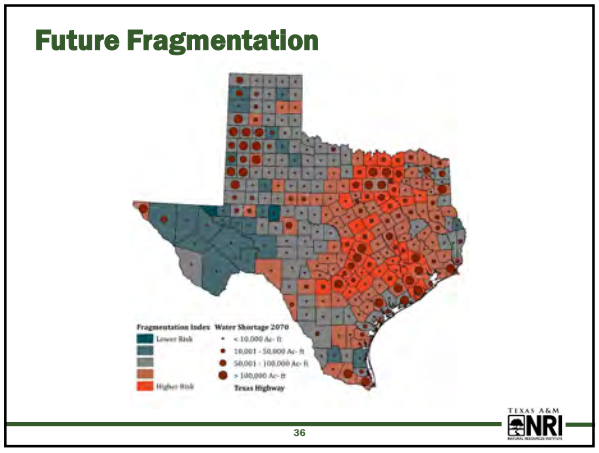

Future Water
Water Needs
2070
Impaired Streams
35

35


Future Fragmentation
Fragmentation Index
Lower Risk
Higher Risk
Water Shortage 2070
Texas Highway
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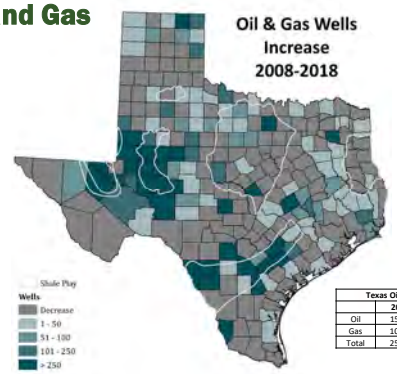
Oil and Gas



Texas Oil Well Count		
	2008	2018
Oil	152,751	186,025
Gas	101,075	103,124
Total	253,826	289,149

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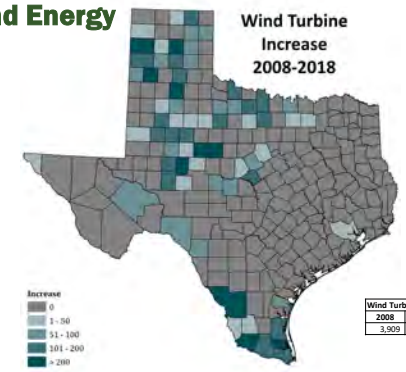
Wind Energy



Wind Turbine Count	
2008	2018
3,909	13,158

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Final Thoughts…

- **More People** – Increasing human population, shifts in ethnicity and urban residents.
- **Impacts to Farms and Ranches** – Loss of working lands, fragmentation and conversion BUT not in all places…
- **Changing Landowner Perspectives** – Aging landowners, different objectives, largest intergenerational transfer.
- Communicate the *public* benefits of *private lands*…

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Promoting Private Lands Stewardship through Research, Education, and Policy.

http://nri.tamu.edu/
http://txlandtrends.org/

Roel R. Lopez
roel@tamu.edu

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Glenn Hegar Texas Comptroller of Public Accounts

Presentation at the 2020 Wildlife Appraisal Practices for Property Tax Professionals

Wildlife Management: History & Appraisal

October 2020
Property Tax Assistance Division
Texas Comptroller of Public Accounts

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Glenn Hegar Texas Comptroller of Public Accounts

Joe Holcomb
Ag & Timberland Appraiser
Texas Comptroller of Public Accounts
(512)936-6945
or 1-800-252-9121 (press 1 to access the directory, then press 6-6945)
Joe.Holcomb@cpa.texas.gov

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Glenn Hegar Texas Comptroller of Public Accounts

Outline

- History of Wildlife Management (WLM)
- Wildlife Management Statistics
- Qualification Requirements
- Appraising Wildlife Mgmt. Land
- Property Tax Code & Tax Rules
- Wildlife Use Requirement
- Roles in the WLM Process

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Glenn Hegar Texas Comptroller of Public Accounts

History of Wildlife Management

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Glenn Hegar Texas Comptroller of Public Accounts

Ag Valuation in Texas

- 1966: Voters approved 1-d by constitutional amendment
- 1978: Voters approved 1-d-1 (including timberland) by constitutional amendment
- 1995: Wildlife management added

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Glenn Hegar Texas Comptroller of Public Accounts

Proposition 11

- The constitutional amendment to allow open-space land used for wildlife management to qualify for tax appraisals in the same manner as open-space agricultural land, subject to eligibility limitations provided by the legislature
- Approved by voters on November 7, 1995
  - For: 434,643
  - Against: 274,736

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Wildlife Management Statistics

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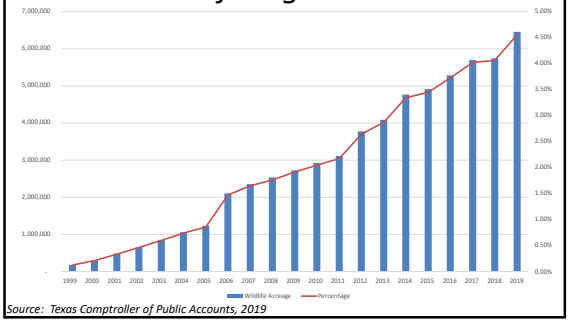
Wildlife Mgmt. Acres



Source: Texas Comptroller of Public Accounts, 2019

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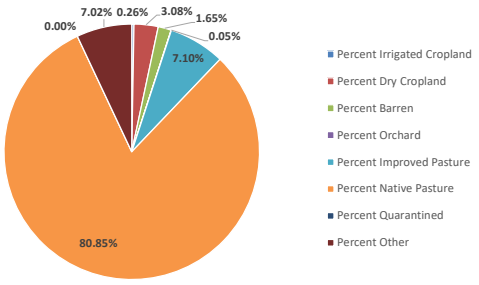
Wildlife Mgmt. by Category



Source: Texas Comptroller of Public Accounts, 2019

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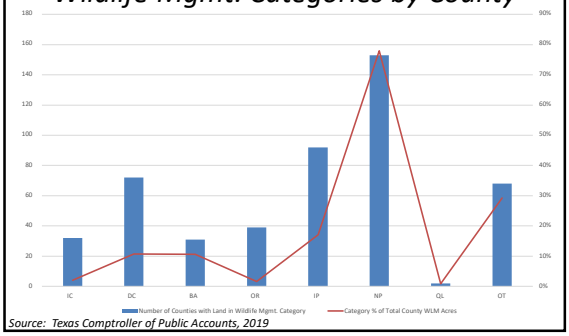
Wildlife Mgmt. Categories by County



Source: Texas Comptroller of Public Accounts, 2019

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Statistics by County (2019)

% Counties that have WLM	167 Counties	65.75%
Max Wildlife Mgmt. %	Kleberg	83.05%
Average % Acreage in WLM	6.15%	
Average Acres in WLM	38,706	
Most Acreage in WLM	Val Verde	496,060
Least Acreage in WLM	Dickens	3
Most Total Acreage in Ag	Brewster	2,619,225

Source: Texas Comptroller of Public Accounts, 2019

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Qualifying for Wildlife Management

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Requirements

- Appraised under 1-d-1 (Subchapter D) or timberland (Subchapter E)
- Primary use must be wildlife management
- Do at least 3 of the 7 statutory listed activities
- Must be actively managed to generate a sustaining breeding, migrating or wintering population of indigenous wild animals
- Managed for human use:
  - Food
  - Medicine
  - Recreational
- Must meet the specified wildlife use requirement, **if applicable**

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Appraising Wildlife Mgmt. Land

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WLM Appraisal

- No actual calculations for WLM
- Is simply the value of the category that it was previously appraised as
  - §23.52(g)
- If NP is $50.00/acre, then WLM NP is $50.00

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Property Tax Code & Tax Rules

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Texas Property Tax Code

- §23.51(1): Exceptions to prior use rule
  - Federally listed endangered species
  - A conservation or restoration project to provide compensation for natural resource damages
- §23.51(4): Hunting income on WLM is NOT to be included in your NTL calculations
- §23.51(7): Initial statutory source
- §23.52(g): Land in WLM is the category of the land before the wildlife-management use began.
- §23.521: Standards for qualification of land based on wildlife-management use.

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Texas Property Tax Rules

- 9.2001: Purposes and Definitions
- 9.2002: Wildlife Use Appraisal Regions
- 9.2003: Wildlife Management Plan
  - (g): Optional annual report
- 9.2004: Qualification for Agricultural Appraisal Based on Wildlife Management Use
- 9.2005: Wildlife Use Requirement

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Wildlife Use Requirement

- Wildlife Use Requirement = (x-1) ÷ x
  - With "x" representing the tract of land's total acreage
- Standard Acreage/Individual Owners:
  - **ONLY** applies if the number of acres is **fewer** than on January 1st of the preceding year
- Wildlife Mgmt. Property Associations/Endangered Species:
  - **ALWAYS** have to pass the minimum acreage requirement
  - Different requirements than standard individuals

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Wildlife Use Requirements Range

- Trans Pecos: at least 97% but not more than 99%
- High Plains: at least 96% but not more than 98%
- Rolling Plains: at least 96% but not more than 98%
- Edwards Plateau (Western): at least 96% but not more than 98%
- Edwards Plateau (Eastern): at least 93% but not more than 95%
- Cross Timbers & Prairies: at least 93% but not more than 95%

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Wildlife Use Requirements Range (cont.)

- Gulf Prairies & Marshes (Upper Coast): at least 92% but not more than 94%
- Gulf Prairies & Marshes (Lower Coast): at least 96% but not more than 98%
- Post Oak Savannah: at least 92% but not more than 94%
- Blackland Prairie: at least 92% but not more than 94%
- Pineywoods: at least 92% but not more than 94%
- South Texas Plains: at least 96% but not more than 98%

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Wildlife Use Requirement

- South Texas Plains Region:
  - Low end: 96%: 100 ÷ (100 – 96) = 25 acres
  - High end: 98%: 100 ÷ (100 – 98) = 50 acres
- Blackland Prairie Region:
  - Low end: 92%: 100 ÷ (100 – 92) = 12.5 acres
  - High end: 94%: 100 ÷ (100 – 94) = 16.7 acres

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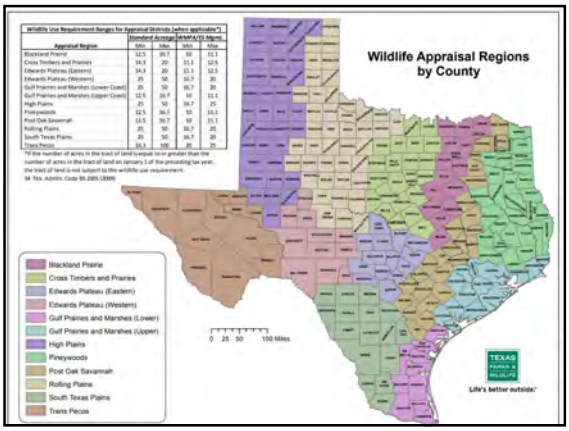

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Roles in Wildlife Management Process

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Property Owners

- Fill out and turn into CAD a 1-d-1 application (Form 50-129) along with TPWD's wildlife management plan.
- *Actively* manage their land by doing at least 3 of the 7 activities
- Fill out and turn in annual report **IF** required by CAD
- Tell CAD if they are going to switch back to "traditional" ag or quit completely

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Appraisal Districts

- Approve or deny applications
- Choose wildlife use requirement percentage/acreage
- Decide if you want landowners to file an annual report or not per 9.2003(g)
- **Cannot** force a landowner to do any of the 7 activities

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Questions?

Joe Holcomb

(512)936-6945

or 1-800-252-9121 (press 1 to access the directory, then press 6-6945)

Joe.Holcomb@cpa.texas.gov

27

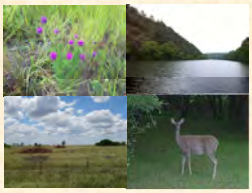
1

Habitat Control

Basic concept of wildlife management

Provides:

- Food
- Water
- Shelter/Cover
- Space



2

Habitat Control

- Grazing Management
- Prescribed Burning
- Range Enhancement
- Brush Management
- Fence Modification
- Riparian Management
- Wetland Enhancement
- Habitat Protection for Species of Concern
- Prescribed Control of Native, Exotic and Feral Species
- Wildlife Restoration

3

Habitat Control

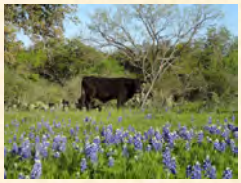
4

Grazing Management

5

Grazing Management

- Planned rest/rotation to improve plant diversity
- Livestock as a tool for wildlife management
- Minimum stocking intensity often to high for optimum wildlife habitat health under traditional Ag valuation



6

Planned Grazing System

- Number of grazeable acres
- Type of livestock
- Stocking rate
- Stocking duration
- Fencing
- Water
- Grazing deferment??

7

Graze based on Rain

Destocking Plan:

June		October	
Rainfall to Date	Action	Rainfall to Date	Action
<5 inches	100% destock	<9 inches	100% destock
5 to 8 inches	50% destock	9 to 13 inches	50% destock
8 to 12 inches	25% destock	13 to 21 inches	25% destock
12+ inches	Nothing	21+ inches	Nothing

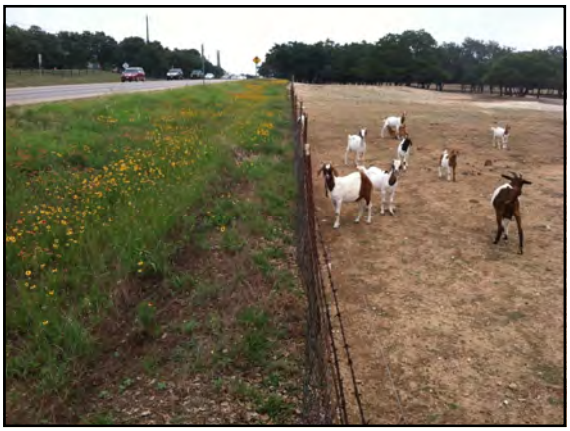
8

Planned Grazing System

☐ *Grazing management.* Check grazing system being utilized.
☐ 1 herd/3pasture ☐ 1 herd/4 pasture ☐ 1 herd/multiple pasture
☐ High intensity/low frequency (HILF) ☐ Short duration system
☐ Other type of grazing system (describe)

Additional information: _____

9



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Prescribed Burning

12

Prescribed Burning

☐ *Prescribed Burning*
Acres to be burned: _____ Planned burn date: _____
Additional Information: _____

*Minimum of 15% of acreage annually

13

Prescribed Burning

- Burn plan with goals
- Planning and safety
- Professional assistance

➢ Benefits
  - Remove thatch
  - Stimulate plant growth
  - Brush control
  - Return nutrients back to soil

14

15

16

Range Enhancement

17

Range Enhancement

☐ *Range Enhancement (Range Reseeding)*
Acres to be seeded: _____ Date to be seeded: _____
Seeding Method: ☐ Broadcast ☐ Drilled ☐ Native Hay
Seeding mixture to be used: _____
Fertilized: ☐ Yes ☐ No
Weed control needed for establishment? ☐ Yes ☐ No
Additional Information: _____

*10% of designated area or 10 acres annually (whichever is less)

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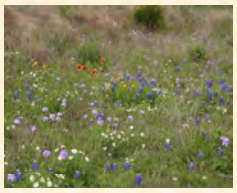
Range Enhancement

- Native plants
- Seeding method
- Timing
- Cost - $85 - $150 per acre



➢ Benefits
- Increase plant diversity
- Food and cover for wildlife

19

Brush Management

20

Brush Management

☐ *Brush Management.* Acres to be treated: _____ Check method of brush management:
☐ Mechanical
☐ grubber ☐ chain ☐ roller chopper/aerator ☐ rhome disc
☐ brush hog (shredder) ☐ dozer ☐ hand-cutting (chainsaw)
☐ hydraulic shears ☐ other (describe): _____
☐ Chemical Kind: _____ Rate: _____
☐ Brush management design:
☐ block ☐ mosaic ☐ strips: width: _____ Length: _____
Additional Information: _____

*10% of designated area or 10 acres annually (whichever is less)

21

Brush Management

- Careful consideration to target species needs
- Selective removal
- Invasive species of woody plants
- Promote diversity across the landscape

22

Mechanical (grubbing)

23

Mechanical (hydro-axe/mulcher)

24

Mechanical (hydro-axe/mulcher)

25

Mechanical (shearing)

26

Mechanical (shearing)

27

Chemical

28

Chemical

29

Chemical

30

Brush Sculpting

31

32

33

34

35

36

37

Fence Modification

38

Fence Modification

☐ *Fence Modification*
Target species: ☐ pronghorn antelope ☐ bighorn sheep
Technique: ☐ fold up bottom of net-wire Gap width: 18 inches minimum
☐ replace sections of net-wire with barbed wire. Gap width: _____
Miles of fencing that will be modified: _____
☐ replace entire net-wire fence with barbed wire. Miles replaced: _____
Additional Information: _____

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Fence Modification

- Increase movements
- Allow access to valuable resources or habitats

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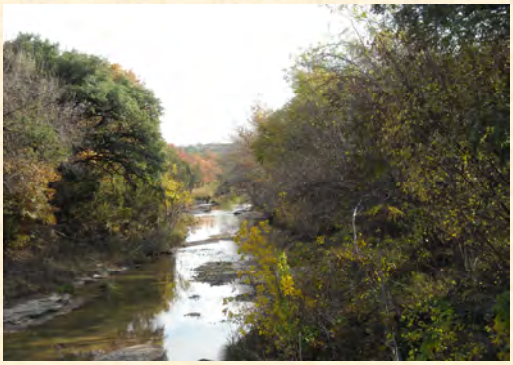
Riparian Management and Enhancement



41

Riparian Management and Enhancement

☐ *Riparian management and enhancement*
- ☐ Fencing of riparian area
  - ☐ Complete fencing ☐ Partial fencing
- ☐ Deferment from livestock grazing
  - ☐ Complete deferment ☐ partial deferment Season deferred : _____
- ☐ Establish vegetation
  - ☐ Trees (list species) _____
  - ☐ Shrubs (list species) _____
  - ☐ Herbaceous species (list) _____

Additional Information: _____

*One project every 10 years

42

Riparian Management and Enhancement

- Protect riparian habitats
- Prevent erosion
- Increase riparian plant diversity
- Riparian corridors

43

Wetland Enhancement

44

Wetland Enhancement

☐ *Wetland enhancement*
☐ Provide seasonal water ☐ Provide permanent water ☐ Moist soil management
☐ Other (describe) _____
Additional Information: _____

*One project every 10 years

45

Wetland Enhancement

- Provide critical wetland habitat for native and migratory species

46

Habitat Protection for Species of Concern

47

Habitat Protection for Species of Concern

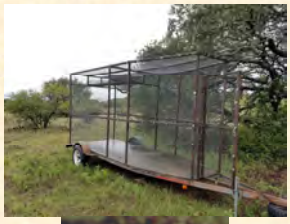
☐ *Habitat Protection for species of concern*
☐ Fencing ☐ Firebreaks ☐ Prescribed burning ☐ Control of nest parasites
☐ Habitat manipulation (thinning, etc.) ☐ Native/exotic ungulate control
☐ Other (describe) _____
Additional Information: _____

*One project every 10 years

48

Habitat Protection for Species of Concern

- Control invasive or exotic species
- Manage habitat at optimum level for species of concern
- Must actually have the species of concern



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Prescribed Control of Native, Exotic and Feral Species

50

Prescribed Control of Native, Exotic and Feral Species

☐ *Prescribed Control of Native, Exotic and Feral Species*

☐ Prescribed control of vegetation ☐ Prescribed control of animal species

☐ Species being controlled:

☐ Method of control:

Additional Information:

*Minimize negative impact on native wildlife and habitat

51

Prescribed Control of Native, Exotic and Feral Species

- Control animals damaging native habitat
- Feral hog control for riparian health
- Exotic mammals (axis, aoudad)
- Exotic plants (old world bluestem)

52

Prescribed Control of Native, Exotic and Feral Species




53

Wildlife Restoration

54

Wildlife Restoration

☐ *Wildlife Restoration*
☐ Habitat restoration ☐ Wildlife restoration
☐ Target species: _____
☐ Method of restoration: _____
Additional Information: _____

55

Wildlife Restoration

- Limited opportunities
- Usually work through Texas Parks & Wildlife

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Points to Remember

- Diversity will benefit multiple species
- Practices may be different for different species
- Good wildlife management and land stewardship has multiple benefits

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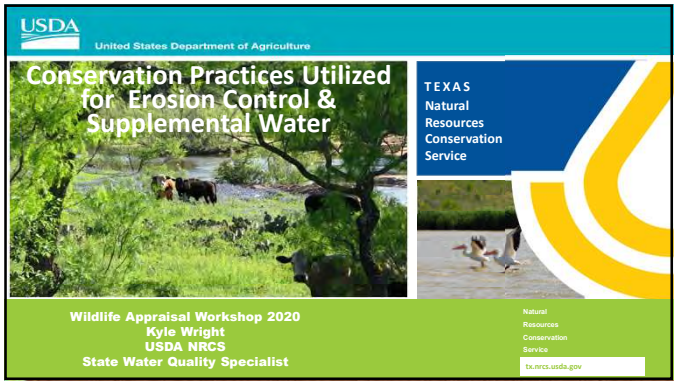
USDA
United States Department of Agriculture
Conservation Practices Utilized for Erosion Control & Supplemental Water
TEXAS
Natural
Resources
Conservation
Service
Wildlife Appraisal Workshop 2020
Kyle Wright
USDA NRCS
State Water Quality Specialist
Natural
Resources
Conservation
Service
tx.nrcs.usda.gov

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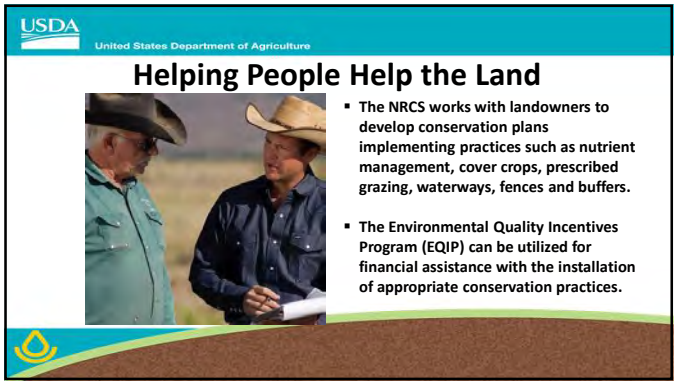
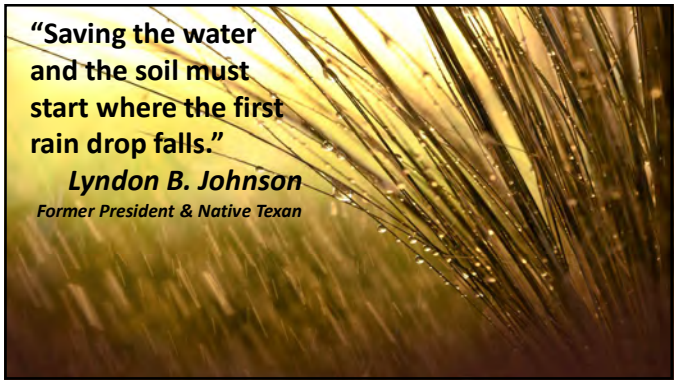

USDA
United States Department of Agriculture
Helping People Help the Land
The NRCS works with landowners to develop conservation plans implementing practices such as nutrient management, cover crops, prescribed grazing, waterways, fences and buffers.
The Environmental Quality Incentives Program (EQIP) can be utilized for financial assistance with the installation of appropriate conservation practices.

2


"Saving the water and the soil must start where the first rain drop falls."
Lyndon B. Johnson
Former President & Native Texan

3

USDA United States Department of Agriculture

The ACT

Avoid, Control or Trap

Use a "systems approach" to address your resource concerns. Select appropriate practices for Avoiding, Controlling, or Trapping contaminants

4

USDA United States Department of Agriculture

Avoid

Practices such as ***Nutrient Management***, ***Cover Crop***, and ***Conservation Crop Rotation*** help producers avoid pollution by reducing the amount of nutrients available in runoff or leaching into water bodies and watersheds. Practices such as cover crops and crop rotation help take up nutrients to avoid potential runoff and pollution. Crop rotations that include differing crops, such as legumes, can limit amounts of commercial nutrients applied.

5

USDA United States Department of Agriculture

Control

Land treatment in fields or facilities that prevents the loss of pollutants includes practices such as conservation tillage and residue management, which improve infiltration, reduce runoff, and control erosion. Specific practices such as ***No-till/Strip/Till/Direct Seed***, ***Mulch Tillage***, and ***Ridge Till*** are foundation practices to recommend to producers. Practices such as ***Cover Crop*** will also do double duty by helping with Avoidance as well as Controlling. Other facilitating practices, such as ***Terraces*** or ***Stripcropping***, help control erosion and may manage runoff to reduce nutrients loading.

6

USDA United States Department of Agriculture

Trap

The last line of defense against potential pollutants is to trap them. Practices such as ***Contour Buffers***, ***Filter Strips***, ***Riparian Buffers*** and the suite of ***practices to create, enhance, and/or restore wetlands*** all serve to trap and uptake nutrients and sediments before entering water bodies.

7

USDA United States Department of Agriculture

Conservation Buffer Practices

Contour Buffer strips
Cross Wind Trap Strips
Field Borders
Filter Strips
Grassed Waterways
Herbaceous Wind Barriers
Riparian Forest Buffers
Windbreaks/shelterbelts

8

USDA United States Department of Agriculture

Residue Management Practices

- No Till
- Reduced Till

9

USDA United States Department of Agriculture

Practices Utilized on Dry Cropland

Conservation Crop Rotation
Terraces
Contour Farming
Grassed Waterway
Residue Management
Conservation Buffers

10

USDA United States Department of Agriculture

Practices Utilized on Irrigated Cropland

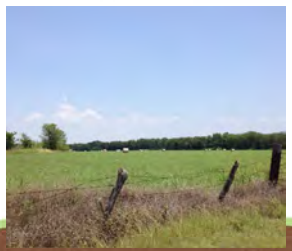
Irrigation Land Leveling
Irrigation Water Management
Conservation Crop Rotation
Residue Management
Conservation Buffers

11

USDA United States Department of Agriculture

Practices Utilized on Grazing Lands

Prescribed Grazing
Water Source
Conservation Buffers



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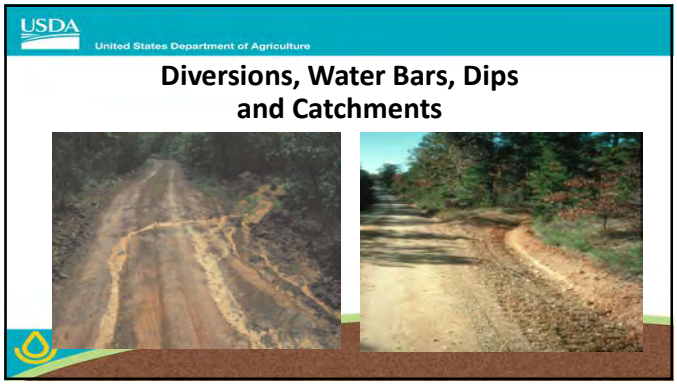
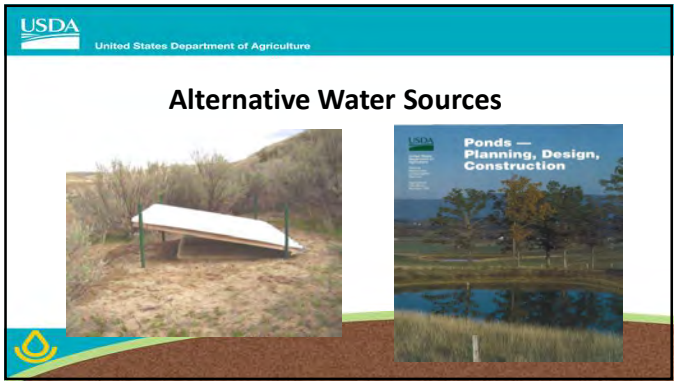

USDA
United States Department of Agriculture
Diversions, Water Bars, Dips and Catchments

13


USDA
United States Department of Agriculture
Alternative Water Sources
Ponds — Planning, Design, Construction

14


USDA
United States Department of Agriculture
Healthy Soils Are The Foundation of Healthy Ecosystems

15

USDA
United States Department of Agriculture

Healthy soil gives us clean air and water, bountiful crops and forests, productive grazing lands, diverse wildlife, and beautiful landscapes. Soil does all this by performing five essential functions:

1. **Regulate and partition water**
2. **Sustains plant and animal life**
3. **Filters and buffers potential pollutants**
4. **Cycling of nutrients**
5. **Physical stability and support**

16

USDA
United States Department of Agriculture

Healthy Soils Make Sense

- The soil's water-holding capacity reduces runoff, and increases the availability of water to plants during droughts.
- Good infiltration keeps nutrients and sediment from loading into lakes, rivers, and streams.
- Healthy soils do a better job of filtering and buffering organic and inorganic materials which helps to protect our groundwater.

17

USDA
United States Department of Agriculture

Five Basic Principals for Improving Soil Health

1. **Keep the soil covered as much as possible.**
2. **Disturb the soil as little as possible**
3. **Keep plants growing throughout the year to feed the soil**
4. **Grow a diverse mixture of plants.**
5. **Integrate Livestock**

18


USDA
United States Department of Agriculture
Should Soil Health be Part of Your Solution to Reducing Erosion

19


USDA
United States Department of Agriculture
Battle Starts Here

20


USDA
United States Department of Agriculture
Questions?
Kyle Wright
State Water Quality Specialist
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Natural Resources Conservation Service
101 South Main | Temple, Texas 76501
(254)742-9865 | kyle.wright@tx.usda.gov
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21

1

Supplemental Feeding

- Origins of the Practice
- Should you "feed wildlife?"
- Have it when it matters!
- Get it only to the target!
- Let's take a critical look at what makes a difference!

2

Supplemental Feeding…an Example

- Nutrition
  - Water
  - Protein
  - Carbohydrates
  - Lipids (fat)
  - Vitamins
  - Minerals
  - **6-7% crude protein for rumen function**
  - **13-16% crude protein for growth, antler production, reproduction**

3

Nutrition Calendar

SAVE THE DATE

The nutritional requirements for deer vary with sex, age and time of year. It's important for whitetail land managers to stay on top of their herd's needs throughout the year. – *Matt Haun*

NUTRITIONAL REQUIREMENTS

Month	Bucks	Does	Fawns
January	Carbohydrates	Carbohydrates	Carbohydrates
February	Carbohydrates	Carbohydrates	Carbohydrates
March	Carbohydrates	Carbs/Protein	Carbohydrates
April	Carbs/Protein	Carbs/Protein	Carbs/Protein
May	Protein	Protein	Protein
June	Protein/Sodium	Protein/Sodium	Nursing
July	Protein/Sodium	Protein	Nursing
August	Protein	Protein	Nursing/Protein
September	Carbohydrates	Carbohydrates	Protein/Carbs
October	Carbohydrates	Carbohydrates	Protein/Carbs
November	Carbohydrates	Carbohydrates	Protein/Carbs
December	Carbohydrates	Carbohydrates	Carbs/Protein

4

Reasons to Feed

- Do we have to feed?
  - Baiting
  - Helping during Nutritional Stress
  - Increase landscape carrying capacity for deer
  - Aesthetics

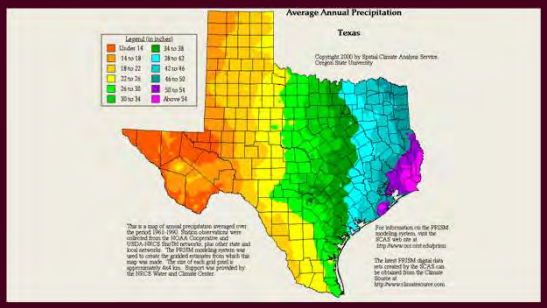
5

Reasons Not to Feed

- Health Risks
  - Infectious Disease
  - Parasites
  - Dietary Death
- Non-Target Feeding
  - Expansion of Feral Hogs
- Habitat Degradation
- Can we mitigate the risks?

6

Supplemental Forages

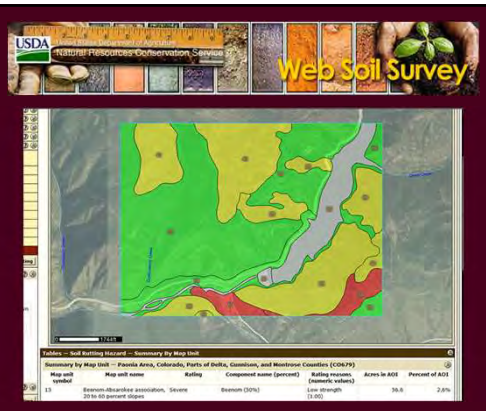


7

Food Plotting The West

- Where did food plots come from?
- What challenges do we have in the western US?
- Is a food plot a good idea?
- Solutions
  - Proper Planning
  - Perennial Forages

8

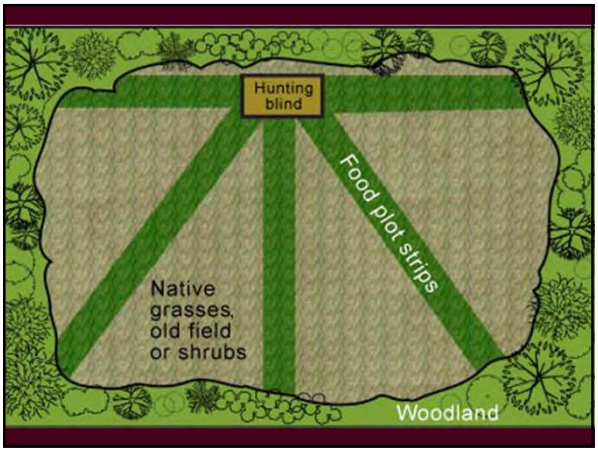


9

Placing a Food Plot

- Size and shape
  - Narrow strips
- How much area?
  - Usually no more than 2%
- Think about deer behavior!
  - Where would YOU be most likely to eat, and how far in?
- Multi-species success

10



11

Shallow Disking

12

Monitoring Use

13

Feed Deployment

14

Supplemental Shelter

15

Ah, Shelter!

16

What Counts?

- Easy to Incorporate on any Property!
- Additions:
  - Boxes
  - Brush Piles
  - Artificial Structures
- Intentional Leavings:
  - Brush Mottes
  - Intense Edge
  - Replanted Areas
  - Snags

17

How Much? How Many?

- Depends on goals!
- Too much of a good thing?
- Balancing Human Needs and Safety with Wildlife
- How long does it count?

18

Common Solutions

- Brush Piles for Rabbits
- Same for Quail
- Artificial Roosts
- Bird Boxes
- Bat Boxes
- Rock Piles
- Brush Mottes
- Replantings and

No-Mow for Prairie Species

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Thank you! Questions?

20

WILDLIFE SURVEYS AND PREDATOR CONTROL

Billy C. Lambert, Jr.

TEXAS PARKS & WILDLIFE

Texas Parks and Wildlife Department

1

WHAT ARE SURVEYS

Wildlife surveys are used to quantitatively monitor changes in population characteristics for a given species

Census

- A total count of the population
- Usually impractical for wildlife

Survey

- Made from a subset of the population
- Commonly used for wildlife

2

2 TYPES OF SURVEYS

Direct

- Counting individuals in a population
- Examples include spotlight surveys, camera surveys, helicopter surveys

3

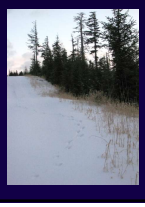
2 TYPES OF SURVEYS

Indirect

Quantifying wildlife sign

Examples include track counts, scat surveys, call counts, browse surveys





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NO SURVEY TECNIQUE IS FOOLPROOF

In order to provide meaningful information, surveys must be conducted in such a manner as to reflect actual changes in numbers or composition, as opposed to changes in methodology or timing.

Be as consistent as possible

Surveys before deer season 1 year and then after deer season the next

Bird surveys in May 1 year versus summer or winter counts the next

Quail roadside survey in one year versus aerial survey the next

Try to avoid bias

Differences in observers
Time of year
Time of day
Feeders and/or house deer

While you can't always avoid bias, you can recognize it is a source of variation in the data

5

☐ *Spotlight counts* Targeted species: _____

Length of route: _____ Visibility of route: _____

Dates (3 required) A. _____ B. _____ C. _____

Additional Information: _____

Probably the most common deer survey statewide
(not necessarily for small landowners)

Can be used for predators, furbearers, deer, feral hogs, alligators, etc.
(if their eyes shine, you can count 'em)

Most assume that you are trying to count all of the animals when you do a spotlight survey. But, you are really only trying to count a percentage of the animals, which is based on visibility. The visibility, or visible acreage, is as important, if not more important, than the actual counts.

Need to be as consistent as possible (route, dates, timing, weather, etc.) between years

Need a truck, at least 3 people, and 2 spotlights (not rechargeable)

Record numbers, sex, and age (antler quality if desired)

6

☐ *Standardized incidental observations* Targeted species: _____

Observations from: ☐ Feeders ☐ Food plots ☐ Blinds ☐ Vehicle ☐ Other _____

Dates: _____

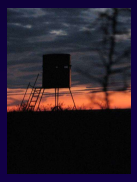
Additional Information: _____

Most properties will not do this one

Simply record individuals of a species of interest (can be any wildlife species)

'Standardized' refers to repeatability and consistency over time

Can be performed for a variety of species



7

☐ *Stand counts of deer* (5 one hour counts per stand required). Number of stands: _____

Dates: _____

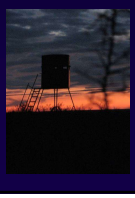
Additional Information: _____

Was commonly used for small acreage properties until infrared-triggered cameras

Used for deer only; record numbers, sex, and age (antler quality if desired)

Dates need to be consistent between years

Usually recommend a minimum of 1 stand per 50 acres

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☐ *Aerial Counts* Species counted: _____

Type of survey: ☐ Helicopter ☐ Fixed-wing

Percent of area surveyed: ☐ Total ☐ 50% ☐ Other: _____

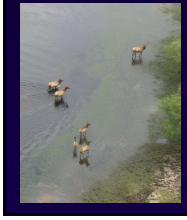
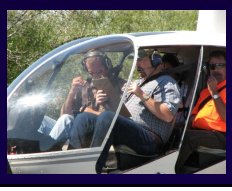
Additional Information: _____

Not commonly used in the Post Oak Savannah, although it can be

Cost-prohibitive, need experienced pilots

Can be used for predators, deer, feral hogs, quail, etc.

Most assume a census


9

☐ *Track counts:* ☐ Predators ☐ Furbearers ☐ Deer ☐ Other: _____

Additional Information: _____

Most properties will not do this one

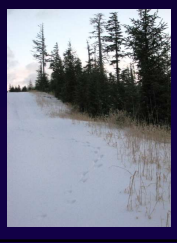
Rarely used, especially given infrared-triggered cameras

Can be used for animals rarely seen, especially for presence-absence

Mainly used for furbearers and predators

Drag or sand an area, quantify and identify tracks

Need consistent methodology for meaningful data



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☐ *Daylight deer herd/wildlife composition counts*

Species: ☐ Deer ☐ Turkey ☐ Dove ☐ Quail ☐ Other _____

Additional Information: _____

One of the most common deer surveys

Most useful when used in combination with spotlight and camera surveys to 'beef up' herd composition estimates (sex ratio, fawn crop)

Observations are recorded whenever at the property for a given time period

Record numbers, sex, and age (antler quality if desired)

11

☐ *Harvest data collection/record keeping:* ☐ Deer ☐ Game birds

☐ Age ☐ Weight ☐ Sex ☐ Antler data ☐ Harvest date

Additional Information: _____

Another common technique used across the state

Most are collecting this data anyway

12

☐ *Browse utilization surveys* (thirty 12-foot circular plots required)

Additional Information: _____

Most properties will not do this one

As deer densities increase, you will see a greater amount of use on browse species

1st, 2nd, and 3rd choice browse plants

Timing and consistency is important (spring versus summer surveys)

Requires a knowledge of browse species

Results complicated by browsing pressure from other species

13

☐ *Census of endangered, threatened, or protected wildlife.* Species: _____

Method and dates: _____

Additional Information: _____

Most properties will not do this one

Mainly used for chupacabras, bigfoots, mapinguaries, dragons, and unicorns

14

☐ *Census and monitoring of nongame wildlife species.* Species: _____

Method and dates: _____

Additional Information: _____

Should be covered by one of the other techniques

Baseline Inventory

'Life Lists'

15

☐ Miscellaneous Counts: Species being counted: _____
☐ Remote detection (i.e., cameras) ☐ Hahn (walking) line ☐ Roost counts
☐ Booming ground counts ☐ Time/area counts ☐ Songbird transects and counts
☐ Quail call and covey counts ☐ Point counts ☐ Small mammal traps
☐ Drift fences and pitfall traps ☐ Bat departures ☐ Dove call counts
☐ Chachalaca counts ☐ Turkey hen/poultry counts ☐ Waterfowl/water bird counts
☐ Alligator nest/census counts ☐ Other: _____
Additional information: _____

Remote detection with infrared-triggered cameras

Relatively inexpensive, fun, useful for a variety of species

Probably the best technique to survey deer populations on small acreage in the Post Oak Savannah (in association with incidental observations)

For deer, use 1 camera location per 167 acres

Cameras should be placed over bait, but not at a feeder (feeders should be turned off for the survey period)

Cameras should be active for 14 consecutive days

Set the camera to take 1 photo per 5-minute interval

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CAMERA SURVEY

Total number of identified deer =	677
Total bucks photographed =	98
Total does photographed =	536
Total fawns photographed =	43
Number of individual bucks photographed =	5
Correction factor – 5 / 98 =	0.0510

Corrected Herd Composition

Bucks =	5
Does (536 x 0.0510) =	27
Fawns (43 x 0.0510) =	2
Total Deer =	34
Density – 750 acres / 34 deer =	22.1 acres per deer
Sex Ratio – 536 / 98 =	5.5 does per buck
Fawn Crop - 43 / 536 =	0.08 fawns per doe

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OTHER CAMERA USES

18

OTHER CAMERA USES

19

OTHER CAMERA USES

20

OTHER CAMERA USES

21

OTHER CAMERA USES

22

PREDATOR CONTROL

3. PREDATOR CONTROL

- ☐ Imported red fire ants (verify prior to application that product is labeled for pasture use)
- ☐ Control of cowbirds ☐ Grackle/starling/house sparrow control
  - Method of control: ☐ Trapping ☐ Shooting ☐ Baiting ☐ Scare tactics _____
- ☐ Coyotes ☐ Feral hogs ☐ Raccoon ☐ Skunk ☐ Bobcat ☐ Mountain lion
- ☐ Rat snakes ☐ Feral cats/dogs
  - Method of control: ☐ Trapping ☐ Shooting ☐ M-44 (licensed applicators)
  - ☐ Poison collars (1080 certified, licensed, applicator) ☐ Other _____
- *Additional Information:* _____

Normally not needed and not effective

Exotic (non-native species) are the exception

Native predator control should only occur after a 'need' has been identified

23

GOOD LUCK!
HAVE FUN WITH IT!

24

NOTE PAGES

NOTE PAGES

NOTE PAGES

NOTE PAGES

NOTE PAGES

NOTE PAGES

Glenn Hegar
Texas Comptroller of Public Accounts

Guidelines for Qualification of Agricultural Land in Wildlife Management Use

Last Adopted October 2007

Table of Contents

Introduction

These *Guidelines for Qualification of Agricultural Land in Wildlife Management Use* will discuss the requirements that land must meet to qualify for wildlife management use, how to value this land, and each of the seven wildlife management activities mandated by state law.

In 1995, Texas voters approved Proposition 11, which amended Article VIII, Section 1-d-1 of the Texas Constitution to permit agricultural appraisal for land used to manage wildlife. H.B. 1358 implemented the constitutional amendment by making wildlife management an agricultural use that qualifies the land for agricultural appraisal.

In 2001, the Legislature passed H.B. 3123, requiring the Texas Parks and Wildlife Department (TPWD) to develop and the Comptroller to adopt rules for the qualification of agricultural land in wildlife management use. These guidelines and Chapter 9, Subchapter F of the Texas Administrative Code constitute the rules, as required by Section 23.52(g), Tax Code. The Texas Administrative Code language specifically addresses qualification of land partitioned from a previously qualified larger tract of real property qualified for 1-d-1 appraisal as wildlife management land.

Tax Code Chapter 23, Subchapter D addresses the requirements for landowners to qualify their land for agricultural appraisal and also instructs county appraisal districts in how to appraise qualified agricultural land. Land used for wildlife management must meet all the legal requirements of land qualified for agricultural appraisal. Those requirements, however, are outside the scope of these guidelines. The Comptroller publishes a Manual for the Appraisal of Agricultural Land that discusses in detail the qualification of land for agricultural appraisal, the rollback tax penalty for change of use and appraisal of agricultural land.[1]

Land on which the owner engages in wildlife management and that meets other requirements for agricultural appraisal is qualified for agricultural appraisal and is technically in agricultural use. To simplify terms, however, this booklet refers to agricultural land used for wildlife management as land in wildlife management use.

Tax Code Section 23.51(1) defines qualified agricultural land as:

> Land that is currently and principally devoted to agricultural use to the degree of intensity typical for the area and has been used for agriculture or timber for at least five of the preceding seven years.[2]

Section 23.51(2) Tax Code includes wildlife management in the definition of agricultural uses of land. Section 23.51(7) Tax Code defines wildlife management as:

> Actively using land that at the time the wildlife management began was appraised as qualified open-space land under this subchapter in at least three of the following ways to propagate a sustaining breeding, migrating, or wintering population of indigenous wild animals for human use, including food, medicine, or recreation:
>
> A. habitat control;
> B. erosion control;
> C. predator control;
> D. providing supplemental supplies of water;
> E. providing supplemental supplies of food;
> F. providing shelters; and
> G. making census counts to determine population.

Part One discusses the qualification of agricultural land used for wildlife management. Part Two discusses in detail the seven wildlife management activities listed in Section 23.51(7).

[1] To obtain a copy of *Manual for the Appraisal of Agricultural Land*, please write the Comptroller, Property Tax Division, P. O. Box 13528, Austin, Texas 78711-3528.

[2] Land qualified for timber appraisal is not eligible for wildlife management use. See discussion on page 3.

Part I: Qualifying Land for Wildlife Management Use

Wildlife Management Use Requirements

Land must be qualified for Chapter 23, Subchapter D (1-d-1) Agricultural Appraisal

The first requirement for wildlife management use qualification is purely technical and is not related to the land's actual use to manage wildlife. The law restricts the land that may qualify for wildlife management use. To qualify for agricultural appraisal under the wildlife management use, land must be qualified for agricultural appraisal under Tax Code Chapter 23, Subchapter D, (also called 1-d-1 or open space agricultural appraisal), at the time the owner changes use to wildlife management use.

In other words, the land must have been qualified and appraised as agricultural land during the year before the year the owner changes to the wildlife management use. For example, an owner who wishes to qualify for wildlife management use in 2002 must be able to show the land was qualified for and appraised as agricultural land in 2001.

Land qualified for timber appraisal is not eligible to qualify for wildlife management use. Timber land is qualified under Tax Code Chapter 23, Subchapter E. The law limits wildlife management use to land qualified under Subchapter D of Chapter 23. Similarly, land qualified for agricultural appraisal under Article VIII, Section 1-d of the Texas Constitution and Chapter 23, Subchapter C Tax Code (also called 1-d agricultural appraisal) is not ineligible for wildlife management use.

Land must be used to generate a sustaining breeding, migrating or wintering population of indigenous wild animals.

The second requirement for qualified wildlife management use is that the land must be used to propagate a sustaining breeding, migrating or wintering population of indigenous wild animals.

An indigenous animal is a native animal that originated in or naturally migrates through an area and that is living naturally in that area, as opposed to an exotic animal or one that has been introduced to the area. In this context, an indigenous animal is one that is native to Texas. (Contact TPWD to determine if an animal species is considered indigenous.)

Land may qualify for wildlife management use if it is instrumental in supporting a sustaining breeding, migrating or wintering population. A group of animals need not permanently live on the land, provided they regularly migrate across it or seasonally live there.

A sustaining breeding population is a group of indigenous wild animals that is large enough to live independently over several generations. This definition implies that the population will not die out because it produces enough animals to continue as a viable group. TPWD may be able to provide information to help determine the number of animals of a particular species that must group together to sustain the population.

A migrating population of indigenous wild animals is a group of animals moving between seasonal ranges. A wintering population of indigenous wild animals is a group of animals living on its winter range.

The indigenous wildlife population must be produced for human use.

The law requires an owner to propagate the wildlife population for human use. Human use may include food, medicine or recreation. Land will not qualify unless the owner propagates the population of wild animals for a human purpose.

The use of animals for food and medicine is self-explanatory. These uses result in a product and require active participation. A recreational use may be either active or passive and may include any type of use for pleasure or sport. Bird watching, hiking, hunting, photography and other non-passive recreational or hobby-type activities are qualifying recreational uses. The owner's passive enjoyment in owning the land and managing it for wildlife also is a qualifying recreational use.

Is the land used for three or more of the following activities?

Under the law, an owner must perform at least three of seven listed wildlife management activities on the land. An owner may qualify by doing more than three, but may not engage in fewer than three of the activities. These activities are explained in detail in Part Two of this booklet, but a short summary of each management activity listed in the law appears below.

- **Habitat Control (Habitat Management).** A wild animal's habitat is its surroundings as a whole, including plants, ground cover, shelter and other animals on the land. Habitat control—or habitat management—means actively using the land to create or promote an environment that is beneficial to wildlife.
- **Erosion Control.** Any active practice that attempts to reduce or keep soil erosion to a minimum for the benefit of wildlife is erosion control.
- **Predator Control (Predator Management).** This term means practices intended to manage the population of predators to benefit the owner's target wildlife population. Predator control is usually not necessary unless the number of predators is harmful to the desired wildlife population.
- **Providing Supplemental Supplies of Water.** Natural water exists in all wildlife environments. Supplemental water is provided when the owner actively provides water in addition to the natural sources.
- **Providing Supplemental Supplies of Food.** Most wildlife environments have some natural food. An owner supplies supplemental food by providing food or nutrition in addition to the level naturally produced on the land.
- **Providing Shelter.** This term means actively creating or maintaining vegetation or artificial structures that provide shelter from the weather, nesting and breeding sites or escape cover from enemies.
- **Making Census Counts to Determine Population.** Census counts are periodic surveys and inventories to determine the number, composition or other relevant information about a wildlife population to measure if the current wildlife management practices are serving the targeted species.

Agricultural Use Requirements

Chief appraisers should remember that an owner's wildlife management use must meet all the requirements to qualify for agricultural use, defined in Tax Code Section 23.51(1). Below is a brief discussion of the principal issues involved in agricultural use of land used for wildlife management. For a thorough discussion of these components, please refer to the *Manual for the Appraisal of Agricultural Land.*

Primary Use

The law requires agriculture to be the primary use of the land. Wildlife management is an agricultural use under the law. The primary use requirement is particularly important for land used to manage wildlife. For example, land devoted to wildlife management can be used as a residence for the owner, but the land will not qualify if residential use—and not wildlife management—is the land's primary use.

A chief appraiser must gather and consider all the relevant facts to determine if the land is primarily used to manage wildlife. Some important questions are listed below.

- Is the owner implementing an active, written, wildlife management plan that shows he or she is engaging in activities necessary to preserve a sustaining breeding population on the land? An owner's management plan is required and must be completed on a form supplied by TPWD for each tract of land for which qualification is sought. A plan is clear evidence of the owner's use of the land primarily for wildlife management. A good plan will usually list wildlife management activities with the appropriate seasons and/or sequence of events.

- Do the owner's management practices emphasize managing the population to ensure its continued existence over another use of the land? For example, does the owner refrain from allowing visitors on the land in years when the habitat is sensitive?
- Has the owner engaged in the wildlife management practices necessary to sustain and encourage the population? In some cases, an owner must control predators and supply water when water is not adequate, supply shelter and food when natural food production is not adequate and establish vegetation to control erosion. In other cases, less active management may maintain and encourage the growth of wildlife.
- Are there improvements—appropriate fencing, for example—necessary to control or sustain the wildlife population?

An owner may use land for purposes that are secondary to the primary use—wildlife management—if the secondary use is compatible with the primary use. For example, an owner may engage in wildlife management and also operate a business in which bird watchers stay on the land overnight and watch for birds during the day (known as a bird and breakfast operation). This activity is secondary to the primary activity of managing the wildlife, but it is not incompatible with the wildlife management use. General principles of primary and secondary use are discussed in the *Manual for the Appraisal of Agricultural Land.*

Degree of Intensity for Wildlife Management Use

The degree-of-intensity standard for wildlife management land is determined in the same way as other agricultural uses. Wildlife management land usually requires management practices that encourage long-term maintenance of the population.

A chief appraiser may ask questions such as whether fencing is typical in the area for managing the target wildlife population, and what is the typical population size? In addition, the chief appraiser should ask how many of the following activities are typical in the area (or typical for the area during some parts of the year): habitat management; predator management; erosion control; providing supplemental supplies of food or water; providing shelter; and engaging in census counts.

Because wildlife management activities are elements of the degree of intensity determination, an owner must be engaging in three of seven activities to the degree of intensity typical for the area. General principles of the degree of intensity test are discussed in the *Manual for the Appraisal of Agricultural Land.* TPWD has developed regional wildlife management plans detailing specific management activities appropriate for each ecological area. (See page 8.)

Historical Use Requirement

Land must have qualified for 1-d-1 agricultural use and been appraised as 1-d-1 agricultural use in the year before the owner changes its use to wildlife management. Consequently, the time-period test to determine if the land has been used for agriculture for five of the preceding seven years usually is not necessary.

Determining Appraised Values

The wildlife management use is a revenue-neutral use of land. The owner who switches from another agricultural use to wildlife management use must pay the same amount of property taxes that would have been paid if the land had remained in its former agricultural use.

Land qualified for wildlife management should be placed in a wildlife management category, but should have the same appraised value as before its conversion to wildlife management use. For example, if the land was in Irrigated Cropland I before the owner switched its use to wildlife management, the land should be placed in the wildlife management category, but will be appraised at the Irrigated Cropland I value.

If that land use category's value subsequently changes in the county, the new category values would apply to those tracts under wildlife management use in that category.

Notifying the Chief Appraiser of Change to Wildlife Management Use

The law does not require an annual application for agricultural use once the land has qualified. Because only 1-d-1 qualified land may qualify for wildlife management use, an owner who changes to this use need not reapply for agricultural appraisal. The law, however, does require an owner who changes the category of agricultural use to notify the chief appraiser of the change.

When an owner changes agricultural uses to wildlife management, the owner must notify the chief appraiser in writing before May 1 of the year in which the owner wants to qualify under wildlife management use. The chief appraiser then will determine if the land qualifies for wildlife management use. Likewise, an owner must notify the chief appraiser if land is switched from wildlife management use to another qualifying agricultural use.

Owners should contact their county appraisal districts about notification requirements before changing small portions of their land from one qualified agricultural use to another. For example, if an owner converts a part of a 1,000-acre farm to wildlife management use by creating a pond for wildlife, the owner should ask about the appraisal district's need for notification and documentation requirements.

Part II: Wildlife Management Activities, Practices and Definitions

Among the statutory requirements for property owners to qualify their agricultural land for wildlife management use is a mandate that owners perform at least three of seven wildlife management activities, which were briefly summarized in Part I:

1. habitat control (habitat management);
2. erosion control;
3. predator control (predator management);
4. providing supplemental supplies of water;
5. providing supplemental supplies of food;
6. providing shelters; and
7. making census counts to determine population.

Below is a detailed explanation of the kinds of practices that chief appraisers should examine to determine if property owners are satisfying the law's requirements. Some of the practices listed may require permits from federal, state or local governments. For example, before improving a wetland or controlling grackles or cowbirds, an owner may need a permit. Or before a planned burning, an owner may be required to provide a map of the acreage. Property owners should contact the appropriate legal authorities for permit information if they have any questions or concerns about engaging in any of the practices listed above.

Wildlife Management Plan

A Wildlife Management Plan gives information on the property's history and current use, establishes landowner goals for the property and provides a set of activities designed to integrate wildlife and habitat improvement. Such a plan is clear evidence that the owner's use of the land is primarily for wildlife management.

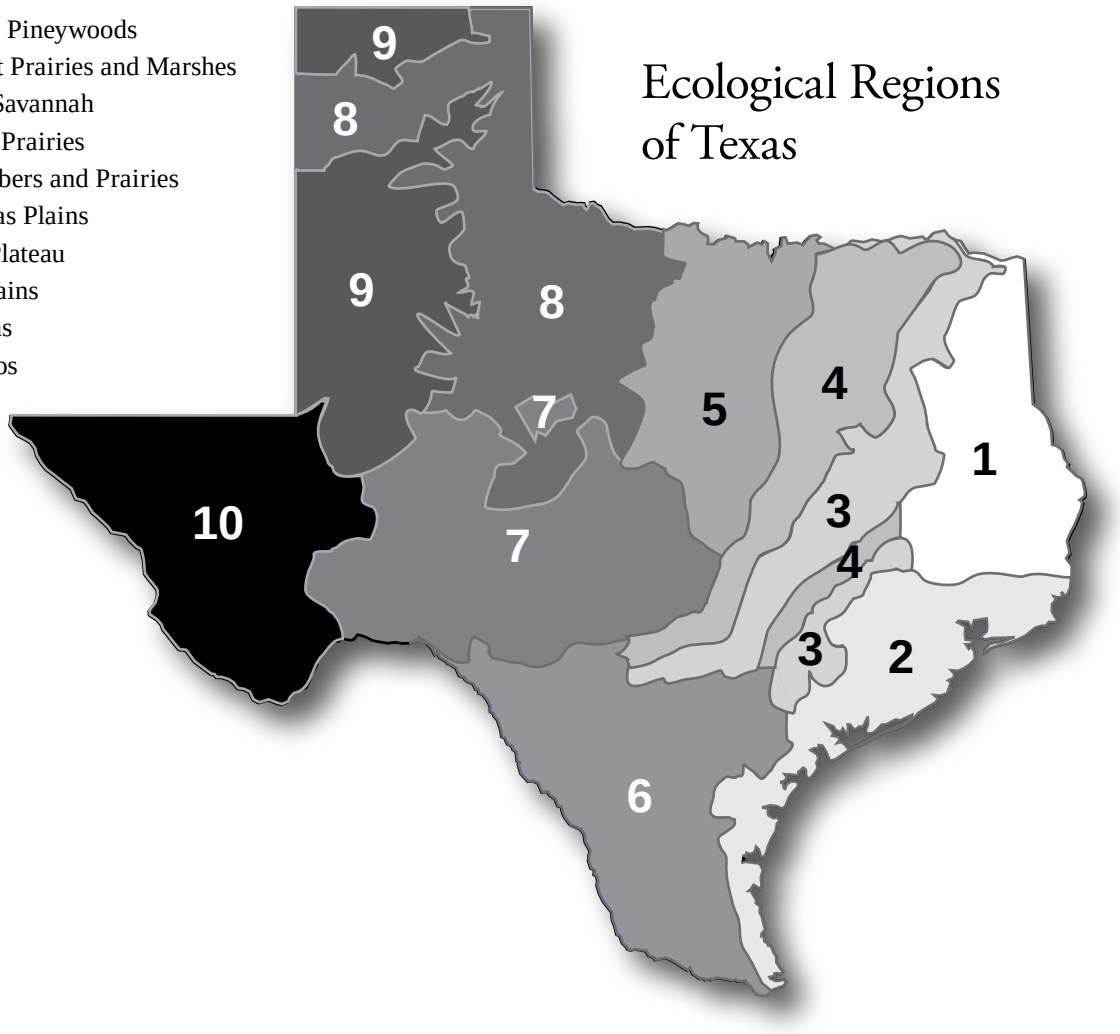
As stated in Part 1, an owner must provide a wildlife management plan to the appraisal district. The plan must be completed on a TPWD form for each tract for which wildlife management use qualification is sought. The activities and practices contained in the plan must be consistent with the activities and practices recommended in the model TPWD regional management plan for the region in which the property is located.

Landowners may formulate their own plans. Assistance or review, however, is available from the TPWD, the Texas Agricultural Extension Service, the U.S. Department of Agriculture's Natural Resource Conservation Service (NRCS), the Texas Forest Service or other qualified wildlife biologists.

A complete plan is likely to include elements of all seven listed wildlife management activities. All activities and practices should be designed to overcome deficiencies that limit wildlife or harm their habitats. Each one of the activities listed in Part Two should be practiced routinely or consistently as part of an overall habitat management plan. For example, scattering seed corn sporadically would not qualify as providing supplemental supplies of food under these guidelines, and occasionally placing barrels of water in a pasture would not meet the requirements for providing supplemental supplies of water.

In addition, some activities that are appropriate for certain regions of Texas would be inappropriate in others. For example, some areas of East Texas may not require providing supplemental pond water for wildlife. And there may be no need for supplemental cover in South Texas brush. TPWD has developed regional wildlife management plans, listing the activities appropriate to Texas' 10 ecological regions. The regions are:

1. East Texas Pineywoods
2. Gulf Coast Prairies and Marshes
3. Post Oak Savannah
4. Blackland Prairies
5. Cross Timbers and Prairies
6. South Texas Plains
7. Edwards Plateau
8. Rolling Plains
9. High Plains
10. Trans-Pecos



Habitat Control (Habitat Management)

A wild animal's habitat is its surroundings as a whole, including plants, ground cover, shelter and other animals on the land. Habitat control—or habitat management—means actively using the land to create or promote an environment that benefits wildlife on the land.

Activities that contribute to habitat control or management include:

- grazing management;
- prescribed burning;
- range enhancement;
- brush management;
- forest management;
- riparian management and improvement;
- wetland improvements;
- habitat protection for species of concern;
- managing native, exotic and feral species; and
- wildlife restoration.

Grazing management means shifting livestock and grazing intensity to increase food and animal cover or to improve specific animals' habitat. Grazing management focuses on:

- the kind and class of livestock grazed;
- stocking rates;
- periodic rest for pastures by controlling grazing intensity; and/or
- the sign of excluding livestock from sensitive areas to promote vegetation protection and recovery or to eliminate competition for food and cover.

Deferred grazing can last up to two years. Seasonal stocker operations also may be appropriate. Supplemental livestock water—provided by earthen tanks or wells—may be useful when implementing grazing rotation.

Appropriately designed fencing can play an important role in grazing rotation plans. Fencing also can be used to improve or protect sensitive areas, woodlands, wetlands, riparian areas and spring sites. Property owners should review their fencing practices and grazing plans annually to ensure they meet the overall wildlife management goals.

Prescribed burning is defined as the planned application of fire to improve habitat and plant diversity, to increase food and cover or to improve particular species' habitats. If the owner has a wildlife management plan, that plan should indicate the frequency of planned burnings and the minimum percentage of acreage to be burned. A plan may designate the areas to be protected or excluded from burning, but should remain flexible during periods when conditions are not favorable for burning, such as during periods of drought.

Range enhancement means to establish native plants—such as grasses and forbs (weeds and wildflowers)—that provide food and cover for wildlife or help control erosion. Protecting, restoring and managing native prairies also is considered range enhancement.

The plants chosen and the methods for establishing the plants should be appropriate to the county. Non-native species generally are not recommended, but if required for a specific purpose, non-native species should not exceed 25 percent of the seeding mix.

The seeding mixtures should provide for maximum native plant diversity. Many broadleaf plants, such as weeds and wildflowers, provide forage for wildlife and/or seed production. Owners should encourage weed and wildflower species by using the methods appropriate to native rangelands, land devoted to the federal Conservation Reserve Program (CRP) and improved grass pastures (for example, Coastal Bermuda). Some periodic noxious weed control may be necessary in fields converted to native rangeland to help establish desirable vegetation.

Brush management may involve maintaining, establishing or selectively removing or suppressing targeted woody plants species (including exotics) to encourage the growth of desirable trees, shrubs, grasses and forbs for forage and nesting or protective cover for selected wildlife species. Brush management also includes keeping the proper kind, amount and distribution of woody cover for particular species.

A useful brush management plan should examine wildlife cover requirements, soil types, slope angle and direction, soil loss and erosion factors and plans to control reinvasion as part of an overall wildlife management plan. This practice also should focus on retaining snags to provide cover and nesting sites for cavity-nesting animals. In addition, herbicides, if used, should be used in strict accordance with label directions.

In areas where brushy cover is limited, property owners may establish native tree and shrub species to provide food, corridors and/or shelter using appropriate plant species and methods.

Forest management involves establishing, maintaining, harvesting, selectively removing or suppressing trees or woody species (including exotics) to allow for the growth of desirable trees, shrubs, grasses and forbs for forage and nesting or protective cover for selected species. Forest management activities also include keeping the proper kind, amount and distribution of woody cover for selected animal species.

As with brush management, this practice also includes retaining snags to provide cover and nesting sites for cavity-nesting animals. Forest management activities include pre-commercial thinning or non-commercial thinning, which involves reducing the stocking levels in a stand to increase the sunlight that reaches the ground to increase vegetation or plants in the understory.

Property owners should establish native tree and shrub species to provide food, corridors and/or shelter using species and methods appropriate to the county. Owners should attempt to restore important forested habitats including bottomland hardwoods, longleaf pine, bogs, mixed pine/hardwood areas and upland hardwoods. Owners also should avoid breaking up large forested habitats for some wildlife species.

Riparian management and improvement focuses on annually and/or seasonally protecting the vegetation and soils in riparian areas (low areas on either side of stream courses).

Riparian management and improvements can include providing livestock alternate watering sites; deferring livestock grazing in pastures with riparian areas during critical periods; excluding livestock from pastures with riparian areas; and fencing to exclude or provide short-duration livestock grazing.

Property owners should attempt to restore important forested habitats including bottomland hardwoods, bogs, mixed pine/hardwood areas and turkey roost sites and avoid breaking up large forested habitats in riparian areas.

Wetland improvements provide seasonal or permanent water for roosting, feeding or nesting for wetland wildlife. This practice involves creating, restoring or managing shallow wetlands, greentree reservoirs, playa lakes and other moist soil sites.

Habitat protection for species of concern refers to managing land to provide habitat for an endangered, threatened or rare species. Habitat protection includes managing or developing additional areas for protecting nesting sites, feeding areas and other critical habitat limiting factors. This protection can be provided by fencing off critical areas; managing vegetation for a particular species; maintaining firebreaks to ensure critical overstory vegetation; and annually monitoring the species of concern. Any broad-scale habitat management for migrating, wintering, breeding neotropical birds (primarily songbirds) should follow the specific guidelines provided in TPWD's management plans for each ecological region. Contact TPWD or follow specifically approved management guidelines before practicing activities designed to protect endangered species.

Managing native, exotic and feral species involves controlling the grazing and the browsing pressure from native and non-native wildlife, particularly white-tailed deer and exotic ungulates, such as axis deer. This practice is designed to prevent overuse of desirable plant species and improve the habitat and plant diversity for native animals.

To ensure that an owner's objectives are met and that the animals are not exceeding the habitat's carrying capacity, owners should monitor the harvesting of animals and vegetation use over time. Owners also may control other exotic and feral animals to improve the habitat and reduce the negative effect on native wildlife. (Feral animals are previously domesticated animals that have become wild.)

In addition, owners should selectively remove or control exotic vegetation affecting native habitats and wildlife over a period of time (for example, large stands of naturalized salt cedar, Chinese tallow, weeping lovegrass, etc.). Owners also should convert tame pasture grasses (such as large areas of coastal bermuda) to native vegetation.

Wildlife restoration simply means 1) restoring and improving a habitat to good condition for targeted species and 2) reintroducing and managing a TPWD-approved native species within a habitat's carrying capacity as part of a TPWD-approved restoration area.

Erosion Control

Any active practice that attempts to reduce or keep soil erosion to a minimum for wild animals' benefit is erosion control. Some erosion control practices include:

- pond construction;
- gully shaping;
- streamside, pond and wetland revegetation;
- establishing native plants;
- dike, levee construction or management; and
- water diversion.

Pond construction is defined as building a permanent water pond to prevent, stop or control erosion as an approved NRCS watershed project while providing habitat diversity and benefiting wildlife. Whenever possible, owners should use ponds to help create or restore shallow water areas as wetlands and for water management.

Gully shaping involves reducing erosion rates on severely eroded areas by smoothing to acceptable grades and re-establishing vegetation. An area should be seeded with plant species that provide food and/or cover for wildlife.

Streamside, pond and wetland revegetation means revegetating areas along creeks, streams, ponds and wetlands to reduce erosion and sedimentation, stabilize streambanks, improve plant diversity and improve the wildlife value of sensitive areas. Some revegetation practices include:

- building permanent or temporary fences to exclude, limit or seasonally graze livestock to prevent erosion;

- using hay (native, when possible) to slow and spread water runoff in areas where vegetation has been recently re-established;
- establishing plant buffer areas or vegetative filter strips along water courses or other runoff areas;
- installing rip-rap, dredge spoil or other barrier material along embankments to prevent erosion and protect wildlife habitat; and
- establishing stream crossings to provide permanent low-water crossings to reduce or prevent erosion.

Establishing native plants on critical areas is one method of controlling erosion. These plants also can provide food and/or cover for wildlife and restore native habitat. Some of the ways to establish these plants include.

- establishing and managing wind breaks/shelterbelts by planting multi-row shelterbelts (at least four rows that are 120 feet wide by 1/4 mile), renovating old shelterbelts (re-fence, root-prune and replace dead trees) and establishing shrub mottes.
- establishing perennial vegetation on circle irrigation corners by revegetating at least every other corner to reduce erosion and sedimentation, improve plant diversity and improve wildlife habitat.
- planting permanent vegetation on terraces and field borders to reduce erosion, improve plant diversity and improve wildlife habitat.
- conserving tillage/no-till farming practices by leaving waste grain and stubble on the soil surface until the next planting season to provide supplemental food or cover for wildlife, control erosion and improve the soil tilth.
- managing CRP cover by maintaining perennial cover established under the CRP on erodible sites using proper management techniques such as haying, prescribed grazing or burning.

Dike, levee construction or management is a way to establish and maintain wetlands or slow runoff to control or prevent erosion and to provide habitat for wetland-dependent wildlife. Levee management may include reshaping or repairing damage caused by erosion and revegetating levee areas to reduce erosion and sedimentation and stabilize levees. This practice may include fencing to control and manage grazing use.

Water diversion systems also can be installed to protect erodible soils and divert water into wetlands to provide habitat for resident and migratory water birds and wetland-dependent species.

Predator Management

This term refers to practices intended to manage the population of predators to benefit the owner's target wildlife population. Predator control usually is not necessary unless the number of predators is harmful to the desired wildlife population. Predator control and management should not be counted as one of the seven wildlife management activities necessary to qualify for agricultural use appraisal unless it is part of a comprehensive wildlife management scheme or plan. Some types of predator management and/or control are:

- mammal predator control;
- fire ant control;
- brown-headed cowbird control; and
- grackle or starling control.

Mammal predator control may be necessary to increase the survival of the targeted species. Key native predator species may include coyotes, raccoons, bobcats and mountain lions, while exotic predators may include wild house cats, wild dogs and wild hogs.

Fire ant control (imported red fire ants) can be used to protect native wildlife species or their food base. Treatments should comply with the label instructions and should cover at least 10 acres or one tenth of an infested area each year, whichever is more.

Controlling brown-headed cowbirds to decrease nest parasitism of targeted neotropical bird species (for example, endangered songbirds) also may be part of an overall planned program.

Grackle/starling control can be undertaken as part of a planned program to reduce bird diseases and overcrowding, which can harm the population of white-winged dove and/or other neotropical birds.

Providing Supplemental Water

Natural water exists in all wildlife environments. Supplemental water is provided when the owner actively provides water in addition to the natural sources. This category of wildlife management activity includes providing supplemental water

in habitats where water is limited or redesigning water sources to increase the availability to wildlife. Wildlife water developments are in addition to those sources already available to livestock and may require protection from livestock. Some examples of recommended practices include:

- marsh or wetland restoration or development;
- managing well, trough and windmill overflow; and
- spring development and/or improvements.

Marsh or wetland restoration or development can provide supplemental water in the form of shallow wetlands for wetland-dependent wildlife, even in areas where inadequate water does not limit wildlife. Owners may include seasonally available water such as:

- greentree reservoirs;
- specific shallow roost pond development;
- seasonally flooded crops and other areas;
- moist soil management;
- cienega (desert marsh) restoration, development and protection; and
- maintaining water in playa lakes.

Based on the wildlife's needs and the suitability of the property, managing water levels annually is desirable. To be effective, a minimum of at least one marsh/wetland should be restored or developed every five years.

Managing well, trough and windmill overflow can provide supplemental water for wildlife and provide habitat for wetland plants. Owners also may drill wells if necessary and/or build pipelines to distribute water. Building devices known as wildlife water guzzlers to collect rainfall and/or runoff for wildlife in areas where water is limited also helps protect wildlife, but these devices must be a part of an overall habitat management program.

Spring development and/or improvements can be designed to protect the immediate area surrounding a spring. Excluding and/or controlling livestock around springs may help to maintain native plants and animal diversity. Other ways to protect areas include moving water through a pipe to a low trough or a shallow wildlife water overflow, making water available to livestock and wildlife while preventing degradation of the spring area from trampling.

Improvements also could include restoring a degraded spring by selectively removing appropriate brush and revegetating the area with plants and maintaining the restored spring as a source of wildlife water. Maintaining critical habitat, nesting and roosting areas for wildlife and preventing soil erosion must be considered when planning and implementing brush removal. This practice should be introduced gradually and selectively over a period of time.

Providing Supplemental Food

Most wildlife environments have some natural food. An owner supplies supplemental food by providing food or nutrition in addition to the level naturally produced on the land. Grazing management, prescribed burning and range enhancement can be used to provide supplemental food. (For information on these activities, see page 9.) Other ways to provide supplemental food include:

- food plots;
- feeder and mineral supplements; and
- managing tame pasture, old fields and croplands.

Food plots are one way to establish locally adapted forage to provide supplemental foods and cover during critical periods of the year. Livestock should be generally excluded from small food plots. The shape, size, location and percentage of total land area devoted to food plots should be based on the requirements of the targeted species.

Feeders and mineral supplements also can help dispense additional food to selected wildlife species during critical periods. Feeders should not be used except to control excessive numbers of deer and/or exotic ungulates as defined within a comprehensive wildlife management plan with a targeted harvest quota that is regularly measured. Harmful aflatoxin in feed should not exceed 20 parts per billion.

Mineral supplements also may be supplied to wildlife in several ways, however, this practice must be a part of an overall habitat management plan that addresses all animal groups and considers the habitat's carrying capacity.

Managing tame pasture, old fields and croplands can increase plant diversity, provide supplemental food and forage and gradually help convert the land to native vegetation. Recommended practices may include:

- overseeding or planting cool season and/or warm season legumes (for example, clovers, vetches and peas) and/or small grains in pastures or rangeland;
- using plants and planting methods appropriate to the county;
- shallow tillage (discing) that encourages habitat diversity, the production of native grasses and forbs or increases bare ground feeding habitat for selected species; and
- no-till or minimum-till agricultural practices that leave waste grain and stubble on the soil surface until the next planting season—which provide supplemental food or cover, control erosion and improve soil tilth.

Legumes should be planted annually until all pastures are shifted to native vegetation.

Providing Supplemental Shelter

This term means actively creating or maintaining vegetation or artificial structures that provide shelter from the weather, nesting and breeding sites or escape cover from enemies. The best shelter for wildlife can be provided by a well-managed habitat. Some practices listed below provide types of shelter that may be unavailable in the habitat:

- installing nest boxes and bat boxes;
- brush piles and slash retention;
- managing fence lines;
- managing hay meadow, pasture or cropland;
- half-cutting trees and shrubs;
- establishing woody plants and shrubs; and
- developing natural cavities and snags.

Installing nest boxes and bat boxes in the proper numbers and locations to provide nests or dens for selected species when necessary should be consistent with the habitat needs of the target species.

Brush piles and slash retention can provide additional wildlife cover and protection in habitats where inadequate natural cover limits the growth of a selected species. Planned placement of brush piles and slash retention—leaving dead brush on the ground where it was cut or uprooted—also can protect seedlings of desirable plant species. In addition, stacking posts or limbs in tepees can provide cover for small game and other wildlife in open areas.

Fence line management, which maintains or allows trees, shrubs, forbs and grasses to grow around fence lines, can provide both food and cover. This practice should only be used where cover is insufficient in the habitat, i.e. cropland or tame pasture.

Hay meadow, pasture or cropland management can be useful tools in wildlife management. Owners should postpone mowing/swathing hay fields until after the peak of the nesting/young-rearing period of local ground-nesting birds and mammals.

Owners also should mow or shred one-third of open areas per year, preferably in strips or mosaic types of patterns, to create edge and structural diversity. Weeds are an important source of food for many wildlife species, and owners should, therefore, minimize weed control practices.

Owners should use no-till/minimum-till agricultural practices to leave waste grain and stubble on the soil surface until the next planting season to provide supplemental food or cover for wildlife, control erosion and improve soil tilth.

Providing shelter also can include roadside right-of-way management for ground-nesting birds; establishing perennial vegetation on circle irrigation corners, terraces, fencerows and field borders; establishing multi-row shelterbelts or renovating old shelterbelts; and protecting and managing old homesites, farmsteads and CRP cover.

Half-cutting trees and shrubs—partially cutting branches of a live tree or shrub to encourage horizontal cover near the ground—provides supplemental cover in habitats where cover is lacking for a targeted wildlife species (See TPWD *Bulletin 48*).

Woody plant/shrub establishment—planting native seedlings to establish shrub thickets, shelterbelts or wind rows—should be organized by four rows of 120 feet for a 1/4 mile.

Natural cavity/snag development involves retaining and/or creating snags for cavity-dwelling species. Undesirable trees can be girdled or treated with herbicide and left standing. Large living trees should be protected and girdling should be minimal where trees are insufficient.

Census Counts

Census counts are periodic surveys and inventories to determine the number, composition or other relevant information about a wildlife population to measure if the current wildlife management practices are serving the targeted species. Such surveys also help evaluate the management plan's goals and practices. Specifically, this activity estimates species numbers, annual population trends, density or age structure using accepted survey techniques. Annual results should be recorded as evidence of completing this practice. The survey techniques and intensity listed below should be appropriate to the species counted:

- spotlight counting;
- aerial counts;
- daylight wildlife composition counts;
- harvest data collection and record keeping;
- browse utilization surveys;
- census and monitoring endangered, threatened or protected wildlife; and
- census and monitoring of nongame wildlife species.

Spotlight counting animals at night along a predetermined route using a spotlight should follow accepted methodology, with a minimum of three counts conducted annually.

Aerial counts using a fixed-wing aircraft or helicopter to count animals also should follow accepted methodology for the region and be performed by a trained individual.

Daylight wildlife composition counts are driving counts used to census wildlife in daylight hours. Annual population trends on dove, quail, turkey and deer, as well as sex/age structure on deer, should be determined by sightings along a standardized transect of a minimum of five miles at least three times during a season.

Harvest data collection/record-keeping means tracking the annual production of wildlife. Age, weight and antler development from harvested deer, and the age and sex information from game birds and waterfowl should be obtained annually.

Browse utilization surveys annually examine deer browse plant species for evidence of deer use on each major vegetative site on the property. The surveys should be conducted in a way that can be repeated.

Census and monitoring of endangered, threatened or protected wildlife through periodic counts can improve management and increase knowledge of the local, regional or state status of the species.

Census and monitoring of nongame wildlife species also can improve management or increase knowledge of the local, regional or state status of the species. These practices can include developing checklists of wildlife diversity on the property and should be a part of a comprehensive wildlife management plan.

For More Information

The TPWD can provide more information on any of the activities or practices listed above. It also has detailed information on appropriate practices for each ecological region of Texas. Contact your local TPWD office or the state headquarters in Austin at (800) 792-1112 or (512) 389-4800.

For more information, visit our website:
comptroller.texas.gov/taxes/property-tax

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Texas Comptroller of Public Accounts
Publication #96-354
February 2018

TEXAS A&M AGRILIFE EXTENSION

Wildlife Management as Agricultural Use For Property Tax Valuation in Texas

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Texas is known for its natural resources ranging from grasslands in the north, brushlands in the south, piney woods in the east and the Chihuahuan desert in the west. These open space lands provide aesthetic and economic benefits through ecosystem services like recreation, water supply, carbon sequestration, and nutrient cycling. In order to preserve open space lands and their value to all Texans, qualifying properties may be taxed at a lower rate than other properties, provided rural lands qualify for one of two types of special *appraisal* methods.

The first type of appraisal is called "Assessments of Lands Designated for Agricultural Use" authorized by Texas Constitution Article VIII, Section 1-d and described in Sections 23.41 through 23.47 of the Texas Tax Code. This type of appraisal is often referred to as 1-d appraisal. The other type of appraisal is called "Taxation of Certain Open Space Land" (OSL) authorized by Texas Constitution Article VIII, Section 1-d-1 and further described in Sections 23.51 through 23.59 of the code, also known as 1-d-1 appraisal. When most people speak in terms of the agricultural use tax valuation for ranches in Texas, they are generally referring to the OSL appraisal method (1-d-1). The Agricultural Use appraisal method (1-d) is appropriate only for lands devoted to full time agricultural operations wherein the owner's primary occupation and source of income is derived from the agricultural enterprise. The landowner's occupation and income is as important to the qualification as is the land's use. Open-space appraisal (1-d-1) is based solely on the primary use of the land with no consideration for the landowner's income or occupation. Lands approved for wildlife use and/or agricultural use pay the same amount of taxes, which are based on the productive value of the land rather than the land's market value.

Prior to 1995, lands managed solely for wildlife did not qualify for the property tax valuation as did lands designated for agricultural use or open-space use. A bill originating in the Texas House of Representatives, HB 1358, called for an amendment to the Texas constitution that added wildlife management to the list of qualifying agricultural practices. The bill would allow these properties managed for wildlife to also have property taxes based on

land productivity rather than market value. House Joint Resolution 72 put the amendment to the Texas Constitution known as “Proposition 11” on the general election ballot and Texas voters passed it by a margin of nearly 2 to 1. Currently the state of Texas Tax Code contains the following language:

> "Agricultural use" includes but is not limited to the following activities: cultivating the soil, producing crops for human food, animal feed, or planting seed or for the production of fibers; floriculture, viticulture, and horticulture; raising or keeping livestock; raising or keeping bees for pollination or for the production of human food or other commercial products; raising or keeping exotic animals for the production of human food or of fiber, leather, pelts, or other tangible products having a commercial value; planting cover crops or leaving land idle for the purpose of participating in a governmental program, provided the land is not used for residential purposes or a purpose inconsistent with agricultural use; and planting cover crops or leaving land idle in conjunction with normal crop or livestock rotation procedure. The term also includes the use of land to produce or harvest logs and posts for the use in constructing or repairing fences, pens, barns, or other agricultural improvements on adjacent qualified open-space land having the same owner and devoted to a different agricultural use. ***The term also includes the use of land for wildlife management.”*** (Texas Tax Code, Subchapter D, Sec. 23.51 (2).

When a landowner changes from a more traditional agriculture use, such as cattle production, to wildlife management agricultural use, the landowner must make application to the chief appraiser between January 1 and April 30 of the year in which the owner wants to implement the change to wildlife management agricultural use. The chief appraiser will determine if the land qualifies for wildlife management agricultural use. Once a property has been qualified for the OSL special tax appraisal, an owner who changes to the wildlife management agricultural use does not have to re-apply each year for open-space appraisal. The chief appraiser may require an annual report on a form prescribed by the Texas Parks and Wildlife Department (TPWD) describing how the wildlife management plan was implemented during the year. The law, however, does require an owner who changes the category of agricultural use to notify the chief appraiser. Likewise, an owner must notify the chief appraiser if land switched from wildlife management agricultural use back to another qualifying traditional agricultural use.

Many landowners who currently own property in Texas, or are considering the purchase of property in Texas, are not aware that managing for wildlife can qualify lands as OSL. This publication discusses some of the requirements associated with receiving the OSL special tax appraisal for lands managed for wildlife in Texas.

The Requirements

Land Qualification: The first requirement for OSL special tax appraisal based on wildlife management use is that the land must have been qualified and appraised as open-space agricultural land in the year prior to conversion to wildlife management use. In other words, to qualify for open-space appraisal under the wildlife management use, the property must have already been qualified for OSL agricultural appraisal under Chapter 23, Subchapter D, or as timberland under Chapter 23, Subchapter E of the Texas Tax Code. Land that qualifies for the agricultural special appraisal under Section 1-d is not eligible for wildlife management use without first acquiring open-space appraisal based on Section 1-d-1. If the property does not currently qualify for the open-space agricultural appraisal, a five-out-of-seven-years qualification period is required to establish traditional agricultural operations and then submit for agricultural tax valuation before converting to a wildlife management agricultural use.

With passage in 2001 of House Bill 3123, the Legislature directed TPWD to develop standards for the qualification of OSL used for wildlife management and the comptroller to adopt these standards by administrative rule. Under the rule, the state initially was divided into four wildlife use appraisal regions based on ambient moisture available and assigned a range of ratios for required wildlife management use for lands in each specific region. Effective December 11, 2008, revised rules divided the state into 12 new regions (Fig. 1). The new appraisal regions were reorganized to more closely track the defined ecological regions as specified in the TPWD Wildlife Management Guidelines. If a county is in more than one ecological region, the region that comprises the majority of the county is selected. Other changes in the rules state that wildlife use requirements (also known as minimum acreage requirements) now apply both when the property has had a reduction in acreage in the year immediately preceding the application for wildlife management use or has subsequently had a reduction in acreage.

The chief appraiser in each county, with the advice and consent of the Appraisal District Board of Directors, now selects the wildlife use requirement from the allowable range of ratios based on the appropriate appraisal region. Minimum acreage ranges (Figure 1; Table 1), when applicable, are the same as before except for Terrell, Clay, and McCulloch counties which increased and Bee county that decreased. Changes result from the reorganization of appraisal regions. Existing properties in wildlife management were grandfathered and were not affected by these changes.

Wildlife Use Requirement Ranges for Appraisal Districts (when applicable*)				
	Standard Acreage		*WMPA/ES Mgmt.*	
Appraisal Region	Min	Max	Min	Max
Blackland Prairie	12.5	16.7	10	11.1
Cross Timbers and Prairies	14.3	20	11.1	12.5
Edwards Plateau (Eastern)	14.3	20	11.1	12.5
Edwards Plateau (Western)	25	50	16.7	20
Gulf Prairies and Marshes (Lower Coast)	25	50	16.7	20
Gulf Prairies and Marshes (Upper Coast)	12.5	16.7	10	11.1
High Plains	25	50	16.7	25
Pineywoods	12.5	16.7	10	11.1
Post Oak Savannah	12.5	16.7	10	11.1
Rolling Plains	25	50	16.7	20
South Texas Plains	25	50	16.7	20
Trans Pecos	33.3	100	20	25

*If the number of acres in the tract of land is equal to or greater than the number of acres in the tract of land on January 1 of the preceding tax year, the tract of land is not subject to the wildlife use requirement.
34 Tex. Admin. Code §9.2005 (2009)

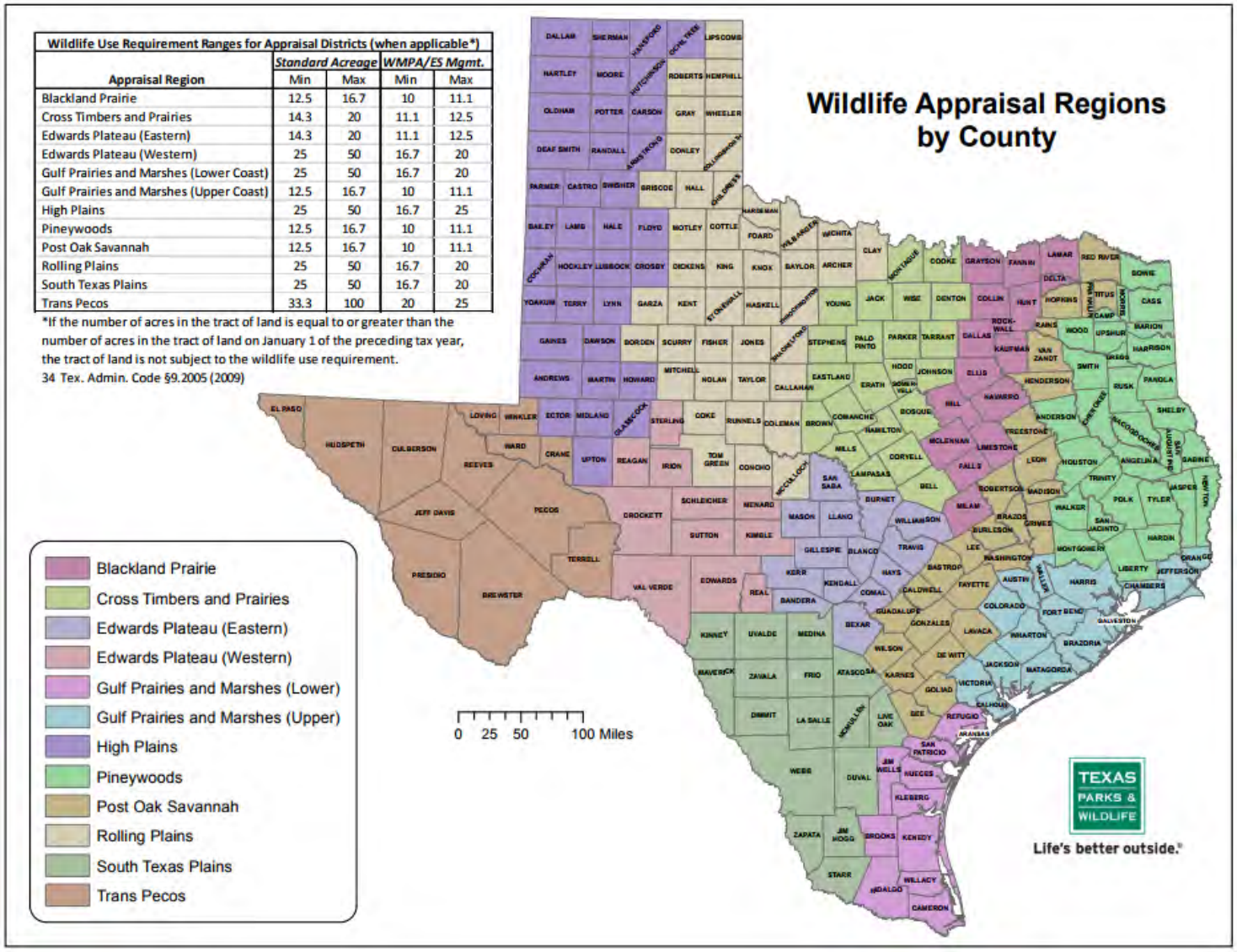


Figure 1. Standard acreages and wildlife mangement property owners associations (WMPA) / endangered species management minimum acreage by ecoregion and county for wildlife tax valuation in Texas.

Ratios among regions are used by the chief appraiser in each county to determine the minimum acreage size for a property to qualify for wildlife management use if the property has been reduced in size in the year immediately preceding the application for wildlife management use or has subsequently had a reduction in acreage. Ratios are calculated using the formula, (A-1)/A = R, wherein A is the total property size in acres and R is the ratio. For the purposes of determining the total property size (defined as a "tract" in the Texas Administrative Code), the property owner should consider the entire area of all contiguous parcels of land under common ownership. The presence of public roads and bodies of water does not affect the contiguity of the parcels of land.

As an example of how the ratios would work, a chief appraiser within the Upper Gulf Prairies and Marshes must chose within the range of 92-94% to set minimum acreage requirements for the county. Although they have discretion within that range, most often the upper ratio, having a greater acreage requirement is selected for tracts subject to the Wildlife Use Requirement (Table 1). If a property owner had a 12.5-acre tract that is subject to the wildlife use requirement and applied for the valuation, the appraiser takes the 12.5, subtracts 1 and then divides by 12.5, which equals 92 % – the lower ratio. To calculate the upper ratio in this scenario, the appraiser would take 16.7, minus 1, and then divides by 16.7, which equals 94%.

Table 1. Ratios and minimum acreage for properties under standard acreages wildlife tax valuation in Texas.

	Lower Ratio	Acreage	Upper Ratio	Acreage
Trans Pecos	97%	33.3	99%	100
High Plains	96%	25	98%	50
Lower Gulf Prairies and Marshes	96%	25	98%	50
Rolling Plains	96%	25	98%	50
South Texas Plains	96%	25	98%	50
Western Edwards Plateau	96%	25	98%	50
Eastern Edwards Plateau	93%	14.3	95%	20
Cross Timbers and Prairies	93%	14.3	95%	20
Blackland Prairie	92%	12.5	94%	16.7
Post Oak Savannah	92%	12.5	94%	16.7
Pineywoods	92%	12.5	94%	16.7
Upper Gulf Prairies and Marshes	92%	12.5	94%	16.7

The qualifying minimum acreage size is likely the most confusing item when switching from traditional agricultural use to wildlife management agricultural use. The following scenarios will help landowners determine if their lands are eligible.

<u>Scenario 1:</u>

- Question 1: Does the land currently have agricultural use valuation?
    - Answer: Yes
- Question 2: Has the size of the property having agricultural use valuation been reduced since the last tax year?
    - Answer: No
- Next step: There is no minimum acreage required; apply for conversion to wildlife management agricultural use between January 1 – April 30.

Scenario 2:

- Question 1: Does the land currently have agricultural use valuation?
  - Answer: Yes
- Question 2: Has the size of the property having agricultural use valuation been reduced since the last tax year?
  - Answer: Yes
- Question 3: Does the land meet the minimum qualifying acreage set by the county chief appraiser? (refer to Table 1).
  - Answer: Yes
- Next step: Apply for conversion to wildlife management agricultural use between January 1 – April 30

Scenario 3:

- Question 1: Does the land currently have agricultural use valuation?
  - Answer: Yes
- Question 2: Has the size of the property having agricultural use valuation been reduced since the last tax year?
  - Answer: Yes
- Question 2: Does the land meet the minimum qualifying acreage set by the county chief appraiser? (refer to Table 1).
  - Answer: No
- Next step: Stop the process as the land cannot qualify as wildlife management agricultural use.
- Exception: Some lands that are part of wildlife property associations or have threatened or endangered species habitats and meet acreage standards for a different set of Lower and Upper Ratios. These are used to create benefits for species of concern through sound wildlife management on smaller properties, given critical importance of habitat for these animals. As before, appraisers generally adopt the acreage limits associated with the Upper Ratio (Table 2). Here landowners should apply between January 1 – April 30.

Table 2. Ratios and minimum acreages for properties under wildlife tax valuation in Texas, having property owners associations, and threatened and endangered species considerations.

	Lower Ratio	Acreage	Upper Ratio	Acreage
Trans Pecos	95%	20	96%	25
High Plains	94%	16.7	96%	25
Lower Gulf Prairies and Marshes	94%	16.7	95%	25
Rolling Plains	94%	16.7	95%	20
South Texas Plains	94%	16.7	95%	20
Western Edwards Plateau	94%	16.7	94%	20
Eastern Edwards Plateau	91%	11.1	95%	20
Cross Timbers and Prairies	91%	11.1	92%	12.5
Blackland Prairie	90%	10	91%	11.1
Post Oak Savannah	90%	10	91%	11.1
Pineywoods	90%	10	91%	11.1
Upper Gulf Prairies and Marshes	90%	10	91%	11.1

Lands qualified for the wildlife management special tax appraisal prior to January 1, 2001 were grandfathered under existing OSL requirements provided they continued to meet all other requirements except size. After January 1, 2001 lands were subject to the new standards and regulations regarding sizes of recently subdivided land tracts that are eligible for qualification for the OSL wildlife management special tax appraisal. New standards for determining the appropriate size of property for wildlife management tax appraisal took effect on December 11, 2008 also grandfathered previously qualified tracts provided they continued to meet all other requirements. If a tract of land becomes reduced in size and no longer meets the minimum size requirement, the landowner could have the agricultural appraisal removed and may be subjected to a 5-year tax rollback for changing the primary use of the property.

Land Use: The second requirement for the property to be considered qualified for the OSL special tax appraisal is that the property must be "actively managed" to sustain a *breeding, migrating, or wintering population of indigenous wild animals for human use.* The word *indigenous* indicates the wildlife species must be native to Texas and is exclusive of exotic animals that may have been introduced purposely or accidentally. A *breeding-group* is a population of wildlife species large enough to live independently over several generations. This could be small mammals or bird species for smaller tracts of land or white-tailed deer and wild turkey on larger tracts of land. *Migrating* wildlife species are those moving between seasonal ranges while *wintering* species are those that may use the property during the winter.

Purpose of Wildlife Management: The third requirement for the property to be considered for the OSL special tax appraisal is that the wildlife species must be managed for *human use*. *Human use* may include wildlife species that are used for food or medicine as the result of harvest of the species for consumption. Human use of wildlife species also includes recreation and may involve either active or passive pursuits. Active pursuits may include hunting, observing wildlife, photography, and other recreational uses. The passive use of simply owning property and managing wildlife is likewise recognized as a qualifying human use. Note that unless the property is being used to manage wildlife for human use, the property will not qualify for the OSL special tax appraisal.

The Application for Open-Space Lands Agricultural Appraisal

Whenever a landowner decides to change their land use from agricultural to wildlife management, an Application for 1-d-1 (Open-Space) Agricultural Appraisal must be submitted to the appraisal district in the county in which the property is located. This form, along with a wildlife management plan, should be submitted between January 1 and April 30 of the year in which

the change in land use is to take place. If the application is granted by the chief appraiser in the county, the landowner does not need to file the application again in later years unless the chief appraiser requests a new application, or if the decision is made to choose another agricultural use designation for the property.

The Management Plan

Another requirement for qualifying for the OSL special tax appraisal is for the landowner to submit a wildlife management plan (WMP) to the chief tax appraiser in the county between January 1 and April 30 of the tax year. The WMP should be submitted on the TPWD form (TPWD 885-W7000 1-D-1 Open Space Agricultural Valuation Wildlife Management Plan). The chief appraiser may accept, but not require, a management plan on another form. All required information, however, must be provided, which is called for on the official TPWD885-W7000 form for each tract for which wildlife management use qualification is sought. The practices and activities contained in the plan must be consistent with the practices and activities recommended in Guidelines for Qualification of Agricultural Land in Wildlife Management Use and the TPWD Comprehensive Wildlife Management Planning Guidelines for the ecoregion in which the property is located. The management plan may be entirely filled out and submitted by the landowner, or the landowner may choose to engage the services of a wildlife management professional to assist in completing the WMP.

Management Practices

The law requires that landowners conduct specific management practices designed to enhance the target wildlife species. At least three of the following seven management practices must be performed each year on the property based on the wildlife management plans. Details regarding TPWD wildlife management practices required in each of 10 different ecological areas are listed in the Resources section later in this publication. Some of the ecological areas have been combined due to similar management practices for the areas.

Habitat Control (Habitat Management). Wildlife habitat is dynamic, not static, requiring active management to benefit wildlife. Habitat management may require the clearing and management of brush or the conversion of introduced plant species to native species. Therefore, this management practice is critical in maintaining the breeding population of various wildlife species. Depending on the target species to be managed, habitat management may take various forms and involves actively manipulating the land for the benefit of the species. Some of the qualifying activities for habitat control/management include:

- Grazing management;
- Prescribed burning;
- Range enhancement;
- Brush management;

- Forest management;
- Riparian management and improvement;
- Wetland improvements;
- Habitat protection for species of concern;
- Managing native, exotic and feral species; and
- Wildlife restoration.

Erosion Control. Land management activities that reduce soil erosion are desirable components of the overall management plan that meets the requirements of the Law. Qualifying erosion control activities include:

- Pond construction;
- Gully shaping;
- Streamside, pond, and wetland re-vegetation;
- Establishing native plants;
- Dike, levee construction or management, and water diversion.

Predator Control/Management). If there is a high number of predators having a significant negative impact on target wildlife species, attempts to control the predators qualifies as a management practice under the Law. Recall that non-game species like songbirds, birds of prey, and many others are protected by state and federal law. Some of the qualifying activities are:

- Mammal predator control;
- Fire ant control;
- Brown-headed cowbird control; and
- Grackle or starling control.

Providing Supplemental Water. Water is vital for all wildlife species. The development of supplemental water sources for wildlife species is a qualifying practice under the Law. Supplemental water may also be a seasonal development as in the case of moist soil management structures that provide seasonal water for migrating waterfowl. Supplemental water development activities that would qualify under the Law include:

- Marsh or wetland restoration or development;
- Managing well, trough and windmill overflow or installing new supplemental water sources; and
- Spring development and/or improvements.

Providing Supplemental Food. Most wildlife environments provide natural food. A landowner may provide supplemental food by way of habitat manipulation (e.g., brush clearing) or by providing supplemental forages or food that tends to augment the food that occurs naturally. Supplemental food activities that qualify under the Law include:

- Establishing food plots;
- Providing and maintaining feeder and mineral supplements; and
- Manage tame pasture, old fields and croplands to benefit wildlife species.

Providing Shelter. This term means actively creating or maintaining vegetation or artificial structures that provide shelter from the weather, for nesting and breeding sites, or for "escape cover" from predators. Providing shelter may be as simple as creating "snag" trees and/or brush piles, or by constructing structures such as nest boxes. Qualifying activities regarding providing shelter include:

- Installing nest boxes and bat boxes;
- Brush piles and slash retention;
- Managing fence lines;
- Managing hay meadow, pasture or cropland;
- Half-cutting trees and shrubs;
- Establishing woody plants and shrubs; and
- Developing natural cavities and snags.

Conduct Census Counts to Determine Population. Census counts are periodic surveys that help determine the population of a certain species or the number of different species occupying the property being managed for wildlife. Census counts are helpful in determining whether, or not management activities are enhancing wildlife populations. Different methods of obtaining population/species estimates include:

- Spotlight counting;
- Aerial counts;
- Daylight wildlife composition counts;
- Harvest data collection and record keeping;
- Browse utilization surveys;
- Census and monitoring endangered, threatened or protected wildlife; and
- Census and monitoring non-game wildlife species.

Summary

Using wildlife management as an agricultural practice to qualify for the 1-d-1 Open Space Agricultural tax appraisal in Texas is not widely understood by many landowners or potential landowners. While it is relatively easy to switch from traditional agricultural uses such as cattle or hay production to wildlife management agricultural use, there are several guidelines that must be adhered to in order for the property to receive the special agriculture tax appraisal based on wildlife management. The enjoyment associated with managing for wildlife, however, make the change in land use management worthwhile for many landowners. Landowners are reminded that to qualify for the special tax appraisal, the following issues must be addressed:

1) The property must have already been qualified as 1-d-1 Open-Space Agricultural Use land the year prior to changing to wildlife management.
2) The land must be used to support a sustaining breeding, migrating, or wintering population of indigenous wild animals. In other words, the *primary* use of the land must be for managing wildlife.
3) An application for 1-d-1 (Open Space) Agricultural Appraisal must be submitted showing the change in land use to wildlife management and submitted to the appraisal district in the county in which the property is located.
4) A Wildlife Management Plan for Agricultural Tax Valuation must be completed and submitted to the Central Appraisal District in the county in which the property is located.
5) If property has been reduced in size since the previous tax year, minimum tract size requirements must be met to qualify for OSL appraisal for wildlife management.

If you require additional information regarding wildlife management as an Open Space Land Agricultural special tax appraisal, contact your local appraisal district, Texas A&M AgriLife Extension Service, or the Texas Parks and Wildlife Department.

Additional Resources

Adams, R. B., J. C. Cathey, and D. F. Prochaska. 2006. Management options for reducing yaupon in the post oak savannah ecological region of Texas. Bulletin PWD BR W7000-010P. Texas Parks and Wildlife Department, Austin, Texas, USA.

Agriculture Property Tax Conversion for Wildlife Management

Alldredge, B.E., N. Dictson, J. Goodwin and J.C. Cathey. 2014. Riparian Restoration on Farms and Ranches in Texas. Texas AgriLife Extension Service. WF-010 Pp. 1-28.

Alldredge, B.E., J. Hardin, J. Isabelle, J. Whiteside, S. Parsons, W. Conway and J.C. Cathey. 2014. Eastern Wild Turkey in Texas: Biology and Management. Texas AgriLife Extension Service. WF-011 Pp. 1-20.

Alldredge, B., L. Redmon, M. Clayton, and J. C. Cathey. 2013. Native grassland monitoring and management. Texas AgriLife Extension Service. WF-001 Pp. 1-21.

Application for 1-d-1 (Open-Space Land) Agricultural Appraisal

Cathey, J. C., R. A. Persyn, D. O. Porter, and M. C. Dozier. 2006. Harvesting rainwater for wildlife. Texas A&M University System, Texas Cooperative Extension Publication B-6182 Pp. 1-16.

Cathey, J. C., S. L. Locke, D. Ransom, Jr., S. J. DeMaso, T. W. Schwertner, and B. Collier. 2007. A habitat appraisal guide for Rio Grande wild turkey in Texas. Texas A&M University System, Texas Cooperative Extension Publication SP-317 Pp. 1-24.

Cathey, J. C., K. Melton, B. Cavney, J. Dreibelbis, S. L. Locke, S. J. DeMaso, T. W. Schwertner, and B. Collier. 2007. The Rio Grande wild turkey: their biology and management. Texas A&M University System, Texas Cooperative Extension Publication B-6198 Pp. 1-16.

Fambrough, Judon. Ag-Use Exemption: Fact or Fiction? 2000. Texas A&M University Real Estate Center, Pub. 1361.

Guidelines for Qualification of Agricultural Land in Wildlife Management Use

Helcel, J., M. Tyson, J. Cash and J. C. Cathey. 2015. Reducing non-target species interference while trapping wild pigs. Texas A&M AgriLife Extension Service WF-030 Pp. 1-11.

Hunting & Wildlife FAQ - Wildlife & Land Management

James, A., M. Marshall, B. Hays, J. Hardin, R. Perez, and J. C. Cathey. Habitat guide for northern bobwhite. Texas A&M AgriLife Extension Service WF-020 Pp. 1-17.

Locke, S.L., J. C. Cathey, B. Collier, and J. Hardin. 2008. Rio Grande wild turkey life history and management calendar. Texas AgriLife Extension Service Publication L-5497 Pp. 1-4.

Locke, S.L., C. Frentress, J.C. Cathey, C. Mason, R. Hirsch, and M. Wagner. 2007. Techniques for wetland construction and management. Texas A&M University System, Texas Cooperative Extension SP-316 Pp. 1-20.

Manual for the Appraisal of Agricultural Land

Marshall, M., B. Hays, R. Reitz, J. Goodwin, M. Machacek, and J. C. Cathey. 2014. Grazing, hunting, and endangered species management are compatible practices: diversifying income through a multi-species approach. Texas AgriLife Extension Service. SP-WF-007 Pp. 1-14.

Redmon, Larry and Monte Rouquette. 2000. Wildlife Forage Areas for White-Tailed Deer – Soil and Crop Sciences Departmental Publication No. SCS-2000-24, Texas A&M University, College Station.

Summary of New Rules Effective for Open Space Lands 12/11/2008

Texas Administrative Code Title § 23.521. Standards for Qualification of Land for Appraisal Based on Wildlife Management Use

Texas Tax Code Subchapter D Section 23.51 (2). Appraisal of Agricultural Land

Wildlife Management Plan For Agricultural Tax Valuation

Wright, B. D., J. C. Cathey, and R. K. Lyons. 2005. Habitat monitoring for quail on Texas rangelands. Texas A&M University System, Texas Cooperative Extension Publication B-6172 Pp. 1-17.

Wright, B. D., R. K. Lyons, J. C. Cathey and S.M. Cooper. 2002. White-tailed deer browse preferences of south Texas and the Edwards Plateau. Texas A&M University System, Texas Cooperative Extension Publication B-6130 Pp. 1-8.

The Comprehensive Wildlife Management Planning Guidelines developed by Texas Parks and Wildlife Department for each ecoregion can be found here and are intended to assist landowners in preparing a wildlife management plan for ad valorem tax purposes.

The authors wish to express their appreciation to Justin Dreibelbis (Texas Parks and Wildlife Department), Shane Kiefer (Plateau Land and Wildlife Management),and David Langford (Texas Wildlife Association and Western Photography), for their editorial assistance in the preparation of this publication. We also appreciate the use of the TPWD minimum acreage map.

1-D-1 Open Space Agricultural Valuation
Wildlife Management Plan for the Year(s) _____

Submit this plan to your County Chief Appraiser, not to Texas Parks and Wildlife Department

Part I. Owner Information **Account Number:** _____

Owner's Name: _____

Current mailing address: _____

City, town, post office, state and zip code: _____

Phone number: _____

Tract Name: _____ Majority County: _____

Additional Counties (if any): _____

Part II. Property Description

Legal Description of Property: _____

Location of Property (distance and direction from nearest town; specify highway/road numbers):

_____

Is Acreage under high fence: ☐ Yes ☐ No ☐ Partial: (Describe) _____

Total Acreage: _____ Ecoregion _____

(refer to Comprehensive Wildlife Management Planning Guidelines)

Habitat Types and Amounts of Acres:

☐ Cropland	_____	☐ Bottomland/Riparian Native	_____	☐ wetlands	_____
☐ Non-native Pasture	_____	☐ Pasture/Grassland	_____	☐ timberlands	_____
☐ Native Range/Brush	_____	☐ Other (describe)	_____		

III. Species targeted for management. (List all that apply. Attach additional page(s) if needed)

☐ Deer ☐ turkey ☐ quail ☐ songbirds ☐ waterfowl ☐ doves ☐ bats

☐ Neotropical songbirds (List) _____

☐ Reptiles (list) _____ ☐ Amphibians (list) _____

☐ Small mammals (list) _____ ☐ Insects (list) _____

☐ Identified species of concern (List) _____

☐ Other (List) _____

Part IV. Management Plan Goals and Objectives

Describe the wildlife management ***goals*** (*what you want the property to look like, or want to be able to do with it*) and ***objectives*** (*how you intend to achieve these goals)* for this piece of property. You may use an additional page if needed. (Note: This space will expand as you type.)

Part V. Qualifying Wildlife Management Activities

Check the wildlife management practices to be implemented on the property during the coming year that will support and achieve your management goals. A minimum of three practices is required.

- ☐ Habitat control
- ☐ Erosion control
- ☐ Predator control
- ☐ Making census counts to determine population.
- ☐ Provide supplemental supplies of water
- ☐ Provide supplemental supplies of food
- ☐ Provide shelters

Part VI. White tail Deer and Mule Deer Population Management

Is hunting to be a part of this wildlife management plan? ☐ Yes ☐ No

If YES, type of hunting: ☐ Lease hunting ☐ Family/guests only ☐ Both

List deer harvest for past three seasons:

Year: _____ Bucks: _____ Does: _____
Year: _____ Bucks: _____ Does: _____
Year: _____ Bucks: _____ Does: _____

Population Management Goals:

Target Density for Pre-season Deer Population (fall density) _____
Target Sex Ratio (does/buck): _____
Target Production (fawns/doe): _____
Other (may be age, weight, antler measurements, browse conditions, etc.

_____

Deer Harvest Strategy (numbers, types of deer to be harvested to achieve goals):

_____

Part VII. Wildlife Management Association Membership

Are you a member of a wildlife management association (co-op)? ☐ Yes ☐ No

Are you a member of a wildlife property association? ☐ Yes ☐ No

Name of wildlife property co-op/association, if YES is checked. _____

Part VIII. Wildlife Management Activities

Check the activities you intend to implement during the year to support each of the wildlife management activities listed in Part V.

1. HABITAT CONTROL

☐ *Grazing management*. Check grazing system being utilized.

☐ 1 herd/3pasture ☐ 1 herd/4 pasture ☐ 1 herd/multiple pasture
☐ High intensity/low frequency (HILF) ☐ Short duration system
☐ Other type of grazing system (describe)

_____

Additional Information: _____

☐ *Prescribed Burning*

Acres to be burned: _____ Planned burn date: _____

Additional Information: _____

☐ *Range Enhancement (Range Reseeding)*

Acres to be seeded: _____ Date to be seeded: _____

Seeding Method: ☐ Broadcast ☐ Drilled ☐ Native Hay

Seeding mixture to be used: _____

Fertilized: ☐ Yes ☐ No

Weed control needed for establishment? ☐ Yes ☐ No

Additional Information: _____

☐ *Brush Management*. Acres to be treated: _____ Check method of brush management:

☐ Mechanical

☐ grubber ☐ chain ☐ roller chopper/aerator ☐ rhome disc
☐ brush hog (shredder) ☐ dozer ☐ hand-cutting (chainsaw)
☐ hydraulic shears ☐ other (describe): _____

☐ Chemical Kind: _____ Rate: _____

☐ Brush management design:

☐ block ☐ mosaic ☐ strips: width: _____ Length: _____

Additional Information: _____

☐ *Fence Modification*

Target species: ☐ pronghorn antelope ☐ bighorn sheep

Technique: ☐ fold up bottom of net-wire Gap width: _____

☐ replace sections of net-wire with barbed wire. Gap width: _____

Miles of fencing that will be modified: _____

☐ replace entire net-wire fence with barbed wire. Miles replaced: _____

Additional Information: _____

☐ *Riparian management and enhancement*

☐ Fencing of riparian area

☐ Complete fencing ☐ Partial fencing

☐ Deferment from livestock grazing

☐ Complete deferment ☐ partial deferment Season deferred : _____

☐ Establish vegetation

☐ Trees (list species) _____

☐ Shrubs (list species) _____

☐ Herbaceous species (list) _____

Additional Information: _____

☐ *Wetland enhancement*

☐ Provide seasonal water ☐ Provide permanent water ☐ Moist soil management

☐ Other (describe) _____

Additional Information: _____

☐ *Habitat Protection for species of concern*

☐ Fencing ☐ Firebreaks ☐ Prescribed burning ☐ Control of nest parasites

☐ Habitat manipulation (thinning, etc.) ☐ Native/exotic ungulate control

☐ Other (describe) _____

Additional Information: _____

☐ *Prescribed Control of Native, Exotic and Feral Species*

☐ Prescribed control of vegetation ☐ Prescribed control of animal species

☐ Species being controlled: _____

☐ Method of control: _____

Additional Information: _____

☐ *Wildlife Restoration*

☐ Habitat restoration ☐ Wildlife restoration

☐ Target species: _____

☐ Method of restoration: _____

Additional Information: _____

2. EROSION CONTROL

☐ *Pond construction and repair*

Surface area (acres): _____ Number of cubic yards of soil displaced: _____

Length of dam (feet): _____ Planned date of construction: _____

Additional Information: _____

☐ *Gully shaping*

Total acres to be treated: _____ Acres treated annually: _____

Seeding mix used for reestablishment of vegetation: _____

Planned date of construction: _____

Additional Information: _____

☐ *Streamside, pond, and wetland revegetation.* Techniques used:

☐ Native hay bales ☐ Fencing ☐ Filter strips ☐ Seeding upland buffer

☐ Rip-rap, etc. ☐ stream crossings ☐ Other: _____

Planned date of construction: _____

Additional Information: _____

☐ *Herbaceous and/or woody plant establishment on critical areas (erodible)*

☐ Establish windbreak ☐ Establish shrub mottes ☐ Improve plant diversity

☐ Improve wildlife habitat ☐ Conservation/no-till practices ☐ Manage CRP cover

Additional Information: _____

☐ *Dike/Levee Construction/Management*

☐ Reshaping/repairing erosion damage ☐ Revegetating/stabilize levee areas

☐ Install water control structure ☐ Fencing

Additional Information: _____

☐ *Establish water diversion*

Type: ☐ Channel ☐ Ridge

Slope: ☐ level ☐ graded Length (feet) _____

Vegetated: ☐ No ☐ Yes

If Yes: ☐ Native: _____ ☐ Crop: _____

Additional Information: _____

3. PREDATOR CONTROL

☐ Imported red fire ants (verify prior to application that product is labeled for pasture use)

☐ Control of cowbirds ☐ Grackle/starling/house sparrow control

Method of control: ☐ Trapping ☐ Shooting ☐ Baiting ☐ Scare tactics _____

☐ Coyotes ☐ Feral hogs ☐ Raccoon ☐ Skunk ☐ Bobcat ☐ Mountain lion

☐ Rat snakes ☐ Feral cats/dogs

Method of control: ☐ Trapping ☐ Shooting ☐ M-44 (licensed applicators)

☐ Poison collars (1080 certified, licensed, applicator) ☐ Other _____

Additional Information: _____

4. SUPPLEMENTAL WATER

☐ *Marsh/Wetland Restoration or Development*

☐ Greentree reservoirs ☐ Shallow roost pond development ☐ Seasonally flooded crops

☐ Artificially created wetlands ☐ Marsh restoration/development/protection

☐ Prairie pothole restoration/development/protection ☐ Moist soil management units

Planned date of construction: _____

Additional Information: _____

☐ *Well/trough/windmill overflow/other wildlife watering facilities*

☐ Drill new well Depth: _____ Gallons per minute: _____

☐ Windmill ☐ Pump ☐ Pipeline: Size: _____ Length: _____

☐ Modification(s) of existing water source

☐ Fencing ☐ Overflow ☐ Trough modification ☐ Pipeline

Distance between water sources (waterers): _____

Type of wildlife watering facility:

☐ PVC pipe facility	#	_____	☐ Drum with faucet or float	#	_____
☐ Small game guzzler	#	_____	☐ Windmill supply pipe dripper	#	_____
☐ Plastic container	#	_____	☐ In-ground bowl trough	#	_____
☐ Big game guzzler	#	_____	☐ Inverted umbrella guzzler	#	_____
☐ Flying saucer guzzler	#	_____	☐ Ranch Specialties guzzler	#	_____

☐ Other: _____

Additional Information: _____

☐ *Spring development and/or enhancement*

☐ Fencing ☐ Water diversion/pipeline ☐ Brush removal ☐ Spring clean out

☐ Other: _____

Additional Information: _____

5. PROVIDING SUPPLEMENTAL FOOD

☐ Grazing management ☐ Prescribed burning ☐ Range enhancement

☐ Food plots Size: _____ Fenced: ☐ Yes ☐ No

Irrigated: ☐ Yes ☐ No

Plantings: ☐ Cool season annual crops: _____

☐ Warm season annual crops: _____

☐ Annual mix of native plants: _____

☐ Perennial mix of native plants: _____

Additional Information:

☐ *Feeders and mineral supplementation*

Purpose: ☐ Supplementation ☐ Harvesting of wildlife

Targeted wildlife species: _____

Feed type: _____ Mineral type: _____

Feeder type: _____ Number of feeders: _____

Method of mineral dispensing: _____

Number of mineral locations: _____

Year round: ☐ Yes ☐ No If not, state when:

Additional Information: _____

☐ *Managing tame pasture, old fields and croplands*

☐ Overseeding cool and/or warm season legumes and/or small grains

☐ Periodic disturbance (Discing/Mowing/Shredding) ☐ Conservation/no-till

Additional Information:

☐ *Transition management of tame grass monocultures*

☐ Overseed 25% of tame grass pastures with locally adapted legumes

Species planted: ☐ Clover ☐ Peas ☐ Vetch ☐ Other: _____

Additional Information:

6. PROVIDING SUPPLEMENTAL SHELTER

☐ *Nest boxes* Target Species: _____

☐ Cavity type. # _____ ☐ Bat boxes. # _____ ☐ Raptor pole. # _____

Additional Information: _____

☐ *Brush piles and slash retention*

☐ Type: ☐ Slash ☐ Brush piles Number per acre: _____

Additional Information: _____

☐ *Fence line management* Length: _____ Initial establishment: ☐ Yes ☐ No

Plant type established: ☐ Trees ☐ Shrubs ☐ Forbs ☐ Grasses

Additional Information: _____

☐ *Hay meadow, pasture and cropland management for wildlife* Acres treated: _____

Shelter establishment: ☐ Roadside management ☐ Terrace/wind breaks ☐ Field borders

☐ Shelterbelts ☐ Conservation Reserve Program lands management

Type of vegetation: ☐ Annual ☐ Perennial

Species and percent of mixture _____

☐ Deferred mowing Period of deferment: _____

☐ Mowing Acres mowed annually: _____

☐ No till/minimum till

Additional Information: _____

☐ *Half-cutting trees or shrubs*

Acreage to be treated annually: _____ Number of half-cuts annually: _____

Additional Information: _____

☐ *Woody plant/shrub establishment*

Pattern: ☐ Block ☐ Mosaic ☐ Strips: Width: _____

Acreage or length established annually: _____ Spacing: _____

Shrub/tree species used: _____

Additional Information: _____

☐ *Natural cavity/snag development*

Species of snag: _____ Size of snags: _____ Number/acre: _____

Additional Information: _____

7. CENSUS

☐ *Spotlight counts* Targeted species: _____

Length of route: _____ Visibility of route: _____

Dates (3 required) A. _____ B. _____ C. _____

Additional Information: _____

☐ *Standardized incidental observations* Targeted species: _____

Observations from: ☐ Feeders ☐ Food plots ☐ Blinds ☐ Vehicle ☐ Other _____

Dates: _____

Additional Information: _____

☐ *Stand counts of deer* (5 one hour counts per stand required). Number of stands: _____

Dates: _____

Additional Information: _____

☐ *Aerial Counts* Species counted: _____

Type of survey: ☐ Helicopter ☐ Fixed-wing

Percent of area surveyed: ☐ Total ☐ 50% ☐ Other: _____

Additional Information: _____

☐ *Track counts:* ☐ Predators ☐ Furbearers ☐ Deer ☐ Other: _____

Additional Information: _____

☐ *Daylight deer herd/wildlife composition counts*

Species: ☐ Deer ☐ Turkey ☐ Dove ☐ Quail ☐ Other _____

Additional Information: _____

☐ *Harvest data collection/record keeping*: ☐ Deer ☐ Game birds

☐ Age ☐ Weight ☐ Sex ☐ Antler data ☐ Harvest date

Additional Information: _____

☐ *Browse utilization surveys* (thirty 12-foot circular plots required)

Additional Information: _____

☐ *Census of endangered, threatened, or protected wildlife.* Species: _____

Method and dates: _____

Additional Information: _____

☐ *Census and monitoring of nongame wildlife species.* Species: _____

Method and dates: _____

Additional Information: _____

☐ *Miscellaneous Counts:* Species being counted: _____

☐ Remote detection (i.e., cameras) ☐ Hahn (walking) line ☐ Roost counts

☐ Booming ground counts ☐ Time/area counts ☐ Songbird transects and counts

☐ Quail call and covey counts ☐ Point counts ☐ Small mammal traps

☐ Drift fences and pitfall traps ☐ Bat departures ☐ Dove call counts

☐ Chachalaca counts ☐ Turkey hen/poultry counts ☐ Waterfowl/water bird counts

☐ Alligator nest/census counts ☐ Other: _____

Additional Information: _____

IX. Additional Supporting Information. (Optional)

Attach any other supporting information, such as maps or photographs that you believe to be relevant to this wildlife management plan.

I certify that the above information provided by me in this application is to the best of my knowledge and belief, true and complete.

_____ _____

Landowner Signature Date

This area for use only if the wildlife management plan was prepared for the above landowner for a fee by a wildlife professional or consultant. *

Signature of person preparing wildlife management plan.	Date
Company	Phone Number

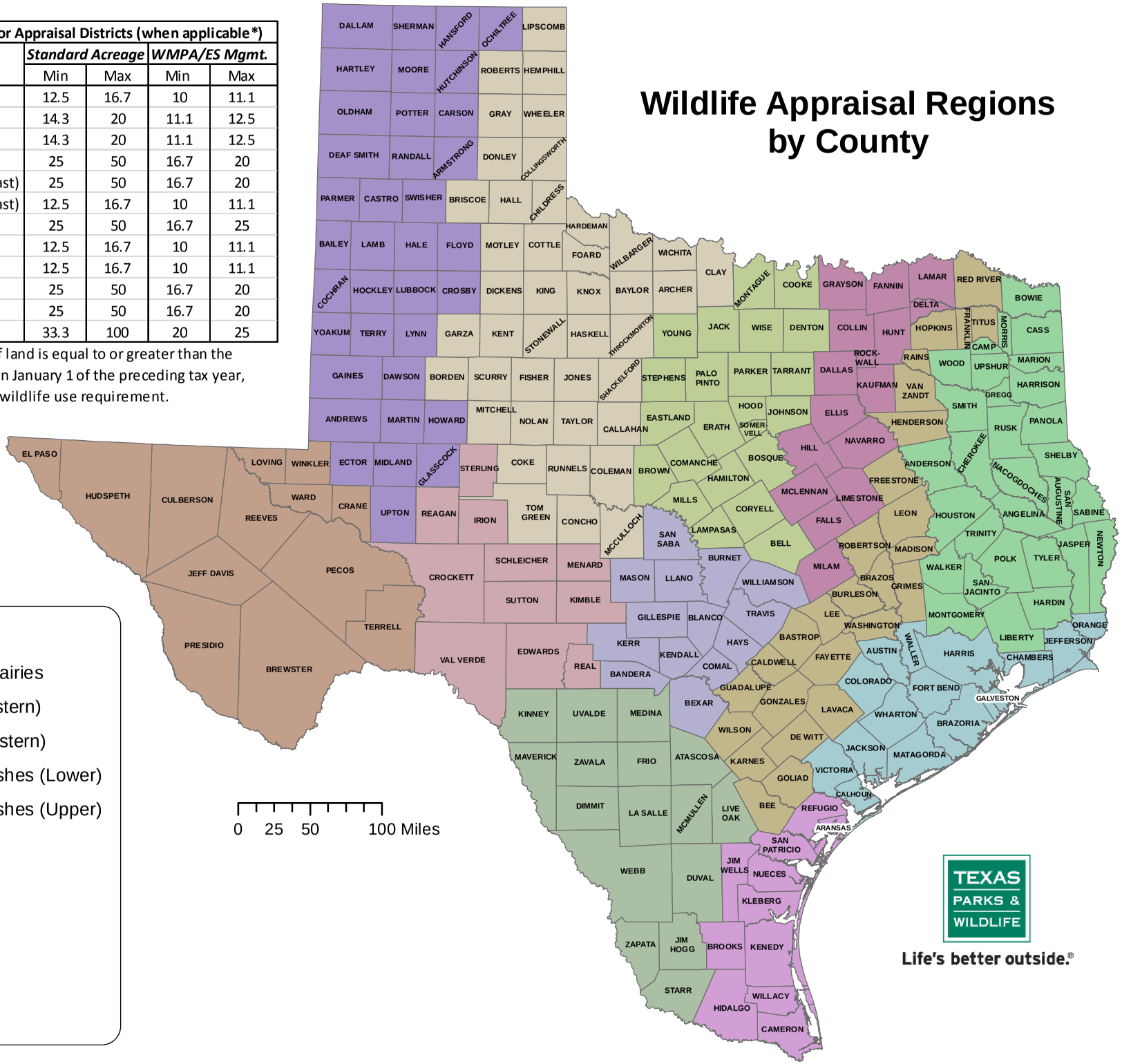
*Signature by TPWD not required for this plan to be valid.

Texas Parks and Wildlife does not maintain the information collected through this form. This completed form is only provided to the County Tax Appraiser. Please inquire with your County Central Appraisal District on any local laws concerning any information collected through this form.

Wildlife Use Requirement Ranges for Appraisal Districts (when applicable*)				
	Standard Acreage		*WMPA/ES Mgmt.*	
Appraisal Region	Min	Max	Min	Max
Blackland Prairie	12.5	16.7	10	11.1
Cross Timbers and Prairies	14.3	20	11.1	12.5
Edwards Plateau (Eastern)	14.3	20	11.1	12.5
Edwards Plateau (Western)	25	50	16.7	20
Gulf Prairies and Marshes (Lower Coast)	25	50	16.7	20
Gulf Prairies and Marshes (Upper Coast)	12.5	16.7	10	11.1
High Plains	25	50	16.7	25
Pineywoods	12.5	16.7	10	11.1
Post Oak Savannah	12.5	16.7	10	11.1
Rolling Plains	25	50	16.7	20
South Texas Plains	25	50	16.7	20
Trans Pecos	33.3	100	20	25

*If the number of acres in the tract of land is equal to or greater than the number of acres in the tract of land on January 1 of the preceding tax year, the tract of land is not subject to the wildlife use requirement.
34 Tex. Admin. Code §9.2005 (2009)

Wildlife Appraisal Regions by County



Note: Table is formatted 8-1/2" x 11", landscape orientation

RANK	DEFINITION
STATE or FEDERAL LISTING STATUS	
LE	Federally endangered species or population.
LT	Federally threatened species or population.
C	Federal Candidate
SAT	Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
PT	Proposed Threatened
PDL	Proposed Dowlisting/Proposed Delisting
E	State endangered species or population.
T	State threatened species or population.
CONSERVATION (Vulnerability or Rarity) RANKING	
(G) GLOBAL Conservation Status Rank	
GX	Presumed Extinct (species) — Not located despite intensive searches and virtually no likelihood of rediscovery.
	Eliminated (ecological communities) — Eliminated throughout its range, with no restoration potential due to extinction of dominant or characteristic species.
GH	Possibly Extinct (species) — Missing; known from only historical occurrences but still some hope of rediscovery.
	Presumed Eliminated — (Historic, ecological communities)-Presumed eliminated throughout its range, with no or virtually no likelihood that it will be rediscovered, but with the potential for restoration, for example, American Chestnut Forest.
G1	Critically Imperiled — At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2	Imperiled — At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3	Vulnerable — At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4	Apparently Secure — Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5	Secure — Common; widespread and abundant.
(S) Subnational or STATE Conservation Status Rank	
SX	Presumed Extirpated — Species or community is believed to be extirpated from the nation or state/province. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
SH	Possibly Extirpated (Historical) — Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20-40 years. A species or community could become NH or SH without such a 20-40 year delay if the only known occurrences in a nation or state/province were destroyed or if it had been extensively and unsuccessfully looked for. The NH or SH rank is reserved for species or communities for which some effort has been made to relocate occurrences, rather than simply using this status for all elements not known from verified extant occurrences.
S1	Critically Imperiled — Critically imperiled in the nation or state/province because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state/province.
S2	Imperiled — Imperiled in the nation or state/province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province.

RANK	DEFINITION
S3	Vulnerable — Vulnerable in the nation or state/province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
S4	Apparently Secure — Uncommon but not rare; some cause for long-term concern due to declines or other factors.
S5	Secure — Common, widespread, and abundant in the nation or state/province.
SNR	Unranked — Nation or state/province conservation status not yet assessed.
SU	Unrankable — Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
SNA	Secure — Common, widespread, and abundant in the nation or state/province.
Rank Qualifiers	
?	Inexact Numeric Rank—Denotes inexact numeric rank (e.g., G2?)
Q	Questionable taxonomy—Taxonomic distinctiveness of this entity at the current level is questionable; resolution of this uncertainty may result in change from a species to a subspecies or hybrid, or the inclusion of this taxon in another taxon, with the resulting taxon having a lower-priority conservation priority.
Infraspecific Taxon Conservation Status Ranks	
Infraspecific taxa refer to subspecies, varieties and other designations below the level of the species. Infraspecific taxon status ranks (T-ranks) apply to plants and animal species only; these T-ranks do not apply to ecological communities.	
T#	Infraspecific Taxon (trinomial)—The status of infraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above for global conservation status ranks. For example, the global rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1. A T-rank cannot imply the subspecies or variety is more abundant than the species as a whole-for example, a G1T2 cannot occur. A vertebrate animal population, such as those listed as distinct population segments under under the U.S. Endangered Species Act, may be considered an infraspecific taxon and assigned a T-rank; in such cases a Q is used after the T-rank to denote the taxon's informal taxonomic status. At this time, the T rank is not used for ecological communities.
Variant Ranks	
G#G# or S#S#	Range Rank—A numeric range rank (e.g., G2G3 or S2S3) is used to indicate the range of uncertainty in the status of a species or community. Ranges cannot skip more than one rank (e.g., GU should be used rather than G1G4).
GU	Unrankable—-Currently unrankable due to lack of information or due to substantially conflicting information about status or trends. Whenever possible, the most likely rank is assigned and the question mark qualifier is added (e.g., G2?) to express uncertainty, or a range rank (e.g., G2G3) is used to delineate the limits (range) of uncertainty.
GNR	Unranked—Global rank not yet assessed.
Not Provided	Species is known to occur in this nation or state/province. Contact the relevant natural heritage program for assigned conservation status.
Breeding Status Qualifiers	
B	Breeding—Conservation status refers to the breeding population of the species in the nation or state/province.
N	Nonbreeding—Conservation status refers to the non-breeding population of the species in the nation or state/province.

ESSENTIAL ONLINE RESOURCES

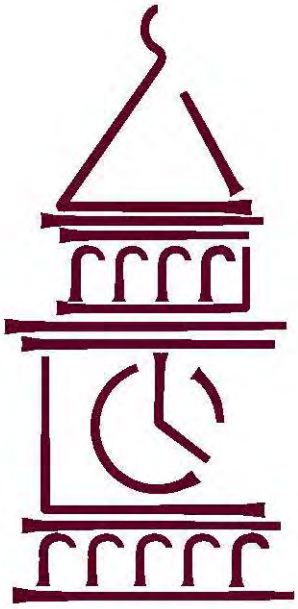
TPWD Wildlife Tax Valuation page:
https://tpwd.texas.gov/landwater/land/private/agricultural_land/

Species of Greatest Conservation Need:
https://tpwd.texas.gov/landwater/land/tcap/sgcn.phtml

Contact Information for Local Assistance:

- **Texas A&M AgriLife Extension Service - County Extension Agents**
  https://agrilifeextension.tamu.edu/contact/
- **Texas Parks & Wildlife Department Wildlife Biologist**
  https://tpwd.texas.gov/landwater/land/technical_guidance/biologists/
- **Local USDA Service Center/Natural Resources Conservation Service**
  https://offices.sc.egov.usda.gov/locator/app?state=TX

Meeting the Educational Needs of Texas County Officials Since 1969



V.G. YOUNG
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TEXAS A&M AGRILIFE EXTENSION